AFPC Association of Faculties of Pharmacy of Canada
Association des Facultes de Pharmacie du Canada

PROCEEDINGS

OF THE

ASSOCIATION OF FACULTIES OF PHARMACY OF CANADA

ASSOCIATION DES FACULTÉS DE PHARMACIE DU CANADA

DURING 2007

INCLUDING THE

SIXTY-FOURTH ANNUAL MEETING

MAY 30 - JUNE 2, 2007

MONTRÉAL, QUÉBEC

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ASSOCIATION OF FACULTIES OF PHARMACY OF CANADA
MISSION STATEMENT

AFPC is an association of faculties of pharmacy whose members are committed to the promotion and recognition of excellence in pharmacy education and scholarly activities.

GOALS

1. To foster excellence in pharmaceutical education.

(a) To stimulate and provide an opportunity for exchange of information, ideas and discussion among pharmaceutical educators.

(b) To encourage quality education in pharmacy by assuming an advisory role for development of policies and standards.

(c) To recognize innovations in pharmaceutical education.

2. To foster excellence in scholarly activities

(a) To provide members with opportunities for the exchange of information, ideas and discussion on scholarly activities.

(b) To recognize excellence in graduate studies.

(c) To recognize innovation in scholarship

(d) To recognize achievements in undergraduate research.

3. To establish and maintain liaison with external organizations for the development, support and improvement of pharmaceutical education and research

(a) To recognize significant contributions and achievements of other organizations or individuals towards the mission of AFPC.

(b) To promote the achievements of our members to the wider pharmacy and health care community.

(c) To represent the broad interest of our members to external organizations.

(d) To gather and report statistical and descriptive data in order to provide information about the state of academic pharmacy in Canada.

Glossary For Mission Statement

For the purpose of this Mission Statement:

Education - is interpreted to include: curricular design, teaching methods, student assessment, program evaluation and continuing education

Scholarly Activities - includes: graduate education; publication/dissemination, discovery/new information; discovery/creation of new knowledge and innovations; acquisition of resources for research; develop interdisciplinary collaboration; adherence to ethical standards of scholarship

AFPC CONSTITUENT FACULTIES 2006 - 2007

Memorial University of Newfoundland, School of Pharmacy, St. John's NF
Linda Hensman, Director (709) 777-6571
Dalhousie University, College of Pharmacy, Halifax, NS
Rita Caldwell, Director (902) 494-2457
Université Laval, Faculté de Pharmacie, Québec, QC
Jean-Pierre Gregoire, Doyen (418) 656-5639
Université de Montréal, Faculté de Pharmacie, Montréal, QC
Pierre Moreau, Doyen (514) 343-6440
University of Toronto, Leslie Dan Faculty of Pharmacy, Toronto, ON
Wayne Hindmarsh, Dean (416) 978-2880
University of Waterloo School of Pharmacy, Waterloo, ON
Jake Thiessen, Hallman Director, (519)-888-4567
University of Manitoba, Faculty of Pharmacy, Winnipeg, MB
David Collins, Dean (204) 474-8794
University of Saskatchewan, College of Pharmacy & Nutrition, Saskatoon, SK
Dennis Gorecki, Dean (306) 966-6328
University of Alberta, Faculty of Pharmacy & Pharmaceutical Sciences, Edmonton, AB
Franco Pasutto, Dean (780) 492-2125
University of British Columbia, Faculty of Pharmaceutical Sciences, Vancouver, BC
Robert Sindelar, Dean (604) 822-2343

AFPC OFFICERS 2006 - 2007

Executive

President	Anne Marie Whelan (Dalhousie)
President Elect	Simon Albon (British Columbia)
Past President	Zubin Austin (Toronto)
ADPC Representative	Linda Hensman (Memorial)
Executive Director	Frank Abbott

Council

Ingrid Price (British Columbia)
Sharon Mitchell (Alberta)
Roy Dobson (Saskatchewan)
Mike Namaka (Manitoba)
Nancy Waite (Waterloo)
Lalitha Raman-Wilms (Toronto)
Daniel Thirion (Montréal)
Jean Lefebvre (Laval)
Mary MacCara (Dalhousie)
John Hawboldt (Memorial)

AFPC REPRESENTATIVES TO AFFILIATE ORGANIZATIONS

Association of Deans of Pharmacy of Canada – Linda Hensman (Memorial)
Academic Board Member, Canadian Pharmacists Assoc. – Rita Caldwell (Dalhousie)
Canadian Council for the Accreditation of Pharmacy Programs
– Sylvie Marleau (Montréal), Jake Thiessen (Toronto)
Canadian Council for Continuing Education in Pharmacy – Yvonne Shevchuk (Saskatchewan)
Pharmacy Examining Board of Canada - Louise Mallet (Montréal) & Linda Suveges (Sask.)
Representative to United States Pharmacopeia Convention – Raimar Löbenberg (Alberta)
Representative to CPhA Human Resources Task Force – Zubin Austin (Toronto)
Representative to the Blueprint for Pharmacy Task Force – Terri Schindel (Alberta)

Committee Chairs and Other Positions

Awards Committee – Roy Dobson (Saskatchewan)
Bylaws Committee – Zubin Austin (Toronto)
Education Committee – Ingrid Price (British Columbia)
Nominations Committee – Zubin Austin (Toronto)
Research Committee - Mike Namaka (Manitoba)
Conference Planning Committee – Dan Thirion (Montréal)
Communications Committee – Simon Albon (British Columbia)
Editor, AFPC Communications – Rebecca Law, (Memorial)
Pharmacy Experiential Programs Canada (PEPC) – Ingrid Price (British Columbia)
Task Force on Educational Outcomes for Entry-Level Pharm D degree – Susan Mansour (Dalhousie)
Strategic and Business Planning – Roy Dobson (Sask) and Ingrid Price (BC)
AFPC Database Project - Sylvie Marleau (Université de Montréal)
Program Evaluation Task Force – Ingrid Price (British Columbia)
Canadian Pharmacy Practice Research Group – Anne Marie Whelan (Dalhousie)

RECIPIENTS OF MAJOR AFPC AWARDS

RECIPIENTS OF THE AFPC AWARD FOR EXCELLENCE IN RESEARCH

McNEIL AWARD

1982	Ron Coutts, University of Alberta
1983	John McNeill, University of British Columbia
1984	Kam Midha, University of Saskatchewan
1985	Basil Roufogalis, University of British Columbia
1986	Ed Knaus, University of Alberta
1987	Tony Noujaim, University of Alberta
1988	Len Wiebe, University of Alberta
1989	Mike Mezei*, Dalhousie University
1990	Mike Wolowyk*, University of Alberta
1991	James Axelson, University of British Columbia
1992	Ted Hawes, University of Saskatchewan
1993	Frank Abbott, University of British Columbia
1994	Fakhreddin Jamali, University of Alberta
1995	Sandy Pang, University of Toronto
1996	Peter O′Brien, University of Toronto

JANSSEN-ORTHO AWARD

1997	Gail Bellward, University of British Columbia
1998	Len Wiebe, University of Alberta
1999	Jack Diamond, University of British Columbia
2000	Sid Katz, University of British Columbia
2001	Jack Uetrecht, University of Toronto
2002	Thérèse Di Paolo-Chenevert, Université Laval
2003	Ed Knaus, University of Alberta
2004	John McNeill, University of British Columbia

PFIZER RESEARCH CAREER AWARD

2005	Raymond Reilly, University of Toronto
2006	Helen Burt, University of British Columbia
2007	Thomas Einarson, University of Toronto

RECIPIENTS OF THE AFPC BRISTOL-MYERS SQUIBB NATIONAL AWARD FOR EXCELLENCE IN EDUCATION

1995	Cheryl Cox, University of Alberta
1996	David Fielding, University of British Columbia
1997	Kristin Janke, Dalhousie University
1998	not awarded
1999	not awarded
2000	Pat Farmer, Susan Mansour, Anne Marie Whelan, Dalhousie
2001	Zubin Austin, University of Toronto
2002	Claude Mailhot, Université de Montréal
2003	Simon Albon, University of British Columbia
2004	Jean-Louis Brazier, Université de Montréal
2005	Andrea Cameron and Lesley Lavack, University of Toronto
2006	Steve McQuarrie and John Mercer, University of Alberta
2007	Louise Mallet, Université de Montréal

RECIPIENTS OF THE AFPC NEW INVESTIGATOR AWARD

UPJOHN-AFPC New Investigator Award

1993	Jacques Turgeon, Université Laval
1994	Robert Foster, University of Alberta
1995	Wendy Duncan-Hewitt, University of Toronto
1996	D. Hampson, University of Toronto

ASTRA PHARMA - AFPC New Investigator Award

1997	Frank Burczynski, University of Manitoba
1998	R. Macgregor, University of Toronto
1999	S. Wu, University of Toronto

ASTRAZENECA – AFPC New Investigator Award

2000	Hu Liu, Memorial University of Newfoundland
2001	David Wishart, University of Alberta
2002	Kishor Wasan, University of British Columbia
2003	Jean-Christophe Leroux, Université de Montréal
2004	Pierre Moreau, Université de Montréal
2005	Heather Boon, University of Toronto
2006	Christine Allen, University of Toronto
2007	Zubin Austin, University of Toronto

ROCHE GRADUATE STUDENT RESEARCH AWARD

1997	Diane Jette, University of Alberta
1998	Rajesh Krishna, University of British Columbia
1999	Jean François Bouchard, Université de Montréal
2000	Mark Lomaga, University of Toronto
2001	Amgad Habeeb, University of Alberta

GLAXOSMITHKLINE GRADUATE STUDENT RESEARCH AWARD

2002	Erica Rosemond, University of Toronto
2003	Huy H. Dao, Université de Montréal
2004	Thomas Chacko Pulinilkunnil, University of British Columbia
2005	Shirley Teng, University of Toronto
2006	Lichuan Liu, University of Toronto
2007	Patrick Ronaldson, University of Toronto

RECIPIENTS OF THE AFPC AWARD OF RECOGNITION FOR OUTSTANDING SUPPORT OF AFPC

1991	Fares Attalla
1992	Canadian Foundation for Pharmacy
1993	Jean-Guy Cyr
1994	Carl Trinca
1995	Yves Chicoine
1996	Pierre Bois
1997	Jeff Poston
1998	Gerald Duncan
1999	not awarded
2000	Ginette Bernier
2001	Richard Penna
2002	not awarded
2003	not awarded
2004	not awarded
2005	Walter Masanic
2006	Not awarded
2007	Not awarded

RECIPIENTS OF THE AFPC SPECIAL SERVICE AWARD

1992	Keith McErlane
1993	Helen Burt
1994	UBC Host Committee, 1993 AFPC Biotechnology Conference
1995	Ernst Stieb
1996	Pauline Beaulac
1997	not awarded
1998	not awarded
1999	not awarded
2000	not awarded
2001	Bernard Riedel, Ernst Stieb
2002	Wayne Hindmarsh, Jim Blackburn
2003	David Hill
2004	not awarded
2005	not awarded
2006	not awarded
2007	not awarded

AFPC HONOURED LIFE MEMBERS

*A.W. Matthews, Toronto, Ont., 1946-52, 1967		* G. Myers	Edmonton, AB 1989
*G.T. Cunningham	Vancouver, B.C. 1947	J. Ryan	Halifax, NS 1989
J.G. Richard	Montréal, Quebec 1957	*F. Teare	Toronto, Ontario 1990
*J.R. Kennedy	Toronto, Ontario 1959	K. James	Halifax, NS 1990
*A.F. Larose	Montréal, Quebec 1960	G. Duff	Halifax, NS 1991
*J.I. MacKnight	Halifax, NS 1964	*A. Noujaim	Edmonton, AB 1993
*J.E. Cooke	Halifax, NS 1965	*M. Mezei	Halifax, NS 1994
*R. Larose	Montréal, Quebec 1965	B. Schnell	Saskatoon, Sask. 1995
*R.C. Cary	Toronto, Ontario 1966	G. Nairn	Toronto, Ontario 1995
*G.L. Webster	Chicago, Illinois 1969	E. Stieb	Toronto, Ontario 1995
*J. Antonin Marquis	Quebec, Quebec 1969	R. Coutts	Edmonton, AB 1996
*F.N. Hughes	Toronto, Ontario 1973	A. Shysh	Edmonton, AB 1996
*Mrs. I. Stauffer	Toronto, Ontario 1974	J. Steele	Winnipeg. MB 1996
*H.J. Fuller	Toronto, Ontario 1974	I. Abraham	Halifax, NS 1998
*L.G. Elliott	Montréal, Quebec 1974	P. Beaulac	Montréal, Quebec 1998
A. Archambault	Montréal, Quebec 1975	F. Chandler	Halifax, NS 1998
*J.E. Halliday	Vancouver, B.C. 1978	P. Farmer	Halifax, NS 1998
*G.C. Walker	Toronto, Ontario 1979	R. Tawashi	Montréal, Quebec 1998
*M.J. Huston	Edmonton, AB 1979	Gilles Barbeau	Québec City, QC, 2000
*A.J .Anderson	Edmonton, AB 1980	Robert Goyer	Montréal, QC, 2000
*G.R. Paterson	Toronto, Ontario 1980	Ted Hawes	Saskatoon, SK, 2000
*J .R. Murray	Winnipeg, MB 1981	Gaston Labrecque	Québec City, QC, 2000
*J.J. O'Mara	St. John's, NF 1981	Pierre-Paul LeBlanc	Québec City, QC, 2000
J.A. Wood	Saskatoon, SK 1982	Dick Moskalyk	Edmonton, AB, 2000
L.G. Chatten	Edmonton, AB 1983	James Orr	Vancouver, BC, 2000
F. Morrison	Vancouver, B.C. 1983	Jacques Dumas	Québec QC 2001
*S.K. Sim	Toronto, Ontario 1984	John Bachynsky,	Edmonton, AB, 2002
*J.G. Jeffrey	Saskatoon, SK 1984	Don Lyster,	Vancouver, BC 2002
*D.J. Stewart	Toronto, Ontario 1984	John Sinclair,	Vancouver, BC 2002
*R.M. Baxter	Toronto, Ontario 1985	John Templeton,	Winnipeg MB 2002
B.E. Riedel	Vancouver, B.C. 1985	Frank Abbott,	Vancouver, BC 2003
P. Claveau Laval,	Quebec, QC 1986	Jacques Gagne	Montréal, QC 2004
*D. Zuck	Saskatoon, SK 1986	John McNeill	Vancouver, BC 2004
G.E. Hartnett	Saskatoon, SK 1986	Gail Bellward	Vancouver, BC 2004
*J .L. Summers	Saskatoon, SK 1986	Peter O'Brien	Toronto, ON 2004
R. Bilous	Winnipeg, MB 1987	Leonard Wiebe	Edmonton, AB 2005
L. Stephens-Newsham	Edmonton, AB 1987	Colin Briggs	Winnipeg, MB 2005
T.H. Brown	Vancouver, B.C. 1987	Joan Marshman	Toronto, ON 2005
A.M. Goodeve	Vancouver, B.C. 1987	Jim Blackburn	Saskatoon, SK 2006
*J.O. Runikis	Vancouver, B.C. 1987	Keith McErlane	Vancouver, BC 2006
R. Plourde	Montréal, Quebec 1987		
*J.G. Moir	Vancouver, B.C. 1988		

*** Deceased**

ANNUAL MEETINGS AND OFFICERS

C.C.P.F (1944-1969)
A.F.P.C. (1970- 2006)

YEAR	PLACE	PAST CHAIRMAN	CHAIRMAN	VICE CHAIRMAN	SEC/TRES*	Assist.SEC
1944(1)	Toronto		E.L. Woods		F.N. Hughes	
1945(2)	Bigwin Inn		E.L. Woods	R.O. Hurst	F.N. Hughes	
1946(3)	Toronto		E.L. Woods	R.O. Hurst	F.N. Hughes	
1947(4)	Vancouver	E.L. Woods	R.O. Hurst	D. McDougall	F.N. Hughes	
1948(5)	Windsor	E.L. Woods	R.O. Hurst	D. McDougall	F.N. Hughes	J.G. Jeffrey
1949(6)	Saskatoon	R.O. Hurst	M.J. Huston	J.A. Marquis	F.N. Hughes	J.G. Jeffrey
1950((7)	Montreal	M.J. Huston	J.A. Marquis	W.C. MacAulay	F.N. Hughes	J.G. Jeffrey
1951(8)	Calgary	J.A. Marquis	W.C. MacAulay	F.N. Hughes	D.H. Murray	
1952(9)	Toronto	W.C. MacAulay	F.N. Hughes	D. McDougall	D.H. Murray	
1953(10)	Winnipeg	F.N. Hughes	D. McDougall	A.F. Larose	D.H. Murray	
1954(11)	Halifax	D. McDougall	A.F. Larose	A.W. Matthews	G.C. Walker	
1955(12)	Vancouver	A.F. Larose	A.W. Matthews	J.E. Cooke	G.C. Walker	
1956(13)	Ottawa	A.W. Matthews	J.E. Cooke	R. Larose	G.C. Walker	
1957(14)	Montreal	J.E. Cooke	R. Larose	G.C. Walker	R.M. Baxter	
1958(15)	Edmonton	R. Larose	G.C. Walker	B.E. Riedel	R.M. Baxter	
1959(16)	Saint John	G.C. Walker	B.E. Riedel	J.G. Jeffrey	R.M. Baxter	
1960(17)	Saskatoon	B.E. Riedel	J.G. Jeffrey	F.A. Morrison	G.R. Paterson	
1961(18)	Hamilton	J.G. Jeffrey	F.A. Morrison	J.R. Murray	G.R. Paterson	
1962(19)	Vancouver	F.A. Morrison	J.R. Murray	R.M. Baxter	G.R. Paterson	
1963(20)	Winnipeg	J.R. Murray	R.M. Baxter	A. Archambault	A.J. Anderson	
1964(21)	Halifax	R.M. Baxter	A. Archambault	J.G. Duff	A.J. Anderson	
1965 (22)	Calgary	A. Archambault	J.G. Duff	G.R. Paterson	A.J. Anderson	
1966(23)	Saint John	J.G. Duff	G.R. Paterson	J.E. Halliday	W.R. Wensley	
1967(24)	Toronto	G.R. Paterson	J.E. Halliday	J.A. Wood	James/Goodeve**	Goodeve/Wood
1968(25)	Regina	J.E. Halliday	J.A. Wood	B.E. Riedel	J.G. Nairn	A.M. Goodeve
1969(26)	St. John's	J.A. Wood	B.E. Riedel	J.A. Mockle	J.G. Nairn	A.M. Goodeve
1970(27)***	Vancouver	B.E. Riedel	F.N. Hughes	J. Tremblay	J.G. Nairn	A.M. Goodeve
1971(28)	Winnipeg	F.N. Hughes	J.G. Nairn	P. Claveau	R.E. Moskalyk	A.M. Goodeve
1972(29)	Edmonton	J.G. Nairn	P. Claveau	A.M. Goodeve	R.A. Locock	O'Reilly/H.J. Segal
1973(30)	Halifax	P. Claveau	A.M. Goodeve	E.W. Stieb	R.F. Chandler	H.J. Segal

YEAR	PLACE	PAST CHAIRMAN	CHAIRMAN	VICE CHAIRMAN	SEC/TRES*	RECORDING SEC.
1974(31)	Ottawa	A.M. Goodeve	E.W. Stieb	G.E. Hartnett	R.F. Chandler	H.J. Segal/IL.I. Wiebe
1975(32)	Montréal	E.W. Stieb	G.E. Hartnett	J.W. Steele	K.W. Hindmarsh	R.M. Gentles/L. Goodeve
1976(33)	Saskatoon	G.E. Hartnett	J.W. Steele	W.E. Alexander	K.W. Hindmarsh	C.J.Briggs
		PAST PRESIDENT	**PRESIDENT**	**PRESIDENT ELECT**		
1977(34)	Charlottetown	J.W. Steele	W.F. Alexander	K.W. Hindmarsh	F.W. Teare	C.J.Briggs
1978(35)	Victoria	W.E. Alexander	K.W. Hindmarsh	F.W. Teare	W.A. Parker	C.J.Briggs
					EXECUTIVE DIRECTOR	
1979(36)	Sarnia	K.W. Hindmarsh	F.W. Teare	R.E. Moskalyk	J.A. Wood****	E.M. Hawes
1980(37)	Calgary	F.W. Teare	R.E. Moskalyk	C.J.Briggs	J.A. Wood	E.M. Hawes
1981(38)	Winnipeg	R.E. Moskalyk	C.J.Briggs	M. Mezei	J.A. Wood	E.M. Hawes
1982(39)	Ottawa	C.J. Briggs	M. Mezei	J.L. Summers	J.A. Wood	K.M. McErlane
1983(40)	Montréal	M. Mezei	J.L. Summers	R. Tawashi	A.M. Goodeve	K.M. McErlane
1984(41)	Vancouver	J.L. Summers	R. Tawashi	J. Gagné	A.M. Goodeve	K.M. McErlane
1985(42)	Halifax	R. Tawashi	J. Gagné	J.Bachynsky	A.M. Goodeve	K.M. McErlane
1986(43)	Québec	J. Gagné	J.Bachynsky	K. Simons	K.M. McErlane	H.M.Burt
1987(44)	Jasper	J.Bachynsky	K. Simons	F. Chandler	K.M. McErlane	H.M.Burt
1988(45)	Saint John	K. Simons	F. Chandler	S.M. Wallace	K.M. McErlane	H.M.Burt
1989(46)	Portland	F. Chandler	S.M. Wallace	P.Beaulac	K.M. McErlane	H.M.Burt
1990(47)	Regina	S.M. Wallace	P.Beaulac	H.M.Burt	K.M. McErlane	M. Greer
1991(48)	St. John's	P.Beaulac	H.M.Burt	M. Spino	K.M. McErlane	M. Greer
1992(49)	Winnipeg	P. Beaulac	H.M. Burt	M. Greer	K. Moody	J. Louvelle
1993(50)	Vancouver	H.M. Burt	M. Greer	R. Coutts	K. Moody	J. Louvelle
1994(51)	Charlottetown	H.M. Burt	M. Greer	R. Coutts	K. Moody	J.L. Glennie
1995(52)	Montréal	M. Greer	R. Coutts	J.L Blackburn	K. Moody	J.L. Glennie
1996(53)	Calgary	M. Greer	R. Coutts	J.L Blackburn	K.A. Ready	C.J. Turner
1997(54)	Vancouver	R. Coutts	J.L Blackburn	D. Perrier	K.A. Ready	C.J. Turner/K.A. Ready
1998(55)	St. John's	J. L. Blackburn	D. Perrier	C.J. Turner/1. Sketris	K.A. Ready	K.A. Ready
1999 (56)	Québec City	D. Perrier	I. Sketris	D. Hill	K. Ready/J. Blackburn	
2000 (57)	Saskatoon	I. Sketris	D. Hill	D. Fielding	J.L. Blackburn	
2001 (58)	Ottawa	D. Hill	D. Fielding	A.J. Rémillard	J.L. Blackburn	
2002 (59)	Winnipeg	D. Fielding	A.J. Rémillard	L. Vercaigne	J.L. Blackburn	
2003 (60)	Montréal	A. J. Rémillard	L. Vercaigne	S. Mansour	J.L. Blackburn	
2004 (61)	Vancouver	L. Vercaigne	S. Mansour	S. Marleau	F. Abbott	
2005 (62)	Saskatoon	S. Mansour	S. Marleau	Z. Austin	F. Abbott	
2006 (63)	Edmonton	S. Marleau	Z. Austin	A. M. Whelan	F. Abbott	
2007 (64)	Montreal	Z. Austin	A. M. Whelan	S. Albon	F. Abbott	

* This office ceased to exist after the 1978 meeting.

**This office was assumed by A.M. Goodeve in the Spring of 1967 due to the sudden illness of K.M. James. ***Officers of the new organization, AFPC, assumed their offices on January 1, 1970, after a mail ballot.

The officers of 1968-69 served in the interim after the 1969 meeting. **** J.A. Wood was Executive Director from 1977-1982.

The following pages contain an overview of

The Activities of the

Association of Faculties of Pharmacy of Canada

During the Period

July 1, 2006 to June 30, 2007

PART 1.0

AFPC ANNUAL CONFERENCE 2007

MONTRÉAL, QUÉBEC

May 30 - June 2, 2007

Sixty-fourth Annual Conference

Of

Association of Faculties of Pharmacy of Canada

"International Symposium on Pharmacy & Pharmaceutical Sciences: From bench to market"

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WELCOME FROM DR. DANIEL THIRION
AFPC Co-Chair

Dear AFPC Members, Conference Delegates and Visitors:

Welcome to the 64th Annual General Meeting and Conference of AFPC! The University of Montreal is pleased to have the honour of hosting this year's lively downtown Montreal event. We join the Canadian Society for Pharmaceutical Sciences (CSPS) and the Pharmaceutical and Biomedical Analysis (PBA) to offer an international research and academic programme dedicated to excellence. This is reflected in the event where you have the great opportunity to choose from three synchronized tracks to tailor your learning experience. AFPC has carefully selected speakers and topics to provide a vision of clinical practice and pharmacy programmes in this time of recent legislative reform. As pioneers in this changing environment, come challenge your mentoring and leadership skills that serve to shape practice and research! Also, explore the interesting cross-curricular competency evaluation now being integrated into health education.

I hope you will enjoy this experience and take advantage of what the AFPC 2007 conference has to offer: opening reception and award dinner, posters, exhibits, the annual general meeting, evening activities, and closing banquet in the exciting downtown Montreal!

J'aimerais remercier profondément mes collègues du comité organisateur pour leur dévouement sans relâche et le souci d'un travail de qualité ainsi que les généreux commanditaires sans qui cette conférence ne pourrait être le succès que vous connaissez aujourd'hui.

Yours sincerely,

Daniel J.G. Thirion, B.Pharm., M.Sc., Pharm.D., BCPS
Co-Chair
Councillor, Faculté de pharmacie, Université de Montréal

Welcome from Dr. Anne Marie Whelan

AFPC PRESIDENT

Dear AFPC Members, Conference Delegates and Visitors:

Welcome to the 64th Annual General Meetings and Conference of AFPC! I would also like to welcome the delegates from the concurrent 10th Canadian Society for Pharmaceutics Sciences (CSPS) Annual Meeting and the 18th Pharmaceutical and Biomedical Analysis (PBA) Annual Meeting. It is exciting to be meeting with these organizations as it is obvious from the program that we share many of the same interests! I 'm sure you will enjoy the speakers, posters and discussions highlighting new drugs, impacts of legislative changes, mentoring, and cross curricular competencies. Please join us for the Opening and Award Dinners, where we will have the opportunity to acknowledge the award winners from our Faculties across Canada.

On behalf of the executive and council of AFPC, I would like to gratefully thank the Montreal Organizing Committee co-chaired by Daniel Thiron from the University of Montreal and Fakhreddin Jamali from the University of Alberta. Under their leadership the committee has worked endlessly to put together a joint program and social activities that are of interest to all three organizations. I would also like to extend our gratitude to all of our sponsors who make these meetings possible.

Please enjoy the meeting and your visit to beautiful Montreal!

AWhelan

Anne Marie Whelan, BSc (Pharm), PharmD
President, AFPC (2006-2007)

Welcome from Dr. Pierre Moreau

Dean of the Faculty of Pharmacy

Dear colleagues and friends,

As the new dean of the Faculty of Pharmacy of Université de Montréal, it is a real pleasure for me to welcome you to Montréal for this year's edition of the AFPC meeting.

As some of you may well know, we will offer a Pharm D program starting this September and the timing for the meeting is simply excellent. Indeed, the program centers around legislation modifications that impact on the practice and training of pharmacy. Our new program was developed to account for these changes in order to provide all the skills necessary to tackle the new challenges. Other provinces are also experiencing similar changes and their reaction will surely provide valuable information for those who will face similar challenges in the future.

Among necessary skills, general competencies are increasingly recognized as a major contributor to the overall quality of health care professionals. These skills were incorporated into our curriculum and the meeting program also includes topics related to this issue and more precisely on how to properly evaluate them. As the role of the pharmacist is expanding, its ability to communicate, manage, stay scientifically informed, collaborate and be critical will also prove to be tremendously valuable in order for the transition to be successful. Collective reflections on these topics is indeed timely.

Montreal is a dynamic city, but pales in comparison to the organizing committee who has put tremendous time and energy to offer you this meeting. I sincerely hope that you will enjoy your stay with us for yet another successful AFPC meeting.

Bienvenue,

Pierre Moreau, Ph.D.
Professeur et Doyen

AFPC Conference Planning Committee

Chair
Daniel Thirion

Registration / Logistics
Sylvie Marleau /Daniel Thirion / Sophie Brisebois /Lyne Levesque / Leila Andraos

Conference Budget
Pierre Moreau / Frank Abbott / Daniel Thirion / Michelle Savoie

AFPC Pharmacy Practice Research Session
Chair: Pierre Moreau
Faculty: Daniel Thirion / Frank Abbott

AFPC/CSPS/PBA Joint Opening Session
Mo Jamali / Daniel Thirion / Frank Abbott

AFPC Teacher's Conference I and II
Daniel Thirion / Nancy Winslade

Conference Program
Sylvie Marleau / Daniel Thirion / Line Labbé / Frank Abbott / Lyne Levesque / Gisèle Gagné

Banquets / Receptions (Opening Dinner, Awards Dinner)
Sylvie Marleau / Sophie Brisebois

GRUM/AFPC Poster Session and Exhibits
Chair : Line Labbé / Sylvie Marleau
Faculty : Daniel Thirion / Frank Abbott / Lyne Levesque

Looking Ahead to the AFPC Conference 2008

The upcoming 2008 AFPC annual meeting will be held with the AACP at the Sheraton Chicago Hotel & Towers Chicago Illinois.

Joint American Association of Colleges of Pharmacy/Association of Faculties of Pharmacy of Canada Meeting
July 19–23 2008
AACP Teachers Seminar, Leadership Seminar and AACP Annual Meeting
Sheraton Chicago Hotel & Towers, Chicago, Illinois

Education Advancing Practice

For only the second time, pharmacy educators in Canada and the United States will hold a joint annual meeting in July 2008 in Chicago Illinois. The opportunity to learn from colleagues from across North America and around the world, and the ability to showcase our own innovations in pharmacy education in Canada will make this conference a premier continuing professional development event for pharmacy educators - book your calendars now to make sure you don't miss this important event! On behalf of AFPC, the Universities of Toronto and Waterloo will be organizing this meeting - we look forward to welcoming you to Chicago in 2008!

Conference Theme:

Pharmacy education and practice have always had a synergistic relationship. Practitioners have been intimately involved in education, either as lecturers, teaching assistants, lab demonstrators or experiential preceptors and co-ordinators. Similarly, educators have made a significant contribution to practice, through development of advanced practice models and roles, providing continuing education, and through mentorship of others. Collaboration across the continuum of practice and education has created an excellent platform for many research endeavors. The relationship between education and practice requires nurturing, yet the advantages for the profession are many.

Objectives:

a) To describe and showcase practice-academia innovations in Canada
b) To discuss barriers and facilitators to practice-academia innovations
c) To identify emerging practices related to practice-academic innovations

Structure:

Three, 3-hour sessions will be planned focused on the following areas:

1) Structured Practical Experience
2) Performance Based Teaching, Learning and Assessment
3) Integrating practice in large-group teaching

For each session, 2-3 innovations will be showcased and discussed. Emphasis will be placed on innovations for which evidence exists regarding the benefit of the practice-academia relationship. These innovations will be utilized as case studies to allow participants to examine promising practices and lessons learned regarding these innovations. Our goal is to showcase at least one innovation from each of the 10 pharmacy schools in Canada.

Calls for papers, posters, and presentations will be published in late fall 2007. Plan now to attend this important meeting, and share your experience with pharmacy educators from across North America!

AFPC Council and Executive

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Université de Montréal

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La librairie de l'Université de Montréal est heureuse de contribuer à la conférence AFPC/CSPS.

The bookstore of the Université de Montréal is happy to be part of the AFPC/CSPS conference in Montreal.

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ASSOCIATION OF FACULTIES OF PHARMACY OF CANADA
64TH ANNUAL MEETINGS AND CONFERENCE

May 30 – June 2, 2007
The Queen Elizabeth Hotel
Montréal, Québec

The 2007 AFPC conference is being held in conjunction with the 10th Canadian Society for Pharmaceutical Sciences (CSPS) Annual Meeting and the 18th Pharmaceutical and Biomedical Analysis (PBA) Annual Meeting.

International Symposium on Pharmacy & Pharmaceutical Sciences:
From bench to market

AFPC Program

WEDNESDAY, MAY 30

4:00 – 6:00 pm	Registration	**Alcôve**
5:30 pm	Opening reception CSPS / PBA / AFPC	**Duluth - Mackenzie**
7:00 pm	Dinner and Presentations by Award Winners	**Hochelaga 4**

THURSDAY, MAY 31

8:00am – 3:00 pm	Registration	**Alcôve**
8:00am – 3:00 pm	Poster viewing and Exhibits	**Hochelaga 1 - 3**
9:00 – 10:00am	Joint Session with CPS and PBA **Drugs on the Horizon** Julie Ducharme, Director, Department of Drug Metabolism and Pharmacokinetics (DMPK), AstraZeneca R&D Montreal and Global Discipline Leader, Discovery DMPK, AstraZeneca	**Duluth - Mackenzie**
10:00am	Break	

10:20 – 11:20am	Joint session with CSPS and PBA **Today's Challenges in Pharmacotherapy** Patrick DuSouich, Professor of Pharmacology, Faculty of Medicine, University of Montreal, Montreal, Canada	**Duluth - Mackenzie**
11:20am	Poster Viewing and Exhibits	**Hochelaga 1 - 3**
11:30am – 1:00pm	**AFPC Annual General Meeting** Lunch served for members	**Montréalais 2**
1:00–4:30pm	**Pharmacy Practice Research Session**: Impact of recent legislation on pharmacy practice, curriculum changes and pharmacy practice research. Moderator: Pierre Moreau, University of Montreal, Qc., Canada	**Mackenzie**
1:00pm	**Legislative Changes in Quebec: Impact on Patient Care** Jean-François Bussières, University of Montreal, QC, Canada	**Mackenzie**
1:45pm	**Legislative Changes: Impact on Pharmacy Programs in Ontario** A: Nancy Waite, University of Waterloo, Waterloo, ON B: Lalitha Raman-Wilms, University of Toronto Bill C102	**Mackenzie**
2:30pm	Break, Poster Viewing and Exhibits	**Hochelaga 1 - 3**
3:00pm	**Legislative Changes and changes in Pharmacy Programs in Alberta** Greg Eberhart, Registrar, Alberta College of Pharmacists	**Mackenzie**
3:45pm	**Expected competencies of graduate and undergraduate students in preparation for the biopharmaceutical industry**. Lyne Fortin Vice President Sales & Marketing, Business Unit #3 Merck Frosst Canada Ltd.	**Mackenzie**
5:00pm	GRUM Poster viewing	**Hochelaga 1 - 3**
6:45pm	Evening activities – Amphibus Tour	**Alcôve**

Friday, June 1

8:00 – 10:30am	Registration	**Alcôve**
8:00am – 5:00pm	Poster Presentations	**Hochelaga 1 - 3**
8:30am - 12:00pm	**Teachers Conference I: Mentoring**	**Mackenzie**
8:30am	**Mentoring and Leadership Workshop** Laurel Taylor, Hema Patel, and Saleem Razack, McGill University, Montreal, QC, Canada	
10:00am	Break, Poster Viewing and Exhibits	**Hochelaga 1 - 3**
10:30am	**Mentoring and Leadership Workshop Mackenzie** Laurel Taylor, Hema Patel, and Saleem Razack, McGill University, Montreal, QC, Canada	
12:00pm	Lunch Break, Poster Viewing and Exhibits	**Hochelaga 1 - 3**
1:00-5:00pm	**Teacher's Conference II:** **Cross Curricular Competencies**	**Mackenzie**
1:00pm	**Fundamentals of Evaluating Cross Curricular Competencies** Nancy Winslade, McGill University, Montreal, QC, Canada	**Mackenzie**
1:45pm	**Tools for Assessing Cross Curricular Competencies** Gilles Leclerc, University of Montreal	**Mackenzie**
2:30pm	Break, Poster Viewing and Exhibits	**Hochelaga 1 - 3**
3:00pm	**Tools for Assessing Cross Curricular Competencies Continued**	**Mackenzie**
3:45pm	**PEP Canada:** **Supporting Pharmacists to be Effective Practice Based Teachers: Developing a National Pharmacy Preceptor Development Strategy** Annie Lee, University of Toronto, Toronto ON and Cheryl Cox, University of Alberta, Edmonton, AB	**Mackenzie**
6:00pm	**AFPC Awards Banquet** **(Departure 5:00pm)**	**Hélène de Champlain** **Île Ste-Hélène**

SATURDAY, JUNE 2

8:30am –12:00pm	AFPC registrants will be free to attend CSPS/PBA sessions To see program go to: http://www.cspscanada.org/symposium2007/programme.html CPhA Centennial Conference begins in Ottawa.

ORAL PRESENTATIONS

AWARD WINNERS AND SPEAKERS

AFPC/GLAXOSMITHKLINE GRADUATE STUDENT RESEARCH AWARD

Patrick Ronaldson, PhD Candidate, Leslie Dan Faculty of Pharmacy, University of Toronto.

Patrick Ronaldson is a Ph.D. candidate at the Leslie Dan Faculty of Pharmacy, University of Toronto under the supervision of Dr. Reina Bendayan. Patrick's doctoral research has focused on characterizing the localization, expression, and activity of drug efflux transporters in glial cells and understanding their relationship to the treatment of brain HIV-1 infection. He has currently published seven papers in peer-reviewed journals as well as a book chapter describing mechanisms of drug transport in the brain. He has also been invited to present his work at several national and international conferences and has received various awards in recognition of his research accomplishments. Patrick was elected by his peers to the post of President of the Pharmaceutical Sciences Graduate Students' Association (2003-2006) at the Leslie Dan Faculty of Pharmacy. He recently received a Gordon Cressy Student Leadership Award (2007), which is awarded by the University of Toronto Alumni Association and the Division of University Advancement for his contributions to the University of Toronto community. After completion of his Ph.D. degree in June 2007, Patrick intends to do a postdoctoral fellowship in the field of drug transport.

Abstract: HIV-1 Viral Envelope Glycoprotein Gp120 Triggers an Inflammatory Response in Cultured Rat Astrocytes and Regulates the Functional Expression of P-glycoprotein.

In the present work, we have examined i) the ability of gp120, an HIV-1 viral envelope glycoprotein**,** to trigger the innate immune response in astrocytes, an HIV-1 brain cellular target and ii) investigated the functional expression of the ABC membrane transporter P-glycoprotein (P-gp), in primary cultures of rat astrocytes treated with gp120 or cytokines (TNF-α, IL-1β, IL-6). Standard MTT and D-mannitol uptake assays confirmed that HIV-$1_{96ZM651}$ gp120 treatment did not alter cell viability or membrane permeability. Semiquantitative RT-PCR analysis and ELISA demonstrated increased TNF-α, IL-1β and IL-6 mRNA and protein expression in cultures treated with HIV-$1_{96ZM651}$ gp120, suggesting *in vitro* activation of immune responses. Cytokine secretion was detected when CXCR4, but not CCR5, was inhibited with a specific antibody, implying cytokine secretion is primarily mediated via CCR5 in astrocytes triggered with HIV-$1_{96ZM651}$ gp120. P-gp protein expression was increased in astrocyte cultures exposed to TNF-α (2.9-fold) or IL-1β (1.6-fold) but profoundly decreased in the presence of IL-6 (8.9-fold), suggesting IL-6 is primarily involved in modulating P-gp expression. In parallel, following HIV-$1_{96ZM651}$ gp120 treatment, immunoblotting analysis showed a significant decrease in P-gp expression (4.7-fold). Furthermore, the accumulation of two P-gp substrates, digoxin and saquinavir (an HIV-1 protease inhibitor) was enhanced (1.5-1.8-fold) in HIV-$1_{96ZM651}$ gp120 treated astrocyte monolayers but not altered by P-gp inhibitors (i.e., PSC833, GF120918) suggesting a loss of transport activity. Taken together, these data imply that HIV-$1_{96ZM651}$ gp120 or cytokine treatment modulate P-gp functional expression in astrocytes which may lead to complex drug-transporter interactions during HIV-1 encephalitis-associated immune responses.

AFPC-Bristol-Myers Squibb National Award for Excellence in Education
PRIX NATIONAL AFPC-BRISTOL-MYERS SQUIBB POUR EXCELLENCE EN ENSEIGNEMENT

Louise Mallet, BSc. Pharm., Pharm. D.
Professeure titulaire de clinique, Faculté de pharmacie, Université de Montréal.

Louise Mallet, a reçu son Baccalauréat en pharmacie à l'Université Dalhousie à Halifax. Par la suite elle a effectué une résidence en pharmacie d'hôpital à « University of Alberta Hospital » à Edmonton en Alberta. Elle obtient un Pharm.D. de Massachussetts College of Pharmacy à Boston puis effectue 2 années de fellowship en gériatrie à l'Université de la Georgie à Athens.

Mme Mallet est présentement professeure titulaire de clinique à la Faculté de Pharmacie de l'Université de Montréal et également pharmacienne en gériatrie au Centre universitaire de santé McGill. Elle est l'auteur de nombreuses publications et co-auteur du livre en gériatrie- Manuel des soins pharmaceutiques en gériatrie.

Abstract: **La gériatrie: Application et implication en enseignement**

La conférence portera sur mon implication au niveau de l'enseignement en gériatrie, de l'enseignement en interdisciplinarité et à la participation à l'application des soins pharmaceutiques à la Faculté de pharmacie de l'Université de Montréal. Les différentes méthodes pédagogiques utilisées seront présentées pour illustrer l'interaction entre les étudiants et le professeur ou conférenciers dans le cours de Pharmacothérapie gériatrique. Ces méthodes pédagogiques sont: les principes gériatriques, la rencontre avec l'expert- la question préalable, la solution collective de problèmes et l'approche interdisciplinaire. La résidence spécialisée en pratique gériatrique représente une autre initiative d'une formation spécialisée permettant de dispenser des soins pharmaceutiques. La « Journée de consultation avec les personnes âgées » mise en place dans le but de favoriser le développement du professionnalisme chez l'étudiant permettra d'illustrer une autre implication gériatrique. L'enseignement en interdisciplinarité en collaboration avec les Facultés de physiothérapie et d'ergothérapie permet aux étudiants de mieux comprendre le rôle de chacun des intervenants dans une équipe de soins. Enfin, une rencontre avec les membres de l'équipe interdisciplinaire permet de découvrir le rôle de chacun. Les outils développés pour favoriser la continuité des soins ainsi que mon implication au niveau de l'équipe de soins de gériatrie au Centre universitaire de santé McGill seront aussi présentés.

AFPC/AstraZeneca New Investigator Research Award

Zubin Austin, BScPhm, MBA, MISc, PhD
OCP Professor in Pharmacy, Leslie Dan Faculty of Pharmacy, University of Toronto

Zubin Austin completed his pharmacy degree at the University of Toronto in 1988. Upon graduation, he began working as a clinical pharmacist at Mount Sinai Hospital, with a specialty in psychiatry. He completed graduate degrees in business administration and information science and began working as a lecturer at the Faculty of Pharmacy in 1994, where he coordinated senior level pharmacy practice lectures and labs. In 2002, after completion of a PhD in cognitive science, he was appointed Assistant Professor. In 2003, he was appointed the inaugural holder of the Ontario College of Pharmacists' Professorship in Pharmacy. His research interests include bridging education for internationally educated health care professionals and interprofessional education and practice. He has published over 45 peer reviewed manuscripts, and has received over $4 million in external competitive funding as principal investigator. In 2006, he was awarded the American Association of Colleges of Pharmacy Lyman Award for outstanding article published in the American Journal of Pharmaceutical Education. He is a past recipient of the AFPC/Bristol Myers Squibb Award of Excellence in Pharmacy Education, and has been named "Professor of the Year" at the Faculty of Pharmacy on five separate occasions.

Abstract: **Social values research in pharmacy education**

Social values researchers examine attitudes towards secular and religious authority, social status, the role of the sexes, and well as orientations towards personal autonomy, informality and immediate gratification. Social values have been studied and described in the general population, and in university-aged students, but there has been little published on the attitudes, values, and beliefs of pharmacy students. The measurement and understanding of social values within a group was described by Rokeach, de Vulpian, and others, and includes a systematic linking of behavioural and attitudinal questions. Since 1997, a longitudinal study of 4th year pharmacy students has been undertaken at the University of Toronto. Through this survey, and using "motivational cognition" methods described by Adams, a model of pharmacy students' social values is emerging. This presentation will outline key findings regarding a model for understanding the evolution of social values of pharmacy students and will discuss implications for pharmacy education, professional practice, and interprofessional collaboration.

AFPC-Pfizer Research Career Award

Thomas R. Einarson Associate Professor, Ph.D. (Arizona), Leslie Dan Faculty of Pharmacy, University of Toronto

Tom Einarson received his bachelor of science in pharmacy degree from the University of Manitoba in 1968. Thereafter, he worked in various community pharmacies in Ontario and in community hospitals (mostly small community hospitals) until 1982. Tom then traveled to Tucson to obtain his Master of Science degree with a major in Pharmacy from the College of Pharmacy, University of Arizona. He completed this degree in 1984. Continuing on in Arizona, Tom completed his Master of Education degree in 1986 with a major in Educational Psychology. In 1987, Tom obtained his PhD degree with a major in Pharmacy and a minor in Educational Psychology. He then proceeded to join the Faculty of Pharmacy at the University of Toronto. Tom's current research is aimed at the development and application of quantitative methods for the evaluation of drug use. This includes the fields of pharmaceopidemiology, pharmacoeconomics, meta-analysis, and statistical methodology. As well, evaluation of methods in the literature is a focus. He has consulted extensively with government (PMPRB, CCOHTA, CADTH, Ontario MoH, Cancer care Ontario)and with both the brand name and generic pharmaceutical industry.

ABSTRACT: Development and Application of Quantitative Methods to Drugs and Drug Services.

Today's healthcare system is facing cost constraints while at the same time increasing consumer demand and increased number of new drug entities entering the market. A need exists for methods to evaluate these new drugs and their place in the system from a variety of viewpoints. Pharmacy administration addresses these and other issues with respect to drugs, drug use, and pharmacy services.

Current research is aimed at the development and application of quantitative methods for the evaluation of drug use. That includes the fields of pharmacoepidemiology, pharmacoeconomics, meta-analysis, and statistical methodology. As well, evaluation of methods in the literature is a focus.

Nancy Waite, Pharm D, FCCP, Associate Director, Practice-Based Education, School of Pharmacy, University of Waterloo, Waterloo

Nancy Waite Pharm D, FCCP is Associate Director of Practice-Based Education at the new School of Pharmacy, University of Waterloo where she oversees experiential programming, practice-based courses/labs, residencies/fellowships and continuing professional development. In her previous position at the Leslie Dan Faculty of Pharmacy she was responsible for the development of a plan for implementation of an Entry-level Pharm D program. Through various academic and clinical positions in Canada and the United States, she has experience providing clinical pharmacy services in ambulatory care practice settings, teaching professional and student audiences, pharmacy practice research and academic managerial responsibilities. Participating and leading curricular reform to meet changing health care needs and advancing pharmacy practice through innovative programs have been two of her key responsibilities over the last 10 years.

Abstract: University of Waterloo School of Pharmacy: Impact of Legislative Changes

The School of Pharmacy at the University of Waterloo (UW) has the rare opportunity to create a wholly new pharmacy program, graduating professionals who embrace both the current and future roles of pharmacists. Recent legislative initiatives are shaping and informing these roles. UW has modified almost every element of a traditional pharmacy curriculum. Our admissions process, through the use of student profiles and personal interviews, is identifying students who are motivated, courageous and innovative. We are committed to identifying and supporting students with interests in a range of professional career paths. Interprofessional team skills will be developed through joint learning opportunities with medicine, optometry, pharmacy technicians and Family Health Teams. Introducing a co-operative model of education has allowed us to increase the amount of experiential learning, early and throughout the curriculum, and provide it in a variety of practice settings. This unique real-world exposure provides students with practical skill sets, on-the-job problem-solving abilities, and allows early and frequent application of classroom learning in an applied context. In turn, the students' employment experiences will continually inform the curriculum. All students will be encouraged to engage with their community through service learning. To facilitate these changes, we have increased the number of pre-requisites and introduced integrated courses. Further details of our new curricular delivery models will be presented.

Lalitha Raman-Wilms, BSc(Phm), PharmD, FCSHP, Associate Professor, Leslie Dan Faculty of Pharmacy, University of Toronto, Toronto.

Lalitha Raman-Wilms is an Associate Professor and Director of the Division of Pharmacy Practice at the Leslie Dan Faculty of Pharmacy. She has experience teaching in both the undergraduate and the Doctor of Pharmacy programs. She is also the faculty advisor for the University of Toronto's International Health Program. Her interests include interprofessional teaching and practice, problem-based learning, pharmaceutical care, and geriatric pharmacotherapy. Lalitha also has many years of hospital and community pharmacy experience, and currently provides pharmaceutical care at a community health centre. Presently, Lalitha has been seconded as Project Leader, Curricular Renewal, as the Faculty is in the process of renewing its curriculum. Lalitha has received several teaching awards and recently, as a member of the Interprofessional Pain Curriculum Committee, was awarded the University's Northrop-Frye award, recognizing distinguished achievements in linking teaching and research.

Abstract: **Curricular Renewal: Preparing Graduates to meet the Evolving Pharmacy-related needs of Canadians**

Across Canada, university pharmacy curricula prepare students effectively to provide direct patient care. However, with changes both in health service delivery and the needs of Canadians, the role of the pharmacist will continue to evolve and expand. In Ontario, there is a strong move towards a team-based approach to care, along with a renewed focus on primary care, as seen by the development of Family Health Teams and Community Health Centres. New legislation related to pharmacists' services are also reflective of the change in the expectation of the pharmacist's role. Pharmacy curricula need to be abreast of these changes in order to ensure that graduates continue to meet the pharmacy-related health care needs of Canadians. This discussion will address the pharmacy curriculum renewal development process and the proposed educational changes at the University of Toronto. The proposed educational changes are based on extensive stakeholder feedback, and reflect the need to enhance education in areas such as personalized therapeutics, pharmacy informatics and patient safety initiatives. In addition, skills and competency in collaborative, interprofessional team-building, retrieval and effective use of health information, knowledge translation at the patient and health care provider levels will enable graduates to develop strong clinical skills, preparing them to be competent and confident in meeting their patient's drug-related needs.

Greg Eberhart, Registrar, Alberta College of Pharmacists, Edmonton, Alberta

Greg Eberhart graduated from the Faculty of Pharmacy and Pharmaceutical Sciences at the University of Alberta in 1979. He practiced in both independent and corporately owned community pharmacies for over 10 years. During this period he had opportunity to provide services to a rural hospital and auxiliary care centre, and a federal penal institute.

In 1984 Greg was elected to the council of Alberta Pharmaceutical Association, serving as president in 1989. During his tenure he chaired the Association's Pharmacy Technician Advisory Committee, and was a member of the Professional Affairs and Drug Caution Code committees. He represented Alberta on the Council of Delegates to the Canadian Pharmaceutical Association from 1986-1989, serving on the association's Audit Review Committee, which he chaired during the 1988/89 term.

Since January 1990 Greg has been Registrar of the Alberta Pharmaceutical Association and its successor, the Alberta College of Pharmacists. Highlights of his career include the inception of NAPRA, the development of Alberta's Pharmacy Information Network and Electronic Health Record, and achieving an expanded scope of practice for pharmacists that formally recognizes the full spectrum of pharmacists' knowledge and skills, positioning Alberta pharmacists as care providers – not simply dispensers of medications.

Abstract: "Legislative Changes and Changes in Pharmacy Programs in Alberta"

Effective April 1, 2007 pharmacists in Alberta are practicing under a new regulatory and practice framework that recognizes their knowledge and skills as prescribers.

The Health Professions Act (1999) accommodates overlapping scopes of practice amongst 30 regulated health professions. Activities such as dispensing, compounding, selling schedule 1 and schedule 2 drugs, prescribing and administering drugs by injection are restricted to health professionals regulated by a college that has demonstrated that its members have the competencies to safely and effectively perform these activities. These are all roles that Alberta pharmacists have been authorized to perform.

The Alberta College of Pharmacists (ACP) developed a unique model to define pharmacist prescribing as a foundation to extensive consultation and negotiation required to bring the legislation to fruition. Most prescribing will be conducted in a collaborative environment; however, the regulations recognize that some patients will benefit from the ability of pharmacists to prescribe when they are the "initial point of contact" with the health system.

The privilege to prescribe is a new tool that will be used by some pharmacists, in some situations, to resolve drug related problems. Basic privileges have been provided to all pharmacists on ACP's clinical (practicing register). Additional privileges will be granted to pharmacists who successfully complete an evaluation process being administered by ACP.

Tools have been developed to support pharmacists identify their learning needs and to support professional development. New standards have been developed for the practice of pharmacists and for the operation of pharmacies. The college's Code of Ethics is scheduled to be reviewed later this fall.

Greg Eberhart, Registrar of the Alberta College of Pharmacists, will introduce the prescribing model, critical success factors important to achieving this legislated authority, ACP's implementation strategy, and discuss experiences to date since implementation.

Lyne Fortin, Vice President, Sales and Marketing, Merck Frosst Canada Limited.

Lyne Fortin is currently Vice-President, Sales & Marketing responsible for the Specialty and Hospital Business Unit at Merck Frosst Canada, Ltd.
Ms. Fortin graduated in 1982 from l'Université de Montréal with a Bachelor of Pharmacy including a Minor in chemistry. She subsequently obtained a Master of Business Administration from Concordia University. At Merck Frosst since 1985, she held various positions in Market Research, Product Management, Marketing Planning, Sales Management as well as Public Affairs. Ms. Fortin also had international experience when appointed in 1994 as Senior Business Director for the Los Angeles region with Merck & Co. prior to being promoted in November 1998 to Executive Director, Sales & Marketing in Canada. In April 2005, she became Vice-President for one the company's Business Unit and more recently was appointed Member of the Board of Directors for Merck Frosst Canada Ltd. Ms. Fortin is also a member of l'Ordre des pharmaciens du Québec.

Abstract: What Industry Expects From Pharmacy Graduates: A Biopharmaceutical Perspective

Over the past few decades, the Canadian health care sector has experienced constant growth. In its most recent projections, the Canadian Institute for Health Information (CIHI) reports that Canadians invested over $148 billion in health care in 2006, representing more than 10% of Canada's GDP. This investment trend is expected to continue as the Canadian population ages. In 1981, Canadians over 65 years of age represented 10% of the population. In 2016, less than a decade from now, this number is expected to reach 16% or almost 6 million people.

Within health care spending, health care technology, and drugs in particular, are often seen as cost drivers. However, they can and should be looked at as a way of optimizing the health status of Canadians and as a tremendous opportunity for economic development. The Canadian government, along with some provincial governments, has repeatedly suggested that the future of Canada's economy lies in the knowledge industry. The biopharmaceutical sector, comprised of a wide range of pharmaceutical and biotech companies, is one of the key sectors of the knowledge economy where Canada can develop a competitive advantage. To build that competitive edge, highly-skilled human resources are a must. In this presentation, we will explore how the field of pharmacy can contribute to build that competitive edge by developing the talent required for a striving biopharmaceutical sector in Canada.

Saleem Razack, Associate Professor Pediatrics, McGill Universitym Montreal.

Saleem Razack is a pediatric intensivist and Associate Professor of Pediatrics at McGill University. He completed his medical school training at the University of Toronto and his residency and fellowship training at McGill University. His academic interests lie within the field of medical education and he is currently the director of the pediatric residency program at McGill University and a member of the Centre for Medical Education at McGill University, He is involved primarily in scholarly projects concerning core competencies training such as leadership skills, communication skills, and training in social accountability. He is the recipient of a 2007 Canadian Association for Medical Education certificate of merit.

Hema Patel, Associate Professor, Pediatrics, McGill University Health Centre, Montreal

Hema Patel is an Associate Professor in Pediatrics with the McGill University Health Centre, working at the Montreal Children's Hospital (MCH) since 1997. She undertook her medical school training at the University of Western Ontario, followed by pediatric residency training at Dalhousie University in Halifax, Nova Scotia. Next, she completed a fellowship in Academic General Pediatrics at The Hospital for Sick Children in Toronto. Concurrently with her fellowship, she completed her Masters in Clinical Epidemiology at the University of Toronto. Currently, her clinical activities are centred in the Intensive Ambulatory Care Service at MCH, where she is interim Program Head. She is also the Academic General Pediatrics Fellowship supervisor at MCH. She is active in research and teaching and has been a Chercheur-Boursier Clinicien with the FRSQ since 2000. Her research now focuses on the theme of Education in Medical Leadership.

<u>Laurel Taylor</u>, Assistant Professor, Departments of Medicine and Neurology, McGill University, Montreal.

Laurel Taylor has a background in business administration (MBA University of Alberta) and organizational analysis (PhD University of Alberta). She is an Assistant Professor in the Departments of Medicine and Neurology, at McGill University. She is currently on the use of pharmacy and e-health technologies and the impact of information technology on the provision of health care. Dr. Taylor is a member of the Medical Office of the Twenty-first Century (MOXXI) project team. In this innovative health research team, she has project management and liaison functions, while pursuing a stream of research concerning the integration of technology to provide improved quality and safety of health care to Canadians. Dr. Taylor's current research interests include: understanding predictors for adoption and utilization of technology in primary care; assessing the prevalence of electronic drug alerts in primary care settings with an integrated drug management system; analyzing the predictors of physician response to drug alerts; and identifying facilitators and barriers to the integration of decision support tools for the treatment of asthma into community care practices. Before relocating to Quebec, she was part of a team that introduced the principles of total quality management to the administrative and clinical functions of the University of Alberta hospitals. She has been a leading instructor in McGill University's annual Health Challenge: Integrating Management and Medicine workshop for graduating MD-MBA students. She is also active in promoting management education for physicians and is currently a co-investigator for a unique and important clinical trial providing leadership and management education to residents.

<u>Abstract</u>: Teaching Cross Curricular Competencies: A Focus on Teamwork

The current focus on utilizing multidisciplinary teams for the provision of health care requires an additional skill set for providers, one that is not commonly offered as part of the training for providers. This workshop will provide an interactive overview of the concepts of teamwork and multidisciplinary practice, including the potential advantages and disadvantages. An additional requirement for effective teamwork is the ability to manage conflict and understand negotiation tactics. The session will introduce this concept and provide attendees with some tools to understand their own, and other, conflict management styles and review the central concepts for successful negotiation. The goal of the workshop is to introduce a framework for optimal team interactions and conflict management.

Nancy Winslade, B.Sc.Phm., Pharm.D., M.H.P.E., Medical Office of the 21st Century Project (MOXXI), Faculties of Medicine, and Epidemiology & Biostatistics, McGill University, Montreal.

Nancy Winslade obtained her Bachelors of Science in Pharmacy from the University of Toronto in Canada and her Doctor of Pharmacy from SUNYAB in United States. During her early career she practiced at Sunnybrook Health Sciences Centre and was an Associate Professor at the Faculty of Pharmacy in Toronto. At the University she developed and administered the Pharm.D. program that focused on teaching pharmacists to provide direct patient care. Nancy changed to a consulting role upon her relocation to Europe in 1994. Since receiving her Masters in Health Professions Education from the University of Maastricht in the Netherlands, she has worked mainly in the area of assessment of students and practicing health care professionals. Based on this expertise, she was invited by the American Association of Colleges of Pharmacy to prepare their position paper on systems for assessing achievement of pharmacy students. Upon her return to Canada in 2004, she joined the Medical Office of the 21st Century project at the Departments of Medicine and Epidemiology & Biostatistics at McGill University. The MOXXI project investigates the use of e-based technologies to improve physician prescribing. Her research expands this focus to include the community pharmacist's role in optimizing patient's use of medications. She continues her consulting in assessment of competence of health professionals, primarily with the Canadian Examiners of Optometry, the Physicians Assistants of the Canadian Forces and the University of Montreal, Faculty of Pharmacy. Her project with the latter includes assistance with the design of a student assessment program for the proposed entry-level doctor of pharmacy program.

Abstract: Fundamentals of Evaluating Cross Curricular Competencies.

Many health professions have focused on the importance of practitioners' skills related to, for example, professionalism, communication and ethics. Various terms have been used for these skills including cross-curricular competencies, professionalism and general attributes. In pharmacy, both the National Association of Pharmacy Regulatory Authorities' competency-based standards of practice and the Association of Faculty of Pharmacy's educational outcomes for Bachelor of Science in Pharmacy programs emphasize that such general attributes are critical to competent performance as a pharmacist. Similar to other professions, initial approaches to assessment of these attributes conceptualized them as separate from other areas of core professional competence such as provision of pharmaceutical care or management of medication distribution. However, the separation of these attributes from core professional competencies created difficulties since these skills are needed to competently perform the core competencies. Alternative assessment methods evaluate performance of these general attributes within the context of performance of professional competencies. Several models for assessing these attributes will be discussed, with focus on the integrated models proposed by the Competence Committee of the Canadian Examiner's of Optometry and by the University of Montreal, Faculty of Pharmacy.

<u>Monsieur Gilles Leclerc.</u> B.Pharm., Faculté de pharmacie, Université de Montréal, Montreal.

Gilles Leclerc is a former member of the AFPC experiential task force and is presently acting as clerkship coordinator at the Faculté de pharmacie, Université de Montréal. Monsieur Leclerc was involved substantially in the Pharm.D. clerkship program design and has shown specific interest in practice oriented assessment of professional and cross-curricular competencies. Furthermore, he was asked to join the Pharm.D. Steering committee. He has planned and developed UGO, an Academic program management system, winning an honourable mention at the IMS Global Learning Impact Award 2007 conference. He shows a growing interest in Instructional Engineering in Networked Environment focusing on reusability of learning resources, interoperability of learning systems and adaptive testing. Lately he became a member of the CREPUQ IT task force.

<u>Abstract</u>: ***Tools for Assessing Cross-Curricular Competencies*: listening to students and preceptors workshop.**

While developing its Pharm.D. curriculum, the University of Montreal explored new ways to assess student's competencies. This has led to the design of the ECO Model. The challenge was to develop standard direct observation tools that could be used for assessment during practice labs, integration activities and clerkships. A pilot project has allowed students and preceptors to apply the ECO Model during clerkship and to comment on this new approach. Based on the preliminary results of this experience, this workshop will focus on challenges raised by students and preceptors on competency assessment and make participants exchange their own views and experiences.

Annie Lee, BScPhm, MSc(T), Lecturer, Leslie Dan Faculty of Pharmacy, University of Toronto, Toronto

Annie Lee received her B.Sc.Phm from the University of Toronto and a Master of Science in Teaching degree from McMaster University. She completed a hospital residency at St. Joseph's hospital, Hamilton, followed by clinical, research and management positions at various hospitals. Annie is a coordinator for the Structured Practical Experience Program and the coordinator of the third year professional practice lab course at the University of Toronto. She is actively involved with the delivery and development of preceptor training programs for new and returning pharmacist preceptors. Annie is currently co-chair of the PEP Canada committee that consists of experiential program coordinators from across Canada.

Cheryl Cox, BSP, MBA - Director of Clinical Placements, Faculty of Pharmacy & Pharmaceutical Sciences University of Alberta, Edmonton

Cheryl completed a Bachelor of Science in Pharmacy at the University of Saskatchewan and a hospital residency at the Royal University Hospital in Saskatoon. Cheryl's research interests are within the field of curriculum studies with a focus on the transition of students from the classroom to the practice setting. This is the focus of her interdisciplinary Ph. D program in Clinical Education in the Faculty of Education. Currently she coordinates three experiential education courses within the pharmacy program at the University of Alberta.

Abstract: "**Supporting Pharmacists to be Effective Practice Based Teachers – Developing a National Pharmacy Preceptor Development Strategy"**, Annie Lee, University of Toronto and Cheryl Cox, University of Alberta

A component of experiential programs across Canada is providing support to preceptors to be effective practice based teachers. This presentation by members of PEP Canada will highlight initiatives taken by the committee as part of the strategic plan to develop a National strategy for preceptor development. PEP Canada is a national committee of experiential program coordinators from each of the Faculties of Pharmacy in Canada. The proposed strategy will explore issues such as the desired qualities of a preceptor, key components of an introductory preceptor workshop, the selection of preceptors, topics for advanced preceptor workshops, implementation issues for preceptor development including mandatory participation and quality assurance. This presentation will focus on two components of this strategy. The survey results from the Canadian program coordinators will be presented that highlight the desired qualities of a preceptor and the key components for a preceptor workshop for advanced experiential rotations.

Sixty-fourth Annual Conference

Of

Association of Faculties of Pharmacy of Canada

"International Symposium on Pharmacy & Pharmaceutical Sciences: From bench to market"

POSTERS

Abstract Compendium

"International Symposium on Pharmacy & Pharmaceutical Sciences: From bench to market"

64th AFPC Annual Conference

May 30 – 31, June 1, 2007

Hôtel Reine Élizabeth
Montréal, Québec

POSTERS - THURSDAY MAY 31, 2007		
CATEGORY	**TITLE**	**AUTHORS**
PHARMACY PRACTICE RESEARCH		
PPR47-AFPC	Nouvelle méthode de revue d'utilisation des médicaments : exemple pratique du pantoprazole intraveineux en réanimation pédiatrique	Jean-François Bussières, Denis Lebel, Catherine Litalien, Sonia Prot-Labarthe, Véronique Bouche, Bao Nguyen
PPR48-AFPC	Intégration de la pharmacovigilance à la pratique clinique	*Jean-François Bussières*, Mariane Blond , Denis Lebel, Brigitte Martin, Pierre Barret, Karine Touzin
PPR49-AFPC	Perspective québécoise et canadienne de la pratique pharmaceutique en établissement – 2005-2006	*Jean-François Bussières,* Patricia Lefebvre
PPR50-AFPC	Metoclopramide and diphenhydramine in the treatment of hyperemesis gravidarum	*Anaïs Lacasse, BSc*, Amandine Lagoutte, Ema Ferreira, PharmD and Anick Bérard, PhD
PPR51-AFPC	Évaluation de la conformité des pratiques en hémato-oncologie au CHU Sainte-Justine	*Jean-François Delisle*, Jean-François Bussières
PPR52-AFPC	Risk evaluation of *Clostridium difficile*-associated diarrhea following antimicrobial prophylaxis in patients undergoing cardiac, vascular or thoracic surgery in a tertiary care trauma center	*Daniel. J. G. Thirion,D.* Banon, C. Ferland, A. Thibodeau, K. Wilhelmy, L. Blais, A. Fillion, T. Bigras, G. Pichette, P. Laflamme
PPR53-AFPC	Prevalences and trends in medication use during pregnancy and lactation	*Marie-Pierre Gendron, BSc*, Brigitte Martin, BPharm MSc, Driss Oraichi, PhD and Anick Berard, PhD
BASIC RESEARCH		
BR54-AFPC	Involvement of elastases in elastocalcinosi	*Céline Bouvet*, Simon Moreau & Pierre Moreau
BR55-AFPC	Chemical and enzymatic synthesis of sugar nucleotides for glycosylation engineering of natural products	*Shannon C. Timmons,* Roy H. Mosher, Sheryl A. Knowles, and David L. Jakeman
BR56-AFPC	Gender-related differences in potassium channel block; Modulatory role of verapamil	*Raymond Hreiche*, Pierre Morissette, Hubert Zakrzewski-Jakubiak and Jacques Turgeon
BR57-AFPC	Polyion complex micelles of carboxymethyldextran-block-poly(ethylene glycol) and diminazene diaceturate: preparation and physicochemical characterization	*Ghareb M. Soliman* and Françoise M. Winnik
BR58-AFPC	Cholesterol efflux mediated by ABC transporters is upregulated with EP 80317, a growth hormone releasing peptide in a PPARG-dependent manner	*Kim Bujold,* Sylvie Marleau and Huy Ong
BR59-AFPC	Ser/Thr cluster I and II located in C-terminal end of IRF3 are both important for its optimal transactivation ability and are involved in different aspects of IRF3 life cycle	*Jean-Francois Clement,* Annie Bibeau-Poirier, Simon-Pierre Gravel, Nathalie Grandvaux, Sylvain Meloche and Marc J Servant
BR60-AFPC	The transcription factors Nur77 and retinoid X receptors participate in amphetamine-induced locomotor affects	*Emmanuelle Bourhis*, Jérôme Maheux[1], Claude Rouillard[2] and Daniel Levesque

Posters - Thursday May 31, 2007		
BR61-AFPC	A physiologically based pharmacokinetic model to assess the role of ABC transporters in drug distribution	*Frédérique Fenneteau,*Jun Li, Lucie Couture, Jacques Turgeon, Fahima Nekka
BR62-AFPC	Induction of the transcription factor *Nur77* by antipsychotic drugs is dependant upon metabotropic glutamate subtype 5 and adenosine A_{2A} receptors	*Jérôme Maheux,* Michel St-Hilaire, Emmanuelle Bourhis, Claude Rouillard, Daniel Levesque
BR63-AFPC	Role du monoxyde d'azote dans la rigidité artérielle et l'élastocalcinose	*Liz-Ann Gilbert,* Richard Larivière et Pierre Moreau
BR64-AFPC	Rôle du TGF-B1 dans l'élastocalcinose	*Simon Moreau,* Céline Bouvet, Pierre Moreau
BR65-AFPC	Novel CD36 ligands with hypocholesterolemic and anti-atherosclerotic properties	*Valérie L. Bessi*, Kim Bujold, Sylvie Marleau and Huy Ong
BR66-AFPC	Implication of the renin-angiotensin-aldosterone pathway-related polymorphisms to heart failure predisposition	*Marcin Zakrzewski-Jakubiak* M.Sc., 1Simon de Denus M,Sc,, 2Marie-Pierre Dubé Ph.D, 1François Bélanger M.Sc., 2Michel White MD, 1Jacques Turgeon Ph.D
EDUCATION AND TEACHING		
ET67-AFPC	Évaluation de la qualité des résumés publiés dans le Pharmactuel de 1993 à 2006	*Bénédicte Coureau*, Jean-François Bussières, Sonia Prot-Labarthe, Denis Lebel
ET68-AFPC	Development and preliminary evaluation of a training workshop for pharmacists assessing students in an OSCE setting	*Debra M. Moy* B.Sc. Pharm, Anthony Marini PhD, Greg Morris, B.A
ET69-AFPC	Evaluation of a complementary pharmacy day within an interprofessional pain curriculum	*Debra M. Moy*, B. Sc. Pharm., Lalitha Raman-Wilms, Pharm D
ET70-AFPC	The ability of interprofessional and uniprofessional student teams to assess the quality of a patient care plan as compared to an experienced evaluator	*Roy Dobson*, Jane Cassidy, Peggy Proctor, Doreen Walker
ET71-AFPC	Self-directed learning at the University of Manitoba: implementation of a new elective program at the Faculty of Pharmacy	*Silvia Alessi-Severini*, Colleen Metge, Rehana Durocher, Tamara Buchel and Brent Kvern
ET72-AFPC	ECO project: A new competency assessment model for clerkships	*Gilles Leclerc*, Ema Feirrera, Guylaine Bertrand, Johanne Collin, Marie Dubois, Tania Choquette
ET73-AFPC	Educational resources management model: From cross-curricular to trans-curricular	*Gilles Leclerc*, Michel Leblanc, Guylaine Bertrand
ET153 - AFPC	Transforming healthcare through collaboration "in-BC"	*Rosemin Kassam*[1], Lesley Bainbridge[2], Grant Charles[3], Kathy Copeman-Stewart[4] Grace Mickelson[5], Provincial Project Leaders

POSTERS - FRIDAY JUNE 1, 2007		
CATEGORY	**TITLE**	**AUTHORS**
PHARMACY PRACTICE RESEARCH		
PPR118-AFPC	Feasibility of conducting a pragmatic cluster cohort study using administrative databases to evaluate the effectiveness of an osteoporosis workshop	*Marie-Claude Laliberté*, Sylvie Perreault, Alice Dragomir, Johanne Goudreau, Isabel Rodrigues, Lucie Blais, Nicole Damestoy, Diane Corbeil, Lyne Lalonde
PPR119-AFPC	Évaluation de la conformité de la chaîne thermique en établissement de santé	*Jessica McMahon*, Jean-François Bussières
PPR120-AFPC	Plasma concentrations of Bupivacaine and Ropivacaine in combined femoral-sciatic block	*Mohamad-Samer Mouksassi*, Pierre Beaulieu, France Varin and Line Labbé
PPR121-AFPC	Population Pharmacokinetics of Intravenous Pantoprazole in Pediatric Intensive Care Patients	*Mohamad-Samer Mouksassi, Géraldine Pettersen**, Yves. Théorêt, Line Labbé, Christophe Faure,Bao Nguyen and Catherine Litalien
PPR122-AFPC	Population pharmacokinetic of intravenous busulfan in children	*Nastya Kassir*, Yves Théorêt, Martin A. Champagne, Michel Duval, Diane Larocque, Line Labbé
PPR123-AFPC	Physician readiness to collaborate with community pharmacists on drug therapy management	*Nedzad Pojski (AFPC Student Research Poster Award finalist)*, Linda MacKeigan, Heather Boon, Curtis Breslin and Philip Ellison
PPR124-AFPC	Facteurs influençant la prestation des soins pharmaceutiques visant la maîtrise de l'asthme par le pharmacien communautaire : Étude PRO-RESPIR	*Nola René-Henri*, *B.Pharm*, Natalie Nadaira B.Pharm, Yvonne Khamla B.Pharm, Catherine Ouellet B.Pharm,Lyne Lalonde, Marie-France Beauchesne, Johanne Collin, Lucie Blais
BR134-AFPC	Early systemic exposure to inhaled milrinone in cardiac patients	*Anne QN Nguyen BSc,* Dr. André Denault MD, Dr. Yves Théorêt BPharm PhD, Dr France Varin BPharm PhD
BASIC RESEARCH		
BR125-AFPC	Design, synthesis, and biological evaluation of thieno[2,3-*b*]quinolones as topoisomerase II inhibitors with potential antineoplastic activity	*Ranjith Garlapati (AFPC Student Research Poster Award finalist)* and Mohsen Daneshtalab
BR126-AFPC	EP80317, a ligand of CD36 receptor, protects against remote lung injury after hindlimb ischemia/reperfusion	*Diala Harb*, Leila Hamdan, Caroline Bélanger, Valérie L.Bessi, Marie-Christine Koutsing Tine, Huy Ong, Sylvie Marleau
BR127-AFPC	Induction and inhibition of cytochrome P450 and phase II enzymes by the flaxseed plant lignans secoisolariciresinol and secoisolariciresinol diglucoside	*Erin Boyd (AFPC Student Research Poster Award finalist)*, Ed S. Krol and Jane Alcorn
BR128-AFPC	P-glycoprotein and HERG closely interact in cardiac ventricular myocytes	*Hakima Yahi-Kerbane*, Raymond Hreiche, François Bélanger and Jacques Turgeon
BR129-AFPC	The QFRP peptides modulate adipogenic genes in differentiated 3T3-L1 cells	*Mukandila Mulumba (AFPC Student Research Poster Award finalist)*, Sylvie Marleau, Huy Ong
BR130-AFPC	Synthesis of 2-deoxy-2-fluorosugars for use as glycosyltransferase enzyme probes	*Stephanie S. Lucas (AFPC Student Research Poster Award finalist)*, Shannon C. Timmons and David L. Jakeman

Posters – Friday June 1, 2007		
BR131-AFPC	Effect of polyethylene oxide (PEO) content and drug solubility on polymer swelling and drug dissolution	*Robert Hardy (AFPC Student Research Poster Award finalist),* Hongtao Li, Xiaochen Gu
BR132-AFPC	Electrical remodeling in a transgenic mouse model of cardiac-specific overexpression of type 1 angiotensin II receptor	*Katy Rivard*, Pierre Paradis, Mona Nemer and Céline Fiset
BR133-AFPC	The effect of metoprolol on energy metabolism in the diabetic heart	*Pavan Dhillon (AFPC Student Research Poster Award finalist)*, Vijay Sharma, Michael Allard and John H. McNeill
BR135-AFPC	Design, synthesis, biological evaluation and determination of the mechanism of action of new anticancer agents: the arylchloroethylurea-combretastatin hybrids	*Sébastien Fortin (AFPC Student Research Poster Award finalist)*, Emmanuel Moreau, Jean-Claude Teulade, René C.-Gaudreault
BR136-AFPC	Outward K^+ current is decreased in ventricular myocytes isolated from adult mice with elevated levels of serum TNFα	*Scott A. Grandy*, Marie-Andrée Lupien and Céline Fiset
BR137-AFPC	Influence of short and long-term exposure to tamoxifen on cardiac repolarization in mice	*Gracia El Gebeily* and Céline Fiset
BR138-AFPC	Dendritic Cell Targeted Nanovaccine Formulations	*Welson Wen-Shang Wang (AFPC Student Research Poster Award finalist)*, Dipankar Das and Mavanur R. Suresh
SOCIAL AND ADMINISTRATIVE RESEARCH		
SAR139-AFPC	Évaluation de la conformité à la politique de double-vérification dans un centre hospitalier mère-enfant	*Jean-François Bussières*, Karine Touzin, Bénédicte Coureau, Sylvie Legault, Ginette Quesnel
SAR140-AFPC	Antihypertensive agents' adherence level and primary prevention of non fatal strokes	*Fatima-Zohra Kettani,* Pharm.*,* Alice Dragomir, MSc, Robert Côté, MD, FRCPC, Louise Roy, MD, Pierre Moreau, PhD, Sylvie Perreault, PhD
SAR141-AFPC	Association between antidepressant use during pregnancy and infants born small for gestational age	*Ramos Elodie*, Driss Oraichi, Anick Bérard
SAR142-AFPC	Are controlled asthmatic pregnant women more at risk of prenatal outcomes than non-asthmatic women?	*Faranak Firoozi* , Francine M Ducharme, Catherine Lemière, Marie-France Beauchesne, Anick Bérard, Amélie Forget, Lucie Blais
SAR143-AFPC	Impact of non-adherence to bisphosphonates on the incidence of osteoporotic fractures : a nested case-control study	*Julie Blouin*, Alice Dragomir, Yola Moride, Louis-Georges Ste-Marie, Julio C Fernandes, Sylvie Perreault
SAR144-AFPC	Population-based study: statin adherence on non fatal stroke among patients for primary prevention	*Laura Ellia*, Alice Dragomir, MSc, Lucie Blais, PhD, Robert Côté, MD, FRCPC, Sylvie Perreault, PhD
SAR145-AFPC	Two-stage nested case-control study of the control and severity of maternal asthma during pregnancy and the incidence of asthma in the offspring	*Marie-Josee Martel*, Evelyne Rey, Marie-France Beauchesne, Jean-Luc Malo, Sylvie Perreault, Amelie Forget, Lucie Blais

Poster Abstracts - Thursday May 31, 2007

Please note that numbering corresponds to the placement of the AFPC abstract in the joint listing of poster abstracts by CSPS, PBA and AFPC

PHARMACY PRACTICE RESEARCH

47. Nouvelle méthode de revue d'utilisation des médicaments : exemple pratique du pantoprazole intraveineux en réanimation pédiatrique

Jean-François Bussières 1, Denis Lebel1, Catherine Litalien 2, Sonia Prot-Labarthe1, Véronique Bouche 1, Bao Nguyen1
1 Unité de recherche en pratique pharmaceutique, Département de Pharmacie, 2 Service de soins intensifs pédiatriques, Département de Pédiatrie, Centre hospitalier universitaire Sainte-Justine, Université de Montréal

Objectif : L'objectif de cette étude est de présenter la première RUM rapide au sein de notre établissement. Elle concerne le pantoprazole intraveineux administré en réanimation pédiatrique. Le pantoprazole est le seul inhibiteur de la pompe à proton (IPP) disponible pour administration intraveineuse au Canada. **Méthodologie :** La méthode de RUM rapide est une démarche qui permet une évaluation structurée dans un temps limité. Elle comporte 15 étapes (Tableau 2) qui doivent être réalisées en 30 jours sur un maximum de 30 patients incluent consécutivement à rebours à partir d'une date donnée sur une période ne dépassant pas 12 mois. La méthode détaillée et les résultats de la RUM rapide portant sur le pantoprazole par voie injectable sont présentés. **Résultats :** L'étude a été réalisée au CHU Sainte-Justine, Montréal, Québec, Canada. Il s'agit d'un centre hospitalier universitaire mère-enfant québécois de 400 lits de pédiatrie dont 24 lits de réanimation pédiatrique. La RUM rapide s'est réalisée sur une période de 40 jours au lieu des 30 jours prévus. Un total de 30 patients (14M; 16F) consécutifs ont été inclus du 1er février 2004 au 30 septembre 2005, ce qui représente une période d'étude de 21 mois. En prophylaxie de l'ulcère de stress, l'utilisation du pantoprazole était conforme aux critères de prescription dans 17 % des cas. La non-conformité s'explique principalement par la non-conformité au critère 2 (i.e. utilisation en première intention de ranitidine à raison de 6 mg/kg/jour). Pour le traitement d'un saignement digestif haut actif, la conformité était de 100 % Une endoscopie a été réalisée dans 28% des cas avant l'instauration du pantoprazole. **Conclusion :** Cette étude illustre une première démarche de revue d'utilisation de médicaments rapide en établissement de santé. L'utilisation du pantoprazole est peu conforme en prophylaxie de l'ulcère de stress mais conforme en traitement de saignement digestif haut actif.

48. Intégration de la pharmacovigilance à la pratique clinique

Jean-François Bussières[1], Mariane Blond [1], Denis Lebel[1], Brigitte Martin[1], Pierre Barret[1], Karine Touzin[1]
[1] Unité de recherche en pratique pharmaceutique, Département de pharmacie, CHU Sainte Justine, Montréal, Québec, Canada / Faculté de pharmacie, Université de Montréal

Objectif: Comparer les systèmes et les formulaires de déclarations utilisés dans 5 pays différents à partir d'une revue de la documentation afin d'en évaluer l'efficacité et présenter une démarche active permettant l'intégration de la pharmacovigilance à la pratique clinique dans un centre hospitalier universitaire.
Méthodologie: À partir d'une revue de la documentation, on a comparé les systèmes et les formulaires de déclarations utilisés dans 5 pays différents. On a revu les méthodes de codification des dossiers patients et l'identification des effets indésirables aux médicaments (EIM) pour en déterminé l'efficacité. À partir de l'intranet pharmacie, on a élaboré et développé un concept d'intégration de la pharmacovigilance dans notre établissement de santé. **Résultats:** Les systèmes de déclaration diffèrent entre les cinq pays étudiés alors que les formulaires de déclaration contiennent les mêmes renseignements. Les données de la documentation suggèrent qu'un nombre important d'EIM n'est pas codifié, déclaré et documenté au dossier du patient et que l'intégration de la pharmacovigilance doit être améliorée en établissement de santé afin d'en augmenter l'efficacité. Le concept développé est composé de trois volets soit la détection, la documentation et le retour d'informations. Le modèle proposé relance les activités d'un sous-comité de pharmacovigilance avec une représentation adéquate des cliniciens et permet l'intégration du dossier pharmacologique, du dossier des examens biologiques et des rapports d'EIM colligés via intranet. **Conclusion:** Les effets indésirables des médicaments doivent être documentés pour assurer leur utilisation optimale. La sous-déclaration des EIM est fréquente dans de nombreux pays. Cet article présente une démarche permettant l'intégration de la pharmacovigilance à la pratique clinique dans un centre hospitalier universitaire, en profitant de la présence des pharmaciens dans les équipes cliniques.

49. Perspective québécoise et canadienne de la pratique pharmaceutique en établissement – 2005-2006

Jean-François Bussières [1], Patricia Lefebvre.
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Objectif: Présenter les faits saillants de la 16ème édition du rapport 2005-06 et les différences observées en ce qui a trait à la pratique québécoise par rapport à l'ensemble de la pratique canadienne. **Méthode:** Il s'agit d'une enquête canadienne réalisée aux deux ans auprès des chefs de département de pharmacie des établissements de santé de plus de 100 lits dont au moins 50 lits courte durée. Les différences observées sont interprétées en tenant compte du nombre absolu de répondants à chaque question. **Résultats:** Les données québécoises 2005-06 (n = 42 répondants) et 2003-04 (n = 48 répondants) sont mises en perspectives données canadiennes en ce qui concerne les indicateurs de structure, les indicateurs de tâches reliées à la pratique pharmaceutique, les indicateurs de ressources humaines, les indicateurs de dépenses en médicaments, le profil des programmes de soins et la présence de pharmaciens, les indicateurs de services cliniques et académiques, les indicateurs de prestation sécuritaire. **Conclusion:** Cette perspective québécoise 2005-06 de la pratique pharmaceutique est publiée dans le cadre d'un supplément du Pharmactuel en ligne au printemps 2007. Cette enquête est réalisée grâce à la contribution financière sans restriction de Eli Lilly Canada.

50. Metoclopramide and diphenhydramine in the treatment of hyperemesis gravidarum

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Introduction: Hyperemesis gravidarum (HG) is the second most common reason for hospitalisation during pregnancy. Since 2002, a new HG treatment protocol consisting of metoclopramide plus diphenhydramine was put in place at CHU Sainte-Justine, Quebec. **Objectives:** We compared the effectiveness and the safety of this new HG protocol with what has been used previously (droperidol plus diphenhydramine) by comparing length of hospitalisation for HG, rate of rehospitalisations, evolution of nausea and vomiting symptoms, pregnancy outcomes, and rate of adverse events between the two groups. Predictors of rehospitalisation for HG in women treated with the new HG protocol were also identified. **Methods:** A retrospective cohort study was conducted from 2002 to 2006 on the population of pregnant women diagnosed with HG, and treated at CHU Sainte-Justine with the new protocol consisting of intravenous metoclopramide 1.2-1.8 mg/h plus diphenhydramine 50mg every 6h. These women were compared to a historical control group consisting of women diagnosed with HG, and treated in the same institution with intravenous droperidol 0.5-1mg/h plus diphenhydramine 25-50mg every 6h between 1998-2001. **Results:** During the study period, 30 pregnant women were exposed to the new HG protocol versus 99 that were exposed to the droperidol and diphenhydramine combination between 1998-2001. Our study showed that the new HG protocol was associated with a greater improvement of vomiting symptoms (36% vs. 21%;p=0.0397), and with less adverse events. The new HG protocol was not better than the droperidol and diphenhydramine combination to reduce nausea symptoms, length of hospitalisation (3.7 vs. 3.1 days; p=0.0096), and rehospitalisations for HG (19.23% vs. 24.44%;p=0.3536); the new protocol did not increase rate of major malformations. In women treated with the new protocol, adjusted analysis revealed that race was the only predictor of rehospitalisation for HG (Black vs. Caucasian;OR: 8.52; 95% CI 1.15-63.34). **Conclusion:** The combination of metoclopramide and diphenhydramine appears to be a good option in the management of HG.

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51. Évaluation de la conformité des pratiques en hémato-oncologie au CHU Sainte-Justine

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Objectif : Évaluer la conformité des pratiques en hémato-oncologie au CHU Sainte-Justine à partir d'une version préliminaire du Guide sur les médicaments dangereux de l'Association pour la santé et la sécurité au travail – secteur des affaires sociales. **Méthode :** À partir d'un comité pharmacie soins-infirmiers avec la participation active d'un pharmacien résident, complétion d'une grille d'auto-évaluation comportant 189 critères de conformité pour 11 domaines. À partir des éléments non conforme, rédaction d'un plan d'action incluant un échéancier en tenant compte d'un nouvel aménagement physique à partir de juin 2007. On a tenu 4 réunions de travail afin de compléter l'outil et de valider les informations recueillies. **Résultats** : Au terme de l'exercice, on obtient le profil de conformité suivant : 30 % des critères sont conformes, 37 % sont partiellement conformes, 30 % sont non conformes et 3 % ne sont pas applicables. Les principaux secteurs de non conformité sont liés aux domaines suivants en ordre décroissant: déballage et entreposage (52 %), aménagement de la pharmacie d'oncologie (42 %), administration des médicaments (21 %). Un plan d'action par domaine a été déterminé incluant un échéancier. **Conclusion :** Une auto-évaluation de la conformité aux pratiques en hémato-oncologie à partir du guide de l'ASSTSAS est une démarche pratique et applicable qui peut mener à un plan d'action concret.

52. Risk evaluation of *Clostridium difficile*-associated diarrhea following antimicrobial prophylaxis in patients undergoing cardiac, vascular or thoracic surgery in a tertiary care trauma center

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Background: Since 2002, a *C. difficile* associated diarrhea (CDAD) outbreak has been affecting institutions in the Canadian province of Quebec. CDAD has since become the most common nosocomial infection diagnosed. The purpose of this study is to evaluate the risk of CDAD and its complications following antimicrobial prophylaxis (AP) in patients undergoing cardiac, vascular or thoracic surgery at a university affiliated tertiary care trauma center. **Methods:** We reviewed the charts of patients aged 18 years or older and who received an AP for surgery between January 1st 2002 and December 31st 2004. The primary outcomes were the occurrence of CDAD and its complications and the occurrence of surgical site infections (SSI). Rates were estimated with their 95% confidence intervals (CI). AP conformity was also documented. **Results:** Overall, 1524 charts were reviewed. In total, 837 cardiac, 335 thoracic, and 352 vascular surgeries were evaluated. CDAD and SSI rates are presented in the following table. Rate of complications associated with CDAD was 20.8 % (95% CI 12.7-28.9 %).

Rates of CDAD and SSI in cardiac, thoracic and vascular surgery patien

Outcome	Cardiac n = 837	Thoracic n = 335	Vascular n = 352	Total n = 1524
CDAD (% (95%CI)	4.3 (2.9-5.7)	10.2 (6.9-13.4)	7.1 (4.4-9.8)	6.3 (5.1-7.5)
SSI (% (95%CI)	4.1 (2.7-5.4)	0.9 (-0.1-1.9)	5.1 (2.8-7.4)	3.7 (2.7-4.6)

Conclusions: AP exposes patients to an increased risk of CDAD. This risk may outweigh its benefit, especially in thoracic surgery. AP needs to be re-evaluated in the context of CDAD outbreaks, and more specifically in surgeries at low risk of SSI. Improving surgical methods is required to alleviate the necessity of AP in specific situations.
Previously presented at ICAAC 2006, and CSHP 2007.

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53. Prevalences and trends in medication use during pregnancy and lactation.

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Background: Although women are having children at an increasingly older age, and thus can be exposed to medications during gestation, little is known about the prevalences and trends of medication exposures during pregnancy and lactation. **Objectives:** Identify the major classes of medications used during pregnancy and lactation, estimate the prevalence of medication use, and determine the overall and yearly trends in medication exposures during pregnancy and lactation for 2003-2007. **Methods:** A cross-sectional study was conducted on the population of women calling IMAGe, a teratology information service based at CHU Ste-Justine in Montreal, Canada, for questions regarding risks/benefits of medication use during pregnancy or lactation. To be eligible in this study, women had to call IMAGe between 12/01/2003 and 01/31/2007, and be pregnant or nursing while using medications at the time of call. Data collected included socio-demographic data, lifestyle variables such as smoking status, alcohol and illicit drug use, pregnancy and lactation history, current pregnancy or lactation data such as gestational age or time since birth, co-morbidities, and complete current medication utilization. Medication data were coded using Health Canada medication library, and disease status using the MedDRA coding system. Time-series modelling was used for the trend analyses. **Results:** A total of 10,506 pregnant women, and 12,982 lactating women were included for analyses. The most frequently used medications during pregnancy were: antidepressants (16.8%), benzodiazepines (5.1%), antipsychotic agents (4.2%), gastro-intestinal agents (4.2%), sympathomimetics (3.9%), NSAIDs (3.6%), and antiemetics (3.1%). The most frequently used medications during lactation were: antidepressants (10.6%), gastro-intestinal agents (6.0%), NSAIDs (5.9%), oral contraceptives (4.5%), antihistaminics (4.0%), opiate agonists (3.3%) and benzodiazepines (3.2%). Significant increases in the number of calls to IMAGe were observed after the paroxetine warnings (Oct. 05), and the signal on the possible teratogenic effect of NSAIDs (Aug. 06). **Conclusions:** Our findings show that there is increasing use of, and awareness to medications during pregnancy and lactation.

BASIC RESEARCH

54. Involvement of elastases in elastocalcinosis.

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Introduction: Elastocalcinosis is a form of vascular calcification associated with aging and localized on the elastic lamellae. It is associated with a reduction of collagen/elastin ratio and a fragmentation of elastin. **Purpose**: Determine if elastases are important in the development of elastocalcinosis. **Methods**: Male Wistar rats were treated with warfarin (20 mg/kg/d) and vitamin K (15 mg/kg/d) (WVK) during 1, 2, 3 and 4 weeks. Untreated rats were used as control (Ctrl). Pulse wave velocity (PWV, an index of vascular stiffness) was evaluated. In the aorta, calcium content and elastin fragmentation were measured. Gelatinase activity was evaluated by zymography. To determine the involvement of different families of elastases, ex vivo experiments of calcification were performed with aprotinin, E-64, 1,10-phenanthroline (1,10-phen) and doxycycline (Doxy). Finally, additional rats received Doxy in association with the WVK treatment during 4 weeks. **Results**: WVK treatment induced a progressive accumulation of calcium and fragmentation of elastin in the aortic wall, associated with a gradual increase of PWV. Gelatinase activity, especially MMP-9 activity, was enhanced after 1 week of WVK treatment (WVK1: 217±52 vs Ctrl: 100, $P<0.05$). The activity returned to baseline at 4 weeks of treatment. Ex vivo experiments demonstrated that only metalloproteinases inhibitors (1,10-phen or doxy) prevented the calcification. Doxy also prevented calcification (Doxy: 0.78±0.18 vs WVK4: 2.27±0.36 μg/mg of tissue, $P<0.05$) and elastin fragmentation in rats. Moreover, it reduced vascular stiffness. **Conclusion**: WVK treatment induced a progressive calcification and elastin fragmentation associated with arterial stiffening. It was associated with a transient activation of MMP-9. Considering that metalloproteinases inhibitors were able to prevent calcification ex vivo and in vivo, our results suggest that MMPs are key players in the process of elastocalcinosis.

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55. Chemical and enzymatic synthesis of sugar nucleotides for glycosylation engineering of natural products

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Introduction and objectives: Despite advances in modern drug discovery, a significant number of pharmaceuticals continue to be derived from natural products, many of which contain one or more carbohydrate functionalities. Sugar appendages are often important in conferring bioactivity, although their precise function remains unclear in many cases. To further understand the medicinal role of carbohydrates attached to natural products, access to a variety of differentially glycosylated compounds is required. As the chemical synthesis of these derivatives is often challenging, glycosyltransferase enzymes are increasingly being used to generate libraries of structurally related glycosylated natural products. These enzymes utilize sugar nucleotides as substrates to transfer carbohydrates to natural products. A major limitation of this approach is poor access to sugar nucleotide substrates. Thus, the development of efficient synthetic and enzymatic methodologies to prepare sugar nucleotides is of particular importance for advancing natural product glycosylation studies (Figure 1).

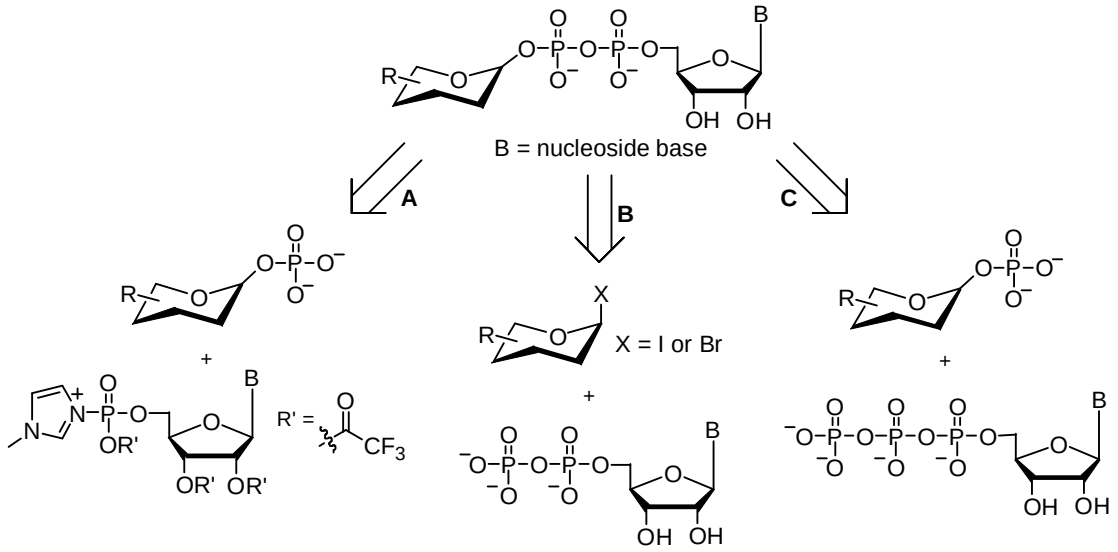

Figure 1. Retrosynthetic strategies for preparing sugar nucleotides

Methods: Sugar nucleotides were prepared using chemical and enzymatic approaches. Compounds were purified using reversed-phase chromatography and characterized via NMR spectroscopy and mass spectrometry. **Results**: Eight sugar nucleotides were chemically synthesized by coupling various sugar-1-phosphates with activated nucleoside 5'-monophosphates **(A)** while five sugar nucleotides were chemically synthesized by coupling electrophilic carbohydrates with nucleoside 5'-diphosphates **(B)**. Fifteen sugar nucleotides were also prepared by exploiting the substrate flexibility of three bacterial thymidylyltransferases **(C). Conclusions:** Chemical synthesis represents a robust and versatile method of preparing structurally diverse sugar nucleotides, although the enzymatic synthesis of sugar nucleotides using nucleotidylyltransferases is a more convenient and higher yielding method of preparing these substrates when enzymes are substrate flexible. Sugar nucleotides prepared via both chemical and enzymatic methods will be used to probe the substrate specificity of the JadS glycosyltransferase enzyme, which transfers a carbohydrate appendage to the angucycline antibiotic aglycon of jadomycin B.

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56. Gender-related differences in potassium channel block; Modulatory role of verapamil.

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Background: Gender-related differences observed in drug-induced Long QT syndrome (LQTS) are well established, while their mechanisms remain largely undefined. Our laboratory previously reported that a treatment with verapamil, a well-known membrane transporters modulator, can potentiate the electrophysiological effects of an I_{Kr} blocker, cisapride. Therefore, the objective of the present study was to evaluate, with or without verapamil treatment, gender-related differences during block of I_{Kr}, I_{Ks}, and I_{Kr}+I_{Ks}.
Method: Hearts (n=120) from Hartley male and female guinea pigs were isolated and buffer-perfused in the Langendorff mode. After a 10min perfusion with Krebbs-buffer containing no drug, hearts were perfused for 10min with buffer containing [20nM dofetilide], [100nM domperidone], [66μM indapamide], [20nM dofetilide + 66μM indapamide] or [100nM domperidone + 66μM indapamide].
Results: In non-treated guinea pigs, indapamide 66 M used as a selective I_{Ks} blocker caused a more pronounced prolongation of $MAPD_{90}$ in female (17.0±5.7msec) compared to male (11.8±3.5msec) ($p<0.05$). In opposite, the $MAPD_{90}$ prolongation induced by I_{Kr} blockers (domperidone and dofetilide) alone or associated with indapamide was not significantly different in male versus female. Independently from the gender effect, we demonstrated that the treatment with verapamil induced a higher $MAPD_{90}$ prolongation when hearts were perfused with dofetilide or domperidone ($p<0.01$). Independently from the verapamil treatment, our results showed that the gender parameter exhibits a significant effect ($p=0.091$) with a significant superior $MAPD_{90}$ prolongation observed in females. Yet, verapamil treatment does not seem to show a significant difference when I_{Kr} or I_{Ks} blockers are perfused.
Conclusion: Gender-related differences were observed in $MAPD_{90}$ of hearts exposed to I_{Ks} blockers but not with I_{Kr} blockers. In addition, we confirmed the modulatory effect of verapamil on the prolongation of cardiac repolarization with I_{Kr} blockers. Finally, we lacked to demonstrate an implication of verapamil treatment - via a potential modulatory role of membrane transporters - in the gender-related differences in drug-induced LQTS.

57. Polyion complex micelles of carboxymethyldextran-block-poly(ethylene glycol) and diminazene diaceturate: preparation and physicochemical characterization.

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Purpose: The purpose of this study is to prepare and characterize the polyion complex micelles (PIC) of novel carboxymethyldextran-block-poly(ethylene glycol) (CMD-PEG) and diminazene diaceturate, a model water soluble cationic drug. The effect of PEG chain length and dextran degree of carboxymethylation on micelle formation and stability was studied.
Methods: CMD-PEG block copolymers with different PEG chain lengths and different degrees of dextran carboxymethylation were synthesized by coupling of PEG-NH_2 and dextran-lactone followed by carboxymethylation of dextran. ^{1}H NMR was used to determine the drug: carboxylate molar ratio corresponding to micellization. The micellar properties, such as their hydrodynamic radius (R_H) and polydispersity index (PI), were determined for solutions of various salt concentrations and over a wide pH range, using dynamic (DLS) and static (SLS) light scattering. The micelle morphology was examined by environmental scanning electron microscopy (ESEM). In-vitro drug release from the micelles was measured using the dialysis bag method.
Results: Four CMD-PEG block copolymers were synthesized, two have different PEG chain length and two have different dextran degrees of carboxymethylation. DLS studies showed that CMD-PEG formed PIC micelles upon the interaction with diminazene diaceturate with R_H ~ 40-60 nm and low PI, depending on the type of CMD-PEG block copolymer. The micelle R_H and PI were constant over the 4 to 11 pH range. The micelles were able to withstand salt concentrations up to 400 mM. Diminazene loading ranged from 40-60 % w/w, depending on the dextran degree of carboxymethylation. ESEM showed that the micelles have spherical shape and uniform size. No aggregation was detectable. The micelles were able to sustain the drug release for 8 h under physiological pH and salt conditions.
Conclusion: Electrostatic interactions between CMD-PEG and diminazene trigger the formation of small, monodispersed and stable micelles. These nanoparticles are expected to find applications in oral drug delivery systems for charged hydrophilic molecules such as peptide drugs.

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58. Cholesterol efflux mediated by ABC transporters is upregulated with EP 80317, a growth hormone releasing peptide in a PPARG-dependent manner.

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Cholesterol homeostasis within macrophages relies in part on efficient efflux pathways supplying cholesterol for its reverse transport to the liver. We have recently shown that CD36 ligands such as EP 80317 exerted striking hypocholesterolemic and anti-atherosclerotic effects in apoE-deficient mice fed a high fat high cholesterol diet. These effects were associated with an increased expression of ATP-binding cassette (ABC) transporters and an increased efflux of cholesterol from peritoneal macrophages. The present study aims to assess the role of nuclear receptors and of the different ABC transporters in EP 80317-mediated cholesterol efflux in macrophages. Methods: J774 cells were loaded with [^{3}H]-cholesterol (1 μCi/ml) and incubated ± EP 80317 (10^{-7}M). Cholesterol efflux from J774 cells was determined following a 4 and 16 hours incubation with HDL (50 μg/ml) or apoA-I (20 μg/ml) as cholesterol acceptors. The expression of proteins involved in reverse cholesterol transport was determined by western blot. Results: With apoA-I as the cholesterol acceptor, EP 80317 induced a significant increase of cholesterol efflux by 163% and 95% ($p<0.001$) after 4 and 16 hours, respectively. In contrast, EP 80317-mediated efflux to HDL increased by only 32-26% ($p<0.001$), under the same conditions. The significant increase of EP 80317-mediated cholesterol efflux was completely inhibited with DIDS, an ABC transporter inhibitor, with either acceptor. In contrast, no change in EP 80317-elicited cholesterol efflux was found following the incubation of J774 cells with BLT-1, a SR-B1 inhibitor. To assess the effect of EP 80317 on PPARγ in the regulation of cholesterol efflux, J774 cells were incubated with GW 9662, a PPARγ inhibitor. A complete inhibition of EP 80317-mediated efflux was found. The expression of proteins involved in cholesterol efflux, as assessed by Western blot, was increased by 2.5-, 2.2- and 7.3-fold for LXRα, ABCG1 and ABCA1, respectively, without significant change in the PPARγ protein levels.Conclusions: EP 80317 induces a significant increase in cholesterol efflux from murine macrophages. EP 80317-mediated efflux is mainly mediated through ABC transporters in a PPARγ-dependent manner.

59. Ser/Thr cluster I and II located in C-terminal end of IRF3 are both important for its optimal transactivation ability and are involved in different aspects of IRF3 life cycle.

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Introduction: The IKK related kinases, IKKi and TBK1, were recently shown to be responsible for the C-terminal phosphorylation of IRF3. However, different conclusions were raised about the phosphoacceptor site(s) targeted by these two kinases. **Purpose**: In order to evaluate with accuracy the physiological relevance of the different Ser/Thr clusters, we chose to study the effect of alanine mutations on anti-viral cytokines productions. **Methods**: For this purpose, we took advantage of a biological assay where supernatants of HeLa cells overexpressing the different C-terminal IRF3 mutants were collected and used to pretreat Vero cells before further challenge with VSV. The effects were evaluated through VSV-induced cell lysis using a standard plaque assay procedure. **Results**: Our data revealed that both Ser/Thr clusters are required for optimal transactivation capacity of IRF3, but that the S385 and S386 are the first one targeted by TBK1/IKKi. *In vitro* kinase assay using full length IRF3 harboring C-terminal mutations as substrates also demonstrate that clusters I and II are both targeted by the kinases as opposed to published results using a GST-IRF3 as substrate. Analysis of Ser/Thr to Ala mutants also reveals that S396A, located in cluster II, abolished IRF3 homodimerization, CBP association and nuclear accumulation. However, the production of anti-viral cytokines is still present in IRF3 S396A expressing cells. Moreover, the phosphomimetic mutant S396D is constitutively active and homodimerize. These data reveal an intriguing role of S396 that lead us to reconsider the current model of IRF3 activation. **Conclusion**: We propose that some read out of IRF3 activation needs to be reconsidered for a better understanding of its regulation. Our data also reconciliate published data by showing that both clusters are essential for IRF3 activity. However, our study clearly demonstrates that the different sites are involved in different steps of IRF3 life cycle. CIHR (MOP-53282), CIHR/RxD and FRSQ

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60. The transcription factors Nur77 and retinoid X receptors participate in amphetamine-induced locomotor affects

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Introduction: In the brain, dopaminergic systems integrate and respond to stimuli coming from internal and external environment. Psychostimulants such as amphetamine (AMPH) represent some external stimuli that alter dopamine neurotransmission. However, the molecular and cellular mechanisms underlying psychostimulant responses are still incompletely understood. In recent years, evidences emerged that certain transcription factors of the nuclear receptor family, specifically Nur77 and retinoid X receptors (RXR), play an important role in adaptation and homeostatic regulation of dopaminergic systems. **Objective**: In this study, we investigate the role of these transcription factors in the locomotor response induced by AMPH. **Methods:** We used a combination of genetic (Nur77) and pharmacological (retinoid drugs) approaches to evaluate the role of these factors. We compared locomotor responses induced by repeated AMPH administration between wild type and Nur77 knockout mice in the presence or not of various synthetic retinoid drugs (RXR and retinoic acid receptor (RAR) agonists and antagonists). We measured 3 components of locomotor activity: horizontal locomotion, vertical locomotion or rearings and stereotyped behaviors. **Results:** The results show that HX531, a synthetic RXR antagonist, reduces AMPH-induced horizontal locomotor activity, while RAR drugs remain inactive. Rearing and stereotyped behaviours are not altered by the Nur77 gene deletion or by retinoid drugs. Interestingly, the effect of the RXR antagonist on horizontal locomotor activity induced by AMPH is abolished in Nur77 deficient mice, suggesting that this orphan nuclear receptor partner is essential for the effect of this RXR drug. **Conclusion:** This study indicates that RXR and Nur77 represent neuronal substrates for AMPH effects. It suggests an involvement of RXR in interaction with the orphan nuclear receptor Nur77 rather than a classic RAR-RXR-mediated retinoid signaling activity. Thus, these transcription factors might play a role in long-term neuroadaptation related to drug-taking and selective RXR antagonists might represent interesting pharmacological tools to reduce motor activation induced by drugs of abuse.

61. A physiologically based pharmacokinetic model to assess the role of ABC transporters in drug distribution.

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Background: Drug interactions affecting the expression and/or activity of ATP-Binding Cassette (ABC) transporters may have a significant impact on drug disposition, drug effectiveness or drug toxicity. The main objective of our study was to develop an innovative model that takes into account the involvement of ABC transporter activities in different tissues, in order to improve prediction of drug distribution in the various conditions surrounding ABC transporter activities. **Method:** A PBPK model was developed in order to consider various conditions of P-gp transporters activities in mouse brain, liver, kidney and heart tissues. Drug distribution was represented either by variants of well-stirred model or permeability rate limited model. Input parameters related to the activity of P-gp in theses tissues were mainly extrapolated from in vitro data. A global sensitivity analysis (SA) was also performed from 500 multivariate log-normal Monte-Carlo simulations to account for the variability of input parameters and their influence on the following model outputs obtained on each tissue: Cmax, Clast and AUC0-tlast. The measure of input-output sensitivity was performed using the partial rank correlation coefficient (PRCC) concept which has been designed for correlated inputs. **Results**: Our model was successfully validated from experimental data collected on wild type and mdr1a/1b(-/-) mice which were intravenously administered 5mg/kg of 3H-domperidone. PBPK model simulations in brain and heart tissues confirmed and quantified a significant involvement of additional efflux transporters at the blood-brain barrier as well as of cardiac influx transporters in domperidone distribution. Further investigations are required to determine the exact nature of additional transporters involved in domperidone distribution at the blood-brain barrier. **Conclusion:** This PBPK model is novel and unique while defined in general terms that can be applied to other drugs and transporters.

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62. Induction of the transcription factor *Nur77* by antipsychotic drugs is dependant upon metabotropic glutamate subtype 5 and adenosine A_{2A} receptors.

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Introduction: Recent observations have shown that transcription factor of the *Nurs* family, mainly *Nur77*, could play a major role in the generation of extrapyramidal effects induced by first generation antipsychotic drugs. Indeed, *Nur77* is strongly induced in motor area of the striatum following administration of a typical neuroleptic. Although antipsychotic actions are generally associated with interaction with dopamine D_2 receptor subtypes, the contribution of metabotropic glutamate and adenosine receptors have been demonstrated. To better understand the role of these neurotransmitters in antipsychotic drugs action, we investigated the role of mGluR5 and A_{2A} receptors in antipsychotic-induced *Nur77* mRNA levels in the mouse brain. **Methods:** Groups of mice received acute injections of vehicle, MPEP (specific mGluR5 antagonist), SCH58261 (specific A_{2A} antagonist), eticlopride (D_2 antagonist), a combination of eticlopride and MPEP or SCH58261 and finally a combination of the eticlopride, MPEP and SCH58261. *Nur77* mRNA levels were detected by in situ hybridization with a specific radiolabeled ribonucleic probe. **Results:** Both MPEP and SCH58261 have no effect on *Nur77* mRNA levels when administered alone. While SCH58261 has no effect on eticlopride-induced *Nur77* mRNA levels, MPEP administration partially prevents this up-regulation. Interestingly, administration of both antagonists abolishes eticlopride-induced *Nur77* mRNA levels in the striatum and nucleus accumbens suggesting a synergistic effect of these two receptors in the up-regulation of *Nur77* mRNA level after eticlopride administration. **Conclusion:** This study indicates that up-regulation of *Nur77* mRNA levels induced by antipsychotic drugs is dependant upon mGluR5 and A_{2A} receptors and might not implicate direct blockade of D_2 receptors in the striatum. These results indicate that the mechanism of action of antipsychotic drugs is not as straightforward as previously proposed and needs to be reconsidered.

63. Role du monoxyde d'azote dans la rigidité artérielle et l'élastocalcinose

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Introduction :L'hypertension systolique isolée (HSI) est associée à une calcification physiologique de l'aorte contribuant à l'augmentation de la rigidité artérielle mesurée par la vitesse de l'onde de pouls (PWV). Objectifs: Déterminer l'implication du NO dans la modulation de la rigidité artérielle et l'élastocalcinose. **Méthodes**: Des rats ont reçu une injection s.c de vitamine K 3 fois par semaine pendant 4 semaines, ainsi que de la warfarine administrée dans l'eau de boisson (WVK). Pendant les 4 semaines suivantes, le traitement WVK a été poursuivi en ajoutant du L-NAME (20mg/kg/jour) dans la nourriture. Les traitements ont été arrêtés 24 heures avant la mesure des paramètres hémodynamiques (pression pulsée et PWV). Les concentrations de calcium aortique ont été mesurées par une méthode spectophotométrique et sa localisation sur coupe d'aorte a été faite par coloration Von Kossa. L'endothéline (ET) tissulaire a été mesurée par essai radioimmunologique. **Résultats**: Le L-NAME a fait varier de manière significative la déposition de calcium au niveau de l'aorte comparativement aux rats WVK, et conséquemment les rats ayant reçu du L-NAME ont un PWV significativement augmenté. Le traitement WVK augmente significativement la production d'ET dans l'aorte, mais l'administration de L-NAME n'augmente pas davantage sa concentration tissulaire. Sur des coupes transversales d'aorte, chez des rats WVK, il est possible d'observer une distribution du calcium sur les lamelles élastiques les plus près de l'adventice. Chez des rats L-NAME, en plus de la déposition de calcium sur les lamelles près de l'adventice, il y a également accumulation de calcium sur les lamelles près de l'endothélium. **Conclusion**: Le NO endogène limite le développement de l'élastocalcinose et l'augmentation de la rigidité artérielle, en agissant principalement sur la partie interne de la tunique médiane.

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64. Rôle du TGF-B1 dans l'élastocalcinose

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Introduction: Le vieillissement est associé à la calcification élastocalcinose et la dégradation progressives des lamelles élastiques de la média, menant à l'augmentation de la rigidité artérielle et au développement de l'hypertension systolique isolée (HSI). Sachant que la dégradation de l'élastine libère certains produits, dont le TGF-B1, nous avons voulu déterminer leur implication dans l'élastocalcinose. **Méthodes:** L'élastocalcinose a été induite chez le rat par le traitement warfarine (20mg/kg/j)-vitamine K(15mg/kg/j) (WVK). Les paramètres hémodynamiques et la rigidité artérielle (vitesse de l'onde de pouls) ont été mesurés, de même que le calcium (colorimétrie). La fragmentation de l'élastine a été évaluée avec la coloration de Weigert. L'activité de TGF-B1 a été évaluée par co-immunoprécipitation de smad 2/3 – smad 4. Le SB-431542 a été utilisé ex-vivo pour bloquer les effets de TGF-B1 et le lactose pour bloquer les récepteurs des peptides d'élatine de façon à évaluer leur rôle dans la calcification vasculaire. Le Cbfa-1 a été mesuré par western blot comme indice de changement phénotypique des cellules musculaires lisses vasculaires. **Résultats:** La calcification était augmentée significativement après 3 semaines de traitement WVK pour atteindre un maximum à 4 semaines. La fragmentation de l'élastine et l'augmentation de l'expression de Cbfa-1 ont suivi la même progression. SB-431542 a prévenu la calcification de façon significative, alors que le lactose n'a pas eu d'effet. In vivo, la liaison de Smad 2/3 à Smad 4 était augmentée à une semaine de traitement WVK, pour ensuite revenir à des valeurs témoin. **Discussion:** TGF-B1 semble être impliqué dans la calcification vasculaire, tant dans le modèle in vivo qu'ex vivo. Puisqu'il est également connu que TGF-B1 est impliqué dans la fibrose, peut-être est-il le lien entre la calcification et la fibrose, qui mènent au développement de la rigidité artérielle.

65. Novel CD36 ligands with hypocholesterolemic and anti-atherosclerotic properties

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Introduction. Atherosclerosis develops as a consequence of oxidized low density lipoprotein accumulation and their uptake through the scavenger receptor CD36 into intimal macrophages which develop into foam cells. We have previously reported that EP 80317, a selective CD36 ligand, and to a lesser extent hexarelin, a growth hormone-releasing peptide (GHRP) that also binds CD36, exert significant CD36-dependent anti-atherosclerotic effect in mice. Whether this anti-atherosclerotic effect is shared by other analogs is not known. A new analog EP 80318 (Atab-D-MeTrp-D-Lys-Trp-D-Phe-Lys-NH_2) with specific binding affinity towards CD36 at 2.5 μM was used to document anti-atherosclerotic properties in apolipoprotein E (apoE)-null mice. **Methods.** ApoE-deficient mice fed a high fat high cholesterol diet from 4 weeks old were administered a daily s.c. dose of either one of two selective CD36 ligands, EP 80317, EP 80318, 300 μg/kg or 0.9% NaCl from 6 to 18 weeks of age (n = 6-9 per group). Blood was withdrawn from the subclavian vein and aortas were isolated from the aortic arch to the iliac bifurcation and cut longitudinally under stereomicroscope. Neutral lipids were colored by Oil Red O staining and the percentage of atherosclerotic lesions was determined by morphometric analysis. **Results**. A chronic treatment with EP 80318 or EP 80317 reduced the percentage of total aortic lesions by 30% ($p < 0.01$) and 41% ($p < 0.01$), compared to 0.9% NaCl, respectively. This effect was associated with a hypocholesterolemia, as shown by a reduction of 31% ($p < 0.05$) of total plasma cholesterol in mice treated with EP 80318 and of 26 % ($p < 0.05$) for mice treated with EP 80317 (22.6 ± 2.2 mmol/L in controls, 15.5 ± 1.3 mmol/L and 16.8 ± 2.1 mmol/L in mice treated with EP 80318 and EP 80317, respectively). In contrast, neither triglycerides, nor HDL cholesterol plasma concentrations were modulated by either one of the treatments. **Conclusion.** Our results support the potential application of GHRP derivatives, targeting CD36 for the prevention of atherosclerotic lesions development.

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66. Implication of the renin-angiotensin-aldosterone pathway-related polymorphisms to heart failure predisposition.

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Aims: Racial differences in survival outcomes point toward a genetic role in the pathophysiology of heart failure. Furthermore, contemporary evidence links genetics to heart failure predisposition. We tested for a difference in prevalence of 10 RAAS-related gene polymorphisms between a homogenous population of maximally treated heart failure patients and healthy controls. **Methods**: 111 healthy volunteers and 58 heart failure patients were included in this study. The healthy control group consisted of males aged between 18 and 35 years old. The heart failure group consisted of patients that were at least 18 years old, were in NYHA class II-III and had a documented LVEF of at most 40% within the previous 6 months. Despite being maximally treated for their condition with ACE inhibitors and beta-blockers, they continued to be symptomatic and, as such, compose a highly specialized and homogeneous patient population. Both groups were composed of Canadian Caucasians. The analysed polymorphisms were: ACE (I/D), AGTR1 (A1166C), AGT (M235T & T174M), eNOS (T-786C & Glu298Asp), ADRB2 (Gln27Glu), BDKRB2 (+9/-9), CYP11B2 (T-344C) and ADD1 (Gly460Trp). **Results**: The AGT T235 allele ($p<0.0025$) and the AGT M174 allele ($p<0.05$) were found to be more prevalent in our heart failure group. The AGT(174M)-AGT(235T) haplotype was also associated with the heart failure phenotype ($p=0.0069$). Exploratory evaluation of gene-gene combinations revealed an indicative association of the AGT(235T)-ACE(D) combined polymorphisms in the heart failure population ($p<0.02$). **Conclusion**: This study demonstrates that the SNPs of AGT may be associated with heart failure in our population and that the AGT/ACE gene combination may play an important role in disease predisposition.

EDUCATION AND TEACHING RESEARCH

67. Évaluation de la qualité des résumés publiés dans le Pharmactuel de 1993 à 2006

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Objectif : Réaliser une évaluation de la qualité des résumés publiés dans le Pharmactuel. L'objectif secondaire est de décrire les résumés publiés. **Méthodologie :** Il s'agit d'une étude descriptive et rétrospective des résumés publiés dans le Pharmactuel du 1er janvier 1993 au 31 décembre 2006. Un résumé sur deux a été sélectionné de façon aléatoire parmi ceux recensés durant cette période de publication du Pharmactuel. Le résumé a été évalué selon une échelle de cotation publiée dans la documentation et composée de 33 critères de qualité regroupés en 8 sections. Deux scores de qualité ont été calculés: conformité globale et conformité si critère applicable. **Résultats :** Des 416 résumés publiés dans le Pharmactuel de 1993 à 2006, 209 ont été inclus. Une proportion significativement plus élevée de résumés proviennent des centres hospitaliers affiliés à l'Université Laval (i.e. 66%) que de l'Université de Montréal (34%). Plus de 90% des résumés sont issus de projets de maîtrise en pharmacie. Pour l'ensemble des résumés évalués, le score moyen de conformité est de 67,9% en prenant les critères applicables à chaque résumé et de 53,4% en prenant l'ensemble des critères (n=33). **Conclusion :** Il s'agit de la première étude évaluant la qualité des résumés publiés dans le Pharmactuel. Pour l'ensemble des résumés évalués, on observe un bon score moyen de conformité. L'activité de publication par les pharmaciens en poste doit être mieux encouragée, ainsi que la finalisation des projets présentés par les résidents (pourcentage de résumés ayant mené à une publication faible : 6,7%).

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68. Development and preliminary evaluation of a training workshop for pharmacists assessing students in an OSCE setting.

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Introduction: As the number of assessors has increased in an Objective Structured Clinical Evaluation (OSCE)-based 4th year undergraduate pharmacy course, to accommodate increased student enrolment, a lack of consistency and reliability in assessment between assessors for the same student performance has been observed by the course instructor and reported by students. **Objective**: To create a workshop for assessors to develop the skills needed to effectively assess OSCE-based student performance with the same reliability. **Methods**: Six steps followed in this developmental study. First an OVID search of the medical literature was undertaken looking for articles on how to improve assessor verbal/cognitive assessment in an OSCE-based teaching environment. Second, key concepts and strategies were identified to create a framework for the workshop. Third, a three-hour workshop was designed. Fourth, evaluation criteria were established and a questionnaire was developed to evaluate assessors' perceptions of the effectiveness of the workshop. Fifth the workshop was delivered to 32 assessors. In the final step a post workshop evaluation was conducted. **Results**: The literature review produced 4 key articles with the work by Brukner being most relevant. An expert facilitator, familiar with pharmacy practice outcomes, was hired. The workshop design included four components; didactic teaching, small and large group discussion, and a DVD, was used depicting simulated students role-playing different student performances. Thirty-one assessors attended the workshop and 29 completed the questionnaire. All respondents indicated the workshop will help them be more consistent when assessing students. Ninety-three percent (93%) of respondents indicated they have both a better understanding of bias/diversity issues that influence their own assessment decisions and how their peers are assessing the same student performance. **Conclusions**: The response by participants to the workshop was overwhelmingly positive. It was suggested that this workshop be offered annually. Anecdotally the number of student complaints related to assessor inconsistency declined dramatically.

69. Evaluation of a complementary pharmacy day within an interprofessional pain curriculum

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In the first year of an interprofessional pain curriculum pharmacy student feedback indicated they were not prepared with the knowledge and skills required to engage effectively in interprofessional discussions. To augment student's ability to contribute to interprofessional discussions we strategically designed a half-day program for our students. **Objective**: To evaluate, from the student's perspective, their experience in the half-day program and their perception of its impact on subsequent interprofessional discussions. **Methods**: Four content components were determined and included. 1. The management of constipation in chronic narcotic use, 2. Methadone in managing pain, 3. Dose conversions, and 4. Chronic pain in the elderly. The teaching design criteria were then established and included. (1) relevant, immediately transferable competency that can be applied the following day, (2) applicable to hospital and community practice and (3) patient-case based. A questionnaire was then developed. It was administered at the end of each half-day pharmacy program between 2004 and 2005. **Results**: For each content area the questionnaire asked if it increased the student's knowledge on how to manage pain-related issues, as well as if it stimulated student's thinking in this area. In addition questions about specific speakers were asked. Students were asked to rate the program overall. In 2004, 90% of students who participated in the half-day program completed the survey and in 2005, 92% of students completed the survey. In both years, 75% of respondents agreed, or agreed strongly that the topics increased their knowledge on managing pain related issues. In both years, more than 87% of respondents rated the day as useful and complementary to the pain curriculum. **Conclusions**: Development of a complementary pharmacy day within an interprofessional pain curriculum, with strategic teaching design criteria, resulted in increased student knowledge on this topic and allowed them to be more active participants in interprofessional discussions.

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70. The ability of interprofessional and uniprofessional student teams to assess the quality of a patient care plan as compared to an experienced evaluator.

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Purpose: To give students working in interprofessional and uniprofessional teams the opportunity to assess a simulated hospitalized patient, develop a comprehensive patient care plan, and assess the quality of that plan. **Methods:** Pharmacy, nutrition and physical therapy students were assigned to work in small interprofessional or uniprofessional (pharmacy only) teams of 2-3 students. Together, each team interviewed a patient-actor role-playing a hospitalized postmenopausal woman with a newly diagnosed vertebral compression fracture, and together developed a comprehensive care plan. At a follow-up tutorial, the teams self-assessed the quality of their care plans using an evaluation tool based on published clinical practice guidelines for the management of osteoporosis, and input from dieticians, pharmacists and physical therapists. The care plans were also assessed by an experienced external evaluator using the same tool. Students were also asked to complete a questionnaire about their experiences with intra-peer assessment of the patient care plan **Results:** Overall, student groups tended to score their care plans higher than the experienced evaluator (34.8 vs 30.5; $p<0.001$). Individual portions of the plans scored higher by the student teams included calcium supplement (4.6 vs 3.7; $p<0.001$), pain management (4.1 vs 3.7; $p<0.05$), exercise (4.4 vs 4.2; $p<0.05$), education (3.5 vs 2.5; $p<0.001$), patient follow-up (3.7 vs 3.3; $p<0.05$), and global assessment (5.7 vs 4.3; $p<0.001$). No differences in scoring were seen for recommendations regarding Vitamin D or choice of pharmacologic agent. Students indicated value in assessing their own plans, confidence in their ability to carry out the task, working together was helpful in assessing the plan, and the evaluation tool was helpful. **Implications:** Self-assessment of the quality of their patient care plan provides students with an opportunity to enhance their understanding of the comprehensive management of osteoporosis and to practice self-evaluation skills as an important professional competency.

71. Self-directed learning at the University of Manitoba: implementation of a new elective program at the Faculty of Pharmacy

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Background: The Electives Program (PHRM 4800), offered for the first time in 2007R at the Faculty of Pharmacy (University of Manitoba), was developed to provide senior pharmacy students with opportunities for self-directed learning in areas of basic and clinical research, professional practice, and education that are beyond the boundaries of the required undergraduate curriculum. **Methods**: Students can choose to conduct projects at sites pre-approved by the Faculty or to propose alternative avenues. Under the guidance of a preceptor, students increase their depth of knowledge in the areas of interest and enhance their skills in reflection-in-practice. Students are required to produce a written report of their experience to complete the evaluation provided by their preceptor. **Results**: In addition to the Faculty of Pharmacy, pre-approved sites included the National Microbiology Laboratory, the Wellness Institute, the Addiction Foundation of Manitoba and the RCMP Toxicology Laboratories. The Department of Family Medicine provided a unique opportunity for interdisciplinary education where pharmacy students interacted with medical residents and various health professionals with the purpose of gaining insights into and improving patients' primary care. Students also pursued sites abroad which included the University of Bonn, the University of Queensland and the International Pharmaceutical Federation. **Conclusion**: A research project aimed at evaluating the entire elective program is on going. Results of this study will contribute to our understanding of how well this new course in pharmacy helps students reach the educational outcome of being able to self-assess their learning needs and develop and implement strategies to promote lifelong learning and continuing professional competences. Upon analysis of the reflective outcomes, recommendations will be made to improve the quality of this educational experience.

Acknowledgements: The evaluation study has been funded by a grant from CHERD (Centre for Higher Education Research and Development) at the University of Manitoba.

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72. ECO project: A new competency assessment model for clerkships

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Purpose: To compare students and preceptors perception between the actual assessment model and a new cross-curricular assessment model (ECO Model). To measure the validity, reliability and convenience of appraisal forms (AF). **Methods:** All active students and preceptors during 4th year clerkship were asked to join in. Participants had to assist to a training session, use ECO Model tools (Direct observation booklet (DOB) and Competency Global Assessment Form (CGAF)), complete an AF, and participate in a focus group. **Results:** Preliminary analysis suggest that the training sessions and informative material were well received by both students and preceptors; that the ECO Model offers an easy process and proposes practice oriented outcomes, enables frequent feedback and allows clear professionalism assessment. On the other hand, preceptors and students have reported resistance to change, an unclear 3-level assessment scale and a too crowded and literal tool display affecting usability. DOB was used 2,2 times/week/preceptor. Preceptors would have appreciated using the ECO Model from the beginning of the clerkship. Online availability of the ECO Model was also requested. **Conclusion:** Relevant modifications will be made to the DOB, CGAF and AF prior to implementation. Preceptors will be trained for accurate use of the ECO Model. Phase 2 of the study will focus on measuring validity, reliability and convenience at a larger scale by using the revised AF.

73. Educational resources management model: From cross-curricular to trans-curricular

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Purpose: Design an online system that supports a collaborative management approach and enables Cross-Curricular and Trans-Curricular reusability of numerical educational resources in order to meet the educational outcomes of pharmacy undergraduate, graduate and professional development programs. **Methods:** A sequential process of preliminary needs analysis, case utilization review, conceptual analysis, international standards review and model design has lead to an iterative development of an online system. **Results:** The model refers to three levels of educational resources management: learning objects (LO), learning units (LU) and course information systems/websites (CIW). The development of these educational resources was driven by a collaborative and multidisciplinary approach. Learning Objects are defined as any digital resource designed to support learning. The model focuses on reusability of LO in various learning context and for diverse education levels. Furthermore, the Learning Units gathers selected LO with formative assessments and external links to service a desired learning domain. Finally the CIW combines and contextualized LUs according to user's educational level. The LU and CIW are designed to support future development toward adaptive learning/ testing and SCORM interoperability. In order to favor usability, a web template was designed for all the courses with common basic features. **Conclusion:** The model will be implemented and tested during the following academic year (2007-2008) in the Pharm.D. first year courses and specific professional development courses.

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153. Transforming healthcare through collaboration "in-BC"

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Introduction. It is becoming increasingly evident that processes by which health professionals are educated and supported will be integral to health human resource planning in Canada. Amongst the many strategies currently being examined, interprofessional education and collaboration is one practice that is thought to be key in maintaining a workforce for a sustainable and quality health care system. **Methods and Goals:** Funded by Health Canada and the BC Ministry of Health, the Interprofessional Network of BC (*In-BC*) is a collaborative initiative amongst the College of Health Disciplines at the University of British Columbia and the six health authorities and post-secondary education institutions across British Columbia. Through this partnership, *In-BC* has brought together health and education stakeholders to share resources and expertise to achieve four overarching goals: 1. Promote and demonstrate benefits of interprofessional education and collaborative patient-centred practice, 2. Foster system change in health and education, 3. Promote knowledge translation/exchange, and 4. Increase capacity to teach and learn from an interprofessional perspective. **Results:** The *In-BC* outcomes include: (i) Implementation of five provincial projects; (ii) Development of a multiple level evaluation framework; (iii) Development of an interprofessional curriculum framework; and (iii) Implementation of infrastructure to support knowledge translation initiatives. **Conclusion:** The *In-BC* initiative has been integral in transforming health and education systems in British Columbia.

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Poster Abstracts – Friday June 1, 2007

PHARMACY PRACTICE RESEARCH

118. Feasibility of conducting a pragmatic cluster cohort study using administrative databases to evaluate the effectiveness of an osteoporosis workshop

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Background: A one-hour osteoporosis workshop offered to family physicians may influence their prescribing practices. **Objectives:** To evaluate the feasibility of using the RAMQ administrative databases to build a cohort of elderly patients candidate for an osteoporosis screening and followed-up by exposed and unexposed physicians to the workshop. **Methods:** Each exposed physician was matched to 10 unexposed physicians from the RAMQ database based on gender and year of graduation. Patients' eligibility criteria were: be alive and 70 years or older at the index date (date of the workshop), have at least one medical visit with a participating physician during the year preceding and following the index date, no bone mineral density testing, no osteoporosis treatment, and not be institutionalized 5 years prior to the index date. The number (proportion) of non-eligible patients is computed after applying each eligibility criteria. **Results:** 26 (76%) out of 34 exposed physicians agreed to participate and were matched with 260 unexposed physicians. A total of 55445 elderly patients alive at the index date were followed-up by these physicians. Among those, 35339 (64%) had no medical visit with the same physician during the year following the index date, 13555 (24%) had bone mineral density testing, 14494 (26%) had an osteoporosis treatment, and 4,696 (9%) were institutionalized 5 years prior to the index date. Overall, 11472 patients fulfilled the eligibility criteria. **Conclusions:** Using the RAMQ databases, with 26 exposed physicians, it is feasible to constitute a sufficiency large cohort to detect, with a power of 80%, a difference of 7% in the proportion of patients having a bone mineral density testing in the exposed and unexposed groups.

119. Évaluation de la conformité de la chaîne thermique en établissement de santé

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Objectif : Cet article vise à présenter une évaluation de la conformité de la gestion des réfrigérateurs dans un centre hospitalier québécois ainsi qu'un plan d'action. **Méthode :** Santé Canada a publié des lignes directrices sur le contrôle de la température des médicaments pendant leur entreposage et leur transport, à l'intention des fabricants, des distributeurs et des pharmaciens. À partir de cette politique en vigueur, nous avons établi douze critères de conformité. On a procédé à une évaluation de la pratique par le biais d'une tournée de tous les réfrigérateurs de l'établissement pouvant contenir des médicaments en appliquant les critères de conformité. **Résultats :** La conformité des réfrigérateurs utilisés dans notre établissement de santé varie de 21% à 96 % et 7 des douze critères sont égaux ou inférieurs à 50 % de conformité. Le degré de propreté est jugé acceptable pour presque la majorité des réfrigérateurs évalués. **Conclusion :** Cette évaluation nous permet de constater que le niveau de conformité des réfrigérateurs présent dans notre établissement de santé doit être amélioré. Elle nous amène à mettre en place une démarche pratique de mise à jour en ce qui concerne la conservation des médicaments. Cette étude démontre la nécessité de diffuser l'information et de former davantage le personnel clinique et celui des unités de soins sur tout ce qui concerne la conservation des médicaments au réfrigérateur dans un centre hospitalier québécois afin d'en assurer la conformité. La possibilité de recourir à de nouvelles technologies (traceurs) pour évaluer ponctuellement d'autres aspects du circuit du médicament fait aussi partie intégrante de notre plan d'action visant l'amélioration de la conformité de la chaîne thermique.

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120. Plasma concentrations of Bupivacaine and Ropivacaine in combined femoral-sciatic block

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Purpose: The objective of our analysis is to describe the population pharmacokinetic (PK) of bupivacaine (BUP) and ropivacaine (ROP) in combined femoral-sciatic nerve block (CFSB) and to identify factors explaining the interindividual variability (IIV). **Methods:** A randomized double blind study comparing ROP (n=8) and BUP (n=8) in CFSB for knee arthroplasty was conducted. Sciatic nerve block was performed first by injecting 15 ml of a 0.5% solution of either anesthetic using the Labatt approach; femoral nerve block was then performed with 25 ml using a classical anterior approach. Plasma samples were drawn up to 32 h after the first block. Data analysis was performed with NONMEM. The covariates studied were: age, sex (ROP group only), height, weight, and drugs affecting CYP1A2 or CYP3A4. **Results:** For BUP no covariate relationships were discovered and apparent clearance (CL/F) was 14.5 L/h with an IIV of 164%. The apparent central volume of distribution (Vd/F) of BUP was 371 L with an IIV of 99 %. For ROP CL/F was 7.7 L/h with an IIV of 23%. The Vd/F of ROP in men was 1.76 greater than in women (366 vs. 208 L; p=0.028). **Conclusions**: No covariate effects were detected for BUP but there were no men in this group. For ROP, sex differences in Vd/F that are not fully explained by weight differences, were observed. Studies with larger number of subjects are needed to fully characterize the PK of both drugs and to detect significant covariate relationships if any.

This abstract was presented at the ASCPT meeting 2006
Mouksassi MS, Varin F, Beaulieu P and Labbé L. Population Pharmacokinetics of Bupivacaine and Ropivacaine in Combined Femoral-Sciatic Nerve Bloc. : PIII-65. Clinical Pharmacology & Therapeutics. 79(2):P76, February 2006.

121. Population Pharmacokinetics of Intravenous Pantoprazole in Pediatric Intensive Care Patients

Mohamad-Samer Mouksassi[1]*, Géraldine Pettersen*[2]*, Yves. Théorêt[3], Line Labbé[1], Christophe Faure[4],
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Introduction: Intravenous (IV) pantoprazole, the only proton pump inhibitor (PPI) with IV formulation in Canada, is an attractive drug for critically ill children who require gastric acid suppression. To date, there is very scarce data regarding the pharmacokinetics of pantoprazole in children, with essentially no data in infants less than 2 years. **Purpose**: To determine the pharmacokinetics of intravenous pantoprazole in critically ill children and to identify factors responsible for interindividual variability. **Methods:** Pantoprazole was administered to twenty patients at risk for or with upper gastrointestinal bleeding in whom intensive blood sampling was performed. A population analysis was conducted via a two-compartment pharmacokinetic model using NONMEM. **Results:** The total interindividual variability for clearance in the base model was estimated to be 132 %. Weight, systemic inflammatory response syndrome (SIRS), age, hepatic dysfunction, and presence of a CYP2C19 inhibitor were the significant covariates, accounting for 77 % of the observed variability. For a typical five year old child weighing 20 kg, the clearance and central volume of distribution were 5.5 L/hr and 2.22 L, respectively. Pantoprazole clearance was decreased by 68 % in the presence of SIRS ($p < 0.001$), by 57 % in the presence of hepatic dysfunction ($p < 0.001$) and 60 % in the presence of a CYP2C19 inhibitor ($p < 0.001$). **Conclusions**: The pharmacokinetics of IV pantoprazole in critically ill children is extremely variable and affected by inflammation. Our results emphasize the importance of dosing individualization in pediatric intensive care patients.
*The first two authors equally contributed to this research

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122. Population pharmacokinetic of intravenous busulfan in children

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Purpose: Busulfan is an alkylating agent used, in combination with cyclophosphamide +/- other drugs, as a radiomimetic in a variety of preparative regimens for hematopoietic stem cell transplantation (HSCT). Intravenous preparation provides better predictable pharmacokinetic than oral formulation, although wide inter and intra-individual variability may subsist. The objective of our study is to describe the population pharmacokinetic of intravenous busulfan and to identify the covariates that allow a better dosing and a lesser variability. **Methods:** A retrospective population pharmacokinetic analysis was performed on 41 consecutive children (0.21 – 20 years old) receiving intravenous busulfan. Initial dose of intravenous busulfan was 0.8 mg/kg for 33 patients and 1mg/kg for 8 patients, in a 2 hour infusion, and then every 6 hours, for a total of 16 doses. Pharmacokinetic parameters were determined on the first dose, and subsequent doses were adjusted, if needed, to achieve an area under the curve of 900-1500 µMol*min. Data analysis was carried out by a population approach using NONMEM. The influence of the covariates age, sex, actual body weight and body surface area (BSA) was studied. **Results:** Clearance (CL) and volume of distribution (VD) of busulfan were found functions of BSA and BSA + sex, respectively. The clearance was 3.24 ml/min/kg and the volume of distribution was 0.68 L/kg. Busulfan VD was significantly reduced in girls (-12%). Patient BSA was associated with an increase of busulfan CL and VD (9.9% and 10.7% per 0.1 m^2, respectively; $p<0.05$). The inter-patient variability was decreased from 77.52% to 18.49% in CL and from 76.35% to 7.94% in VD. Inter-occasion variability was 13.34% in CL and 9.41% in VD. **Conclusion:** Different dose regimens were tested, the dosing based on BSA was found to be more appropriate in children than the dosing per kg. Due to the existing variability, an association with therapeutic drug monitoring is considered more efficient.

123. Physician readiness to collaborate with community pharmacists on drug therapy management.

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Introduction: With the increasing importance of drugs in patients' therapy and their rising costs, health policy makers are focusing attention on strategies to enhance the safety and effectiveness of drug prescribing and use. Close pharmacist-physician collaboration has been shown to increase the safety and cost-effectiveness of drug therapy, however, it occurs relatively infrequently in the community setting, with respect to drug therapy management. The main **goals** of this study were to assess Ontario family physicians' readiness to collaborate with community pharmacists on drug therapy management, as well as to identify predictors of physicians' readiness to collaborate. **Methods**: A 22-item survey instrument was developed based on information from two qualitative studies conducted in Ontario and the Transtheoretical Model of Behaviour Change. The questionnaire enquired about 3 types of physician-pharmacist interactions on a collaborative continuum. The survey was distributed to a stratified random sample of 842 family physicians across Ontario, with physicians stratified based on urban or rural practice location. **Results**: The survey response rate was 36.8%. Most respondents were male (65.5%), practiced in urban locations (83.2%) and non-interdisciplinary settings (75.5%), and had no academic affiliation (70.9%). Preliminary results indicated that 84.2% of respondents regularly take community pharmacists' phone calls, pertaining to drug therapy management, while 77.8% sometimes seek pharmacists' recommendations regarding their patients' drug therapy. Only 28.8% of physicians, however, refer their patients to community pharmacists for medication reviews, with 45.4% unaware such a service exists. Respondents perceived more accurate medication lists as the primary advantage of collaborating with pharmacists, and pharmacists' lack of patient information as the primary disadvantage. **Conclusion**: Overall, Ontario physicians were more engaged in lower level collaborative behaviours, than higher level collaborative behaviours, regarding drug therapy management.

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124. Facteurs influençant la prestation des soins pharmaceutiques visant la maîtrise de l'asthme par le pharmacien communautaire : Étude PRO-RESPIR.

Nola René-Henri, *B.Pharm*[1,2], Natalie Nadaira B.Pharm[1,3], Yvonne Khamla B.Pharm[1,4], Catherine Ouellet B.Pharm[1,5],Lyne Lalonde[1], Marie-France Beauchesne[1,6], Johanne Collin[1], Lucie Blais[1,6].

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Objectifs : Identifier les facteurs organisationnels, professionnels et relationnels influençant la prestation de soins pharmaceutiques (SP) par le pharmacien communautaire afin d'optimiser la maîtrise de l'asthme et décrire les interventions habituellement prodiguées aux patients asthmatiques. **Méthodologie :** En novembre 2006, un questionnaire pré-testé et un rappel ont été envoyés par la poste aux 4587 pharmaciens communautaires du Québec inscrits sur le tableau de l'Ordre des Pharmaciens du Québec avant le 1er janvier 2006 et travaillant au moins 15 heures/semaine. Le questionnaire comprenait 35 questions ouvertes et fermées (échelle de Likert 1 à 4) portant sur les interventions (21), sur les facteurs organisationnels, professionnels et relationnels (14) et sur les caractéristiques socio-démographiques (17). Pour les questions fermées, la proportion (intervalle de confiance à 95% ou IC95%) des réponses rapportées a été calculée. **Résultats** : Parmi les 917 questionnaires retournés (taux de réponse de 20.1%), 877 répondaient aux critères d'admissibilité. 33.9%;IC95%:30.8% à 37.1% des pharmaciens rapportent que le manque de temps restreint leur prestation des SP, alors que près de 20%;IC95%:17.4% à 23.6% des pharmaciens disent que le support des autres pharmaciens et l'intérêt des patients vis-à-vis leur condition médicale les incitent à prodiguer plus de soins. Les 3 interventions les plus souvent prodiguées consistent à donner de l'information verbale sur la nouvelle médication (97.7%;IC95%:96.6% à 98.6%), à enseigner la technique d'inhalation (96.6%;IC95%:95.2% à 97.7%) et à vérifier la sur-utilisation des bronchodilatateurs à courte durée d'action (91%;IC95%:89.0% à 92.8%) tandis que le suivi du journal de bord est la moins fréquente (0.6%;IC95%:0.07% à 1.1%). **Conclusion :** Bien que la majorité des pharmaciens communautaires interviennent principalement au moment d'une nouvelle ordonnance dans le but d'optimiser la maîtrise de l'asthme, il semble que l'organisation du travail restreint la prestation de SP.

134. Early systemic exposure to inhaled milrinone in cardiac patients.

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Background: Milrinone is a vasoactive drug administered intravenously or through inhalation to patients undergoing cardiac surgery under cardiopulmonary bypass (CPB) for the treatment and prevention of pulmonary hypertension (PHT) associated with difficult separation from bypass (DSB)(1,2). Targeted steady-state concentrations during intravenous administration are considered to be 100-300 ng/ml. However, when given intravenously milrinone is associated with a high occurrence of systemic hypotension while this is not the case after inhalation. The blood concentrations of milrinone administered through inhalation have never been measured but the absence of hypotension could be secondary to lower systemic concentrations. Our **objective** was to confirm that the safer profile of inhaled milrinone could be secondary to lower systemic exposure. **Method:** A pilot observational study was carried out in patients scheduled for elective cardiac surgery requiring CPB and admitted at the Montreal Heart Institute. Patients with preoperative PHT and for whom administration of inhaled milrinone was indicated were enrolled. Milrinone (5 mg) was administered before CPB (Pre-CPB) by nebulization (conventional or ultrasonic) over 15 min. Arterial blood samples were obtained before starting inhalation (time zero), at 20, 25, 30 min thereafter, and immediately after CPB (Post-CPB). Milrinone concentrations were determined by HPLC with UV detection with a lower limit of quantification of 2.5 ng/ml. **Results:** In 2 out of 5 patients dosed so far, peak systemic levels of milrinone were 50 and 90 ng/ml. Arterial levels were undetectable in the other patients. **Discussion:** Because the first sample was drawn 5 min after stopping inhalation, peak concentrations could have been underestimated. However, these concentrations remain significantly below those measured after intravenous administration of milrinone. **Conclusion**: Our pilot study suggests that a negligible systemic availability may explain the higher therapeutic index of inhaled milrinone.

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BASIC RESEARCH

125. Design, synthesis, and biological evaluation of thieno[2,3-*b*]quinolones as topoisomerase II inhibitors with potential antineoplastic activity

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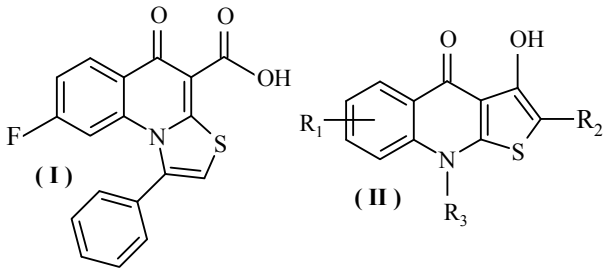
Study Objectives: Based on the previously reported topo-II inhibitory and anticancer activity of 5-fluoro-3-phenyl-8-oxo-3a,8-dihydro-thiazolo[3,2-*a*]quinoline-9-carboxylic acid (**I**) [1] and application of structure-based molecular modeling approach, we designed and synthesized novel 2-substituted-3-hydroxy-9-aralkylsunbstituted-4,9-dihydrothieno[2,3-*b*]quinoline-4-one derivatives (**II**) in order to investigate the potential of these molecules as selective inhibitors of topoisomerase-II and antitumor agents.



R_1 = Various substituents on the benzene ring

R_2 = CO_2Et, CO_2H, $CONH_2$, CONHOH, H

R_3 = Variuos aralkyl substituents

Methods: Using Hyperchem-3 ™ program, the optimum geometry of **I** was determined through molecular mechanic optimization. Based on the above data, the linear analogue II (R_1 = 7-F; R_2 = H, and R_3 = CH_2Ph) was designed, which was perfectly overlapping with the optimized geometry of compound **I**. Based on this information, different derivatives of compound **II** were synthesized using appropriate synthetic approaches. **Results:** Preparation of compound II was achieved by either conventional synthesis of the relevant 2-mercaptoquinolone carboxylic acid followed by N-alkylation and cyclization, or through convergent synthesis starting with appropriate benzoylacetoacetate intermediate and further cyclization. During this process we were able to improve the synthetic feasibility of the final products via regioselective alkylation of quinolones using a modified Mitsunobu reaction. This process would help in further structural modifications using parallel syntheses approach with an appropriately substituted N_1-aralkyl (or alkyl)-2-mercapto-1,4-dihydroquinolin-4-one-3-carboxylate as the building block. The synthesized compounds were preliminary evaluated for their toxicity against brine shrimps. Further biological evaluation of the synthesized compounds against KB and L-1210 cell lines, as well as topo-II inhibitory activity, is in progress to identify the compound with optimized activity profile (lead compound). **Conclusions:** Through this study, we were able to introduce novel synthetic methodologies for the preparation of linear thieno-quinolone derivatives with potential topo-II inhibitory and cytotoxic activities.

[1] Hosomi J, Asahina Y, Suzue S (1989). WO8912055. published, Dec 14,1989

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126. EP80317, a ligand of CD36 receptor, protects against remote lung injury after hindlimb ischemia/reperfusion

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Introduction: Increased numbers/trafficking of primed/activated circulating leukocytes to remote organs is a cause of tissue injury associated with the reperfusion of ischemic limbs. The **aim** was to assess whether EP80317, a ligand of the CD36 scavenger receptor present on endothelial cells and circulating monocytes, may alter the course of the inflammatory response. **Methods**: ApoE$^{-/-}$ mice or apoE apoE$^{-/-}$/CD36$^{-/-}$ mice were treated daily with a s.c. injection of EP80317 or saline for 14 days. Hindlimb ischemia was induced for 30 minutes followed by 180 minutes reperfusion. Lung samples were collected for measurment of leukocyte accumulation (myeloperoxidase assay). Blood samples were harvested to assess luminol-induced blood chemiluminescence (opsonized zymosan-elicited generation of reactive oxygen species). **Results**: As compared to mice on normal diet (ND), mice fed a high fat diet (HFHCD) showed a significant increase of 177% of leukocyte accumulation into lungs (1.3 ± 0.3 to $3.6 \pm 0.7 \times 10^7$ leukocytes/g lung). In mice fed ND, EP80317 did not modulate leukocyte trafficking to the lungs (1.3 ± 0.3 in control mice and $1.3 \pm 0.2 \times 10^7$ leukocytes/g lung in EP80317-treated mice). In contrast, in mice fed a HFHCD, a condition further promoting increased circulating numbers of primed/activated leukocytes, EP80317 significantly reduced leukocyte accumulation by 56% in the lungs (3.6 ± 0.7 in control mice to $1.6 \pm 0.6 \times 10^7$ leukocytes/g lung in EP80317-treated mice). This was associated with 56% reduction of ROS release in whole blood. Neither blood chemiluminescence nor leukocyte accumulation in the lungs was significantly modulated in apoE$^{-/-}$/CD36$^{-/-}$ mice (1.9 ± 0.5 in control mice to $1.9 \pm 0.8 \times 10^7$ leukocytes/g lung in EP80317-treated mice). **Conclusion**: EP80317 protects from ischemia/reperfusion-elicited remote lung injury in hypercholesterolemic mice. This effect appears to be mediated through a CD36 pathway. These results suggest a potentially beneficial role for selective CD36 ligands in hindlimb ischemia-reperfusion injury associated with other cardiovascular risk factors such as hypercholesterolemia.

127. Induction and inhibition of cytochrome P450 and phase II enzymes by the flaxseed plant lignans secoisolariciresinol and secoisolariciresinol diglucoside

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Flaxseed contains the highest levels of the plant lignan Secoisolariciresinol Diglucoside (SDG) a precursor of Secoisolariciresinol (SECO). Flaxseed and the plant lignans have beneficial effects on cardiovascular disease, cancer and diabetes. Induction and inhibition of metabolic enzyme activity must be investigated to determine the safety of lignan use. **Purpose**: To assess the induction and inhibition of phase I and phase II enzymes by SECO and SDG. **Methods**: **Induction Studies**: Male Sprague-Dawley primary rat hepatocytes, purchased from Cellz Direct (pooled n=2) or isolated with a modified two-step collagenase procedure, were incubated with 0, 1, 10 or 100 μM SECO for 24 hours. Cells were harvested and RNA isolated and purified with QIAGEN RNeasy Mini kits. Induction of CYP2C11, 2B1, 1A1, 1A2, 3A1 and 3A2, GSTA2 and A5 and UGT2B1 was assessed with real time RT-PCR. **Methods: Inhibition Studies:** Male, Sprague-Dawley, 12 week, rat liver microsomes were prepared and pooled (n=4). The inhibition of CYP3A, 2B and 2C11 was measured by testosterone metabolism to 6β-, 16α- and 2α -OH testosterone with a gradient HPLC system (UV detection at 240nm). For irreversible inhibition, hepatic microsomes were pre-incubated with various concentrations (0-2000 μM) SECO or SDG for 0, 5, 10 or 20 minutes prior to the addition of testosterone (250 μM). For reversible inhibition, hepatic microsomes were incubated with SECO and SDG (0-2000 μM) concurrently with testosterone (25-250 μM). **Results**: Rat primary hepatocytes have been successfully isolated and cultured. Primers for all gene targets have been optimized for real-time RT-PCR. Inhibition was not observed with SDG at any concentration. For SECO, a concentration dependent decrease in 6β-OH testosterone formation indicated inhibition of CYP3A with an approximate IC_{50} of 300 μM. A concentration dependent increase in 16α-OH testosterone without an effect on 2α-OH testosterone formation indicated an increase in CYP2B activity. Secoisolariciresinol alters CYP enzyme activity *in vitro*.

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128. P-glycoprotein and HERG closely interact in cardiac ventricular myocytes.

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Aims: The drug transporters present in cardiac tissues are key determinants of drug concentrations in the heart and therefore, of cardiac drug action. The rapid component of the delayed rectifier cardiac potassium current (I_{Kr}; HERG) represents a major target for drugs associated with drug-induced Long QT syndrome (LQTS). Binding to HERG is intracellular and several drugs associated with HERG block have also shown affinity for the ATP-binding cassette efflux membrane transporter P-glycoprotein (P-gp). **Methods**: Extraction of membranes protein, co- immunoprecipitation, immunohistochemistry study. The presence of P-gp and HERG was demonstrated in membrane protein extracts from human hearts; Protein extracts were then exposed to non-selective IgG antibodies and to anti-P-gp antibodies where P-gp could be detected after 24 and 4 hours of exposure. Membrane protein extracts from human and guinea pigs hearts were separated by 8% SDS-PAGE and then transferred to nitrocellulose filters (Amersham-Biosciences). Western blotting then separated co-immunoprecipitated proteins. The localization of HERG and P-Gp was revealed by immunochemistry and confocal microscopy following appropriate treatment of a slice of human cardiac ventricular tissue. The co-localization of the two proteins was revealed by simultaneous exposure to wavelengths for both P-gp and HERG antibodies. **Results**: We demonstrated the presence of HERG and P-gp in human heart. In addition, using co-immunoprecipitation procedures, we demonstrated a close relationship between HERG and P-gp. Using immunohistochemistry procedure, we demonstrated the colocalisation of these two proteins. **Conclusion**: We demonstrated in our study, for the first time a tight physical interaction between a cardiac potassium channel protein (HERG) and a membrane drug efflux transporter (P-gp) in human and guinea pig cardiac ventricular myocytes. The close relationship between these two proteins provides new information for our better understanding of mechanisms underlying the drug-induced Long QT syndrome (LQTS). This syndrome has been associated with major cardiac side effects in patients including deaths and has forced removal from the market of otherwise very efficacious drugs.

°This work was supported by Genome Quebec – Genome Canada

129. The QFRP peptides modulate adipogenic genes in differentiated 3T3-L1 cells.

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A novel neuropeptide of 43 aa belonging to the QRFP (RF amide peptide) family, and its constitutive part, QRFP-26, have been recently identified as endogenous ligands of the orphan G-coupled receptor GPR103. Two receptor subtypes 103A and B were identified, and were found to be mainly expressed in the hypothalamus regions involved in the regulation of appetite. Chronic intracerebroventricular injections of these peptides in mice were shown to induce hyperphagia and to increase body weight and fat mass. However, whether the adipogenic effect of QRFP results from a direct effect on peripheral adipose tissue or occurs secondary to alteration of vagal activity has yet to be determined. **Objectives:** 1) To document the effect of QRFP on the expression of genes involved in the differentiation of 3T3-L1 cells towards an adipocyte phenotype 2). To characterize the receptor mediating the adipogenic effect of QRFP in differentiated 3T3-L1 adipocytes. **Methods:** The effect of QRFP-43 and -26 on 3T3-L1 cell differentiation was quantified by measuring the optical density (510 nm) following QRFP-elicited oil red O (ORO) uptake by 3T3-L1 cells. Lipolysis was assessed by quantifying glycerol in the medium after 90 minutes of treatment on 3T3-L1 differentiated cells. **Results:** Four-day treatment with QRFP-43 and -26 increased ORO uptake by 50% and 42%, ($p < 0.001$) respectively compared to control (10% FBS). In parallel, both peptides inbibited isoproterenol-induced lipolysis in a dose-dependent manner in differentiated adipocytes with IC50s of 2.2 and 1.1 nM, respectively. GPR103B mRNA was found to be specifically expressed in 3T3-L1-differentiated adipocytes, and its expression was upregulated during differentiation together with that of adipocyte differentitaion markers including PPAR-gamma2 and perilipin. **Conclusion**: These results suggest that QRFP peptides induce adipogenesis through the activation of GPR103B and may play a key role in energy homeostasis by a direct action on adipose tissue.

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130. Synthesis of 2-deoxy-2-fluorosugars for use as glycosyltransferase enzyme probes

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Introduction and Objectives: Recent research has shown that the carbohydrate units attached to many natural products are essential for bioactivity. The natural product of interest in our laboratory is jadomycin B, an angucycline antibiotic produced by *Streptomyces venezuelae* ISP 5230 in response to environmental stress. In one of the final steps of the biosynthesis of jadomycin B the antibiotic is glycosylated by the JadS glycosyltransferase enzyme, which accepts β-L-digitoxose deoxythymidine diphosphate and the jadomycin B aglycone as its natural substrates (Figure 1). Synthesizing fluorosugar analogues and converting these derivatives into sugar nucleoside diphosphates will provide novel compounds that will be used to probe the substrate flexibility of the enzyme and potentially produce novel compounds for biological testing.

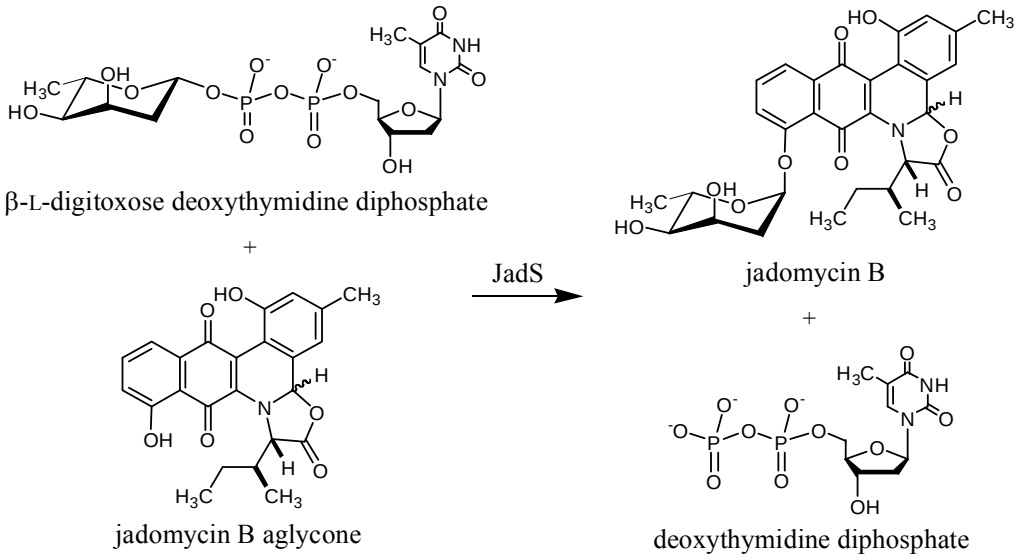

Figure 1: The enzymatic biosynthesis of jadomycin B

Methods: Fluorosugar analogues were synthesized by various multi-step routes in good yield. Compounds isolated in each synthetic step were purified by extraction and/or column chromatography. Purified compounds were characterized using nuclear magnetic resonance (NMR) spectroscopy. **Results:** Four fluorosugar analogues were prepared using novel synthetic routes: 1,3,4-tri-O-acetyl-2-deoxy-2-fluoro-L-fucose, 1,3,4-tri-O-acetyl-2-deoxy-2-fluoro-L-arabinose, 1,3,4-tri-O-acetyl-2-deoxy-2-epifluoro-L-rhamnose and 1,3,4-tri-O-acetyl-2-deoxy-2-fluoro-L-rhamnose. The two fluorosugar analogues derived from L-rhamnose were used to synthesize sugar-1-phosphates, which will be coupled with activated nucleoside monophosphates to prepare sugar nucleotides. All compounds were characterized using NMR spectroscopy, which confirmed the structure and purity of the isolated products. **Conclusions:** Four 2-deoxy-2-fluorosugars were efficiently prepared *via* multi-step synthetic pathways. These sugars will be converted to sugar nucleoside diphosphates and used to probe the substrate specificity of the JadS glycosyltransferase enzyme and potentially produce novel compounds for biological testing. **Acknowledgements:** Funding was provided by the Dalhousie Pharmacy Endowment Fund.

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131. Effect of polyethylene oxide (PEO) content and drug solubility on polymer swelling and drug dissolution

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Purpose: To investigate the effect of PEO content and drug solubility on polymer swelling and drug dissolution from a series of modified release matrix tablets. **Methods:** Nine different formulations of modified release PEO matrix tablets were prepared by direct tableting compression. Acetaminophen (AMP), ibuprofen (IBU) and pseudoephedrine (PSE) were used as model compounds in the preparations for their varying aqueous solubility. Thickness of hydrogel layer formed by PEO during dissolution was measured using a texture analyzer. Tablet dissolution was carried out using a USP II Apparatus. Relationships among hydrogel thickness, PEO ratio, drug solubility and dissolution were correlated and interpreted. **Results:** Hydrogel formation and drug dissolution were directly influenced by drug solubility and PEO content in the formulations. Lower drug solubility resulted in smaller polymer hydration due to slower water penetration; higher PEO content allowed for greater hydrogel formation. Thickness of PEO hydrogel at 30 and 360 minutes ranged 1.82-2.01/6.34-6.76 mm for PSE, 1.67-1.78/5.73-6.25 mm for IBU and 1.23-1.44/3.61-4.63 mm for AMP, respectively. The time required for 50% of drug release ($DT_{50\%}$) from the tablets were 83-92 minutes for PSE, 323-354 minutes for IBU and >6 hours for AMP, respectively. The diffusional release exponents were 0.492-0.498 for PSE, 0.674-0.698 for IBU and 0.746-0.802 for AMP, respectively, indicating a diffusion-controlled release mechanism for both PSE and IBU tablets but an erosion-controlled release mechanism for AMP tablets. **Conclusion:** Drug solubility and PEO content in the modified release matrix tablets directly influenced the hydration of PEO polymer and diffusion and dissolution of drug from the preparations. The study also demonstrated the applicability of a texture analyzer in designing tablet formulation and characterizing drug dissolution.

132. Electrical remodeling in a transgenic mouse model of cardiac-specific overexpression of type 1 angiotensin II receptor

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University of Montreal.

Background Cardiac-specific overexpression of the human type 1 angiotensin II receptor (AT1R) in mice leads to ventricular hypertrophy and heart failure. Moreover, AT1R mice die prematurely of sudden cardiac death suggesting that in pathological condition angiotensin II could be responsible of severe arrhythmias leading to sudden death. Accordingly, the objective of this study was to characterize cardiac repolarization in AT1R mice to establish whether there is a relationship between angiotensin II, delayed repolarization and cardiac arrhythmias. **Methods and Results** To achieve this objective we combined electrophysiology and molecular biology techniques. We first observed that compared to aged-matched littermate controls (CTL), 6-8 month old AT1R male mice present spontaneous ventricular arrhythmias, longer QTc interval (CTL: 53.6 ± 1.5 ms, AT1R: 64.2 ± 1.4 ms, p = 0.0005) and prolonged action potential duration (at 90% repolarization, CTL: 19.0 ± 1.8 ms; AT1R: 39.1 ± 4.7 ms, p = 0.0001). We then studied the K^+ currents in ventricular myocytes and their underlying K^+ channels. These currents (channels) include (1) the Ca^{2+}-independent transient outward, I_{to} (Kv4.2/Kv4.3), (2) the ultrarapid delayed rectifier, I_{Kur} (Kv1.5), (3) the steady-state outward, I_{ss} (Kv2.1) and (4) the inward rectifier, I_{K1} (Kir2.1). Our results revealed a significant reduction of I_{to}, I_{Kur} and I_{K1} in cardiac myocytes isolated from AT1R mice and Western Blot analysis showed a corresponding reduction of protein expression for Kv4.2, Kv1.5 and Kir2.1. To ascertain that the repolarization defects seen in AT1R were not secondary to cardiac hypertrophy and failure, we characterized ventricular repolarization in younger (50 days) AT1R mice confirming that the delayed repolarization seen in AT1R mice did not occur as a consequence of cardiac remodeling. **Conclusion** Altogether, these results indicate that chronic stimulation of type 1 angiotensin II receptor is responsible for the delayed ventricular repolarization phenotype observed in AT1R mice and for the increase incidence of cardiac arrhythmias and sudden death observed in AT1R mice.

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133. The effect of metoprolol on energy metabolism in the diabetic heart.

Pavan Dhillon[1], Vijay Sharma[1], Michael Allard[2], and John H. McNeill[1].

[1] Faculty of Pharmaceutical Sciences, University of British Columbia. [2] James Hogg iCapture Center, St. Paul's Hospital, Vancouver, Canada.

Background; Diabetic myocytes are unable to use glucose as an energy source forcing them to rely on free fatty acids (FFA). This shift in substrate utilization has been associated with lipotoxic oxidative stress, which may lead to cardiomyopathy. We have previously shown that the β-blocker metoprolol inhibits carnitine palmitoyltransferase 1 (CPT-1), a major control step of fatty acid oxidation. Furthermore, it also decreases the sensitivity of CPT-1 to its major inhibitor, malonyl CoA (MCoA). The heart expresses two CPT-1 isoforms, CPT-1Muscle (CPT-1M) and CPT-1Liver (CPT-1L); CPT-1L is less sensitive to MCoA inhibition than CPT-1M. We therefore hypothesized that metoprolol decreases the expression of CPT-1 and induces an isoform shift from CPT-1M to CPT-1 L. **Objective:** To determine whether chronic metoprolol treatment decreases the expression of CPT-1 and induces an isoform shift from CPT-1M to CPT-1L. **Methods**: Male Wistar rats were randomly assigned to one of four groups: control, control treated, diabetic and diabetic treated. Diabetes was induced by injection of 60 mg/kg streptozotocin into the tail vein. Treated groups received 75 mg/ kg/ day metoprolol by intraperitoneal injection. Six weeks after the induction of diabetes, the rats were euthanized and the hearts excised, flash frozen in liquid nitrogen and stored at -70°C until the day of assay. On the day of assay, the heart tissue was homogenized and subjected to SDS-PAGE and Western Blotting to probe for CPT-1 total expression, CPT-1M and CPT-1L. **Results:** The total expression of CPT-1 was decreased by metoprolol. The expression of CPT-1M was decreased by metoprolol, but CPT-1L was detected only at low levels and its expression was not altered by metoprolol. **Conclusions:** The decrease in CPT-1 activity produced by metoprolol may be partially explained by a decrease in CPT-1M expression. However, the decrease in the sensitivity in CPT-1 to malonyl CoA cannot be explained on the basis of an isoform shift.

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135. Design, synthesis, biological evaluation and determination of the mechanism of action of new anticancer agents: the arylchloroethylurea-combretastatin hybrids

Sébastien Fortin[1,2], Emmanuel Moreau[3], Jean-Claude Teulade[3], René C.-Gaudreault[2]
[1]Faculté de pharmacie, Université Laval, Québec, [2]Centre de recherche, CHUQ, Hôpital Saint-François d'Assise, Québec, [3]Université Clermont1, laboratoire de Chimie Organique, Clermont-Ferrand, France

Introduction: Arylchloroethylureas (CEU) are a new class of soft alkylating agents that inhibit cell division through their irreversible binding to the colchicine-binding site on tubulin. Recently, combretastatin-A4 (CA-4), a newer and simpler antitubulin molecule was found to bind also to the colchicine-binding site. In the course of our research program, we have evaluated the chemical interactions occurring between CEU and CA-4, and the colchicine-binding site using molecular modeling tools. Our studies revealed important structural similarities between CEU, CA-4 and other antimitotic agents. **Objectives and methods**: In the aim to increase the inhibition activity and the selectivity of our CEU for the colchicine-binding site we have used those structural similarities to design and prepare a new series of CEU that are "hybrids" of the molecular structures of CEU and CA-4. Conventional organic reactions such as Wittig addition, hydrogenation and reduction were used to synthesize the new derivatives and bioisosteres. Cytotoxicity was evaluated on four tumor cell lines. Effect of the drugs was assessed using flow cytometry experiments. The specificity and the irreversible binding of the drugs toward the colchicine-binding site were evaluated by SDS-PAGE and western analysis. **Results**: CEU-CA-4 hybrids showed that they inhibit tumor cell proliferation at the micro molar level on the four tumor cell lines tested. Flow cytometry experiments evidenced the arrest of the cell division in the G_2/M phase. In addition, competition essays confirmed that the new compounds are still irreversibly binding to the colchicine-binding site. **Conclusion**: The new pharmacophoric moiety of CEU-CA-4 hybrids might be an alternative of the trimethoxyl group present in all the typical colchicine-binding site inhibitors. The antineoplastic activity and the biopharmaceutical properties of these new CEU will soon be evaluated on animal models and compared with the CA-4.

136. Outward K^+ current is decreased in ventricular myocytes isolated from adult mice with elevated levels of serum TNFα

Scott A. Grandy, Marie-Andrée Lupien and Céline Fiset
Montreal Heart Institute, Faculty of Pharmacy, University of Montreal, Montreal, Quebec Canada

Background: Previous studies have shown repolarizing currents are altered in isolated cardiomyocytes treated with tumor necrosis factor alpha (TNFα). Repolarization also is altered in cardiac tissue that overexpresses TNFα. However, the effect(s) of serum TNFα on the K^+ currents that underlie cardiac repolarization are not clear. **Objective:** The purpose of this study was to determine the effects of elevated levels of serum TNFα on cardiac repolarization. **Methods and Results:** C3H mice were treated with TNFα (200 ng) biweekly for 6 weeks. Serum TNFα levels were 27.4±6.5 pg/ml in TNFα treated mice compared to 9.0±5.6 pg/ml in control mice. Mice were then sacrificed and ventricular myocytes were isolated for voltage-clamp experiments. Patch-clamp techniques were used to investigate K^+ currents. The results showed that total K^+ current (I_{peak}) was significantly reduced in myocytes isolated from the hearts of TNFα treated mice compared to myocytes from control (CTL) mice (at +40 mV: CTL 101.1±5.6 pA/pF; TNF 78.3±5.0 pA/pF). Examination of the underlying components of outward K^+ current revealed that the Ca^{2+}-independent (I_{to}) and the ultrarapid delayed rectifier (I_{Kur}) K^+ currents were significantly reduced in ventricular myocytes from TNFα treated animals (I_{to} at +40 mV: CTL 56.0±4.3 pA/pF; TNF 39.9±3.9 pA/pF; I_{Kur} at +40: CTL 36.3±4.2; TNF 22.9±3.9). In contrast, the steady-state K^+ current (I_{ss}) and the inward K^+ current (I_{K1}) were comparable in both groups. To determine if TNFα had a direct effect on outward K^+ current, myocytes isolated from control animals were superfused with TNFα (100 ng) for 10 minutes. The results showed that acute exposure to TNFα had no effect on outward K^+ current. **Conclusion:** This study shows that elevated levels of serum TNFα can alter ionic currents, but that TNFα does not directly modulate K^+ currents in mouse ventricular myocytes.

The data in this abstract was previously presented at the 51st annual meeting of the Biophysical Society (presentation date: March 6, 2007).

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137. Influence of short and long-term exposure to tamoxifen on cardiac repolarization in mice.

Gracia El Gebeily and Céline Fiset
Faculté de pharmacie, Université de Montréal.

Tamoxifen (Tam) is a selective estrogen receptor modulator that has both agonist and antagonist activities depending on the molecular profile of its target. Tam is the most widely used in the treatment and prevention of breast cancer from more than 20 years. Experimental studies have reported that acute exposure to Tam or to its active metabolite the 4-hydroxytamoxifen (4 OH-Tam) could reduce cardiac ionic currents. However, despite widespread clinical use, TAM is not associated with a prolongation of the QT interval and a development of ventricular arrhythmias. In order to verify if the treatment duration of Tam could explain these contradictory results, the **objective** of this study was to compare the acute and chronic effects of 4 OH-Tam on K^+ currents in mouse female ventricular myocytes. These currents include the transient outward (I_{to}), the ultrarapid delayed rectifier (I_{Kur}), the steady state (I_{ss}) and the inwardly rectifying (I_{K1}) K^+ currents. **Methods**: First assessed was the acute exposure to 4 OH-Tam on these currents. Using whole-cell voltage-clamp technique, K^+ currents were recorded before and after perfusion of the cells with 4 OH-Tam applied at different therapeutic concentrations. Results indicated that 4 OH-Tam significantly decreased the density of I_{to}, I_{Kur}, I_{K1} whereas I_{ss} was unaffected. Then, it was determined whether a long term exposure to Tam also affected the density of these K^+ currents. To reproduce similar hormonal environment as the one observed in postmenopausal women receiving Tam, ovariectomized (OVX) mice were used. These animals were treated with placebo or Tam pellets. **Results:** The density of I_{to}, I_{Kur}, I_{K1} and I_{ss} were significantly increased in the ventricular myocytes of the Tam treated OVX mice compared to the OVX mice. **Conclusion**: These results suggest that while blocking the estrogen receptors, TAM would remove the inhibitory effect of estrogen on K^+ currents. This would explain the increase of K^+ currents observed in this study as well as the absence of harmful effect of TAM on QT interval and cardiac rhythm defects with chronic Tam treatment.

138. Dendritic Cell Targeted Nanovaccine Formulations

Welson Wen-Shang Wang, Dipankar Das and Mavanur R. Suresh.
Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta, Edmonton, AB

Purpose: Our lab has designed a dendritic cells (DC) targeting vector for delivering low dose vaccines. The *in vivo* study of targeting antigens to DC stems from our hypothesis that efficient targeting of the antigen to the desired cell population enhances the immune response. A universal DC targeting vehicle such as the bifunctional fusion protein (bfFp) that can bind to a mixture of biotinylated antigens may be useful to induce polyvalent immune responses. **Methods:** scFv in V_L-V_H orientation that recognizes the DEC-205 receptor of DC was fused to core-streptavidin and expressed in *E.coli* using T7 expression system. ELISA and Western blot were performed using different secondary reagents to demonstrate the bifunctional activity employing DC to show the anti-DEC-205 activity and biotinylated OVA or biotinylated BSA to confirm anti-biotin activity. *In vivo* immune response studies in mice with biotinylated OVA, Ebola virus GP1, SARS Spike RBD, MUC-1 cancer peptide, Anthrax RBD, GM3, GM2, and WEE structural DNA were performed. **Results:** Construction, cloning, expression and purification of the bfFp in *E.coli* using T7 expression system was successful. In step purification using IMAC, we were able to obtain pure monomeric fusion protein. Both ELISA and Western blot results have shown the bifunctional activity of the fusion protein. *In vivo* studies in mice with biotinylated OVA has shown that in the presence of bfFp and anti-CD40 mAb, both humoral and cell-mediated responses can be augmented. In this targeting formulation, low concentration of antigen (200 ng) in saline is adequate to achieve a strong immune response in mice. In the multiple antigens targeting strategy, we also achieved humoral and cell-mediated responses for SARS Spike RBD, MUC-1, Anthrax RBD, GM3, GM2 and WEE E1, E2. **Conclusions:** In the absence of traditional adjuvants and *ex vivo* stimulation of DC, bfFp targeting of biotinylated antigens to DC could be a convenient method to deliver multiple antigens to DC. Such nanovaccine formulations can induce immune responses towards peptide, protein, glycoprotein, hapten and DNA encoding structural protein (DNA vaccine).

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SOCIAL AND ADMINISTRATIVE RESEARCH

139. Évaluation de la conformité à la politique de double-vérification dans un centre hospitalier mère-enfant

Jean-François Bussières[1], Karine Touzin[1], Bénédicte Coureau[1], Sylvie Legault[1], Ginette Quesnel[2].
[1]Unité de recherche en pratique pharmaceutique (URPP), [2] Direction des soins infirmiers, Département de pharmacie, CHU Sainte Justine, Montréal, Québec, Canada / Faculté de Pharmacie, Université de Montréal

Objectif : Évaluer la conformité globale à la politique de double vérification avant ainsi que suite à la révision de la liste des DV. **Méthode :** Étude observationnelle pré-post sur tous les patients hospitalisés le 5 février 2007 (pré) et le 7 mars 2007 (post). Consultation des FADM de chaque patient et vérification de la présence/absence de paraphe #1 et de la paraphe #2 des infirmiers et de la signature au long correspondante à ces deux paraphes. **Résultats :** On a évalué la conformité globale de 203 DV en pré (février 2007) et 262 DV en post (mars 2007) à partir des FADM consultées. La conformité globale est de 79% en pré et de 69% en post (p=0,11). On observe une augmentation du nombre moyen de DV/patient (de 1,0 en pré à 1,4 en post). Le profil des DV non conformes est différent entre le pré et le post. **Conclusion :** Cette étude observationnelle pré-post indique une réduction non significative de la conformité globale à la politique de double-vérification dans un centre hospitalier tertiaire au Québec, après mise à jour des médicaments ciblés.

140. Antihypertensive agents' adherence level and primary prevention of non fatal strokes

Fatima-Zohra Kettani[1], Pharm., Alice Dragomir[1], MSc, Robert Côté[2], MD, FRCPC, Louise Roy, MD, Pierre Moreau[1], PhD, Sylvie Perreault[1], PhD.
[1]Faculty of Pharmacy, University of Montréal and [2]Faculty of Medicine, University of McGill, Montréal, Québec

Introduction: Although it has been clearly proven that controlled blood pressure decreases cardiovascular morbidity and mortality, a high proportion of hypertensive patients do not have adequate blood pressure control. This may result from poor adherence to therapy. The consequences of non-adherence on the real-life efficacy of drugs need more studies. **Objective**: To evaluate the impact of antihypertensive agents' adherence level on the rate of non fatal strokes. **Methods**: A cohort of 31,905 patients was reconstructed using the RAMQ databases. All patients aged from 45 to 75 years old who were newly treated with antihypertensive agents between 1999 and 2000 were eligible. A nested case-control design was conducted. Every case of non fatal stroke was matched for age and period with 15 controls. Adherence level was reported as the percentage of the prescribed doses of antihypertensive agents used during follow-up period, and was classified as ≥ 80% or < 80%. Conditional logistic regression models were used to estimate the rate ratio (RR) of non-fatal strokes adjusting for several covariables. **Results**: The overall rate of non-fatal strokes was at 3.8%. Among patients followed for more than one year, those with adherence level of ≥ 80% had less non-fatal stroke (RR: 0.84; 0.71-0.98). The fact of being male (RR: 1.41; 1.22-1.64), welfare recipients (RR: 1.44; 1.11-1.88) or having higher chronic disease score (RR: 2.39; 2.02-2.82) increased significantly the risk of non-fatal stroke. **Conclusion**: Our analysis shows that adherence to therapy of ≥ 80% for more than one year is essential to reduce non-fatal strokes among patients in primary prevention. These results confirm the importance of a long term therapy with antihypertensive agents.

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141. Association between antidepressant use during pregnancy and infants born small for gestational age.

Ramos Elodie[1, 2], Driss Oraichi[2], Anick Bérard[1, 2]
[1]Faculty of Pharmacy, University of Montreal, Montreal, Quebec, Canada; [2]Research Centre, CHU Sainte-Justine, Montreal, Quebec, Canada

Background: Studies have suggested a possible association between antidepressant use during pregnancy, low birth weight, and prematurity. Outcome measures combining birth weight and age e.g. 'Small for Gestational Age' (SGA) have rarely been investigated. **Objective:** To determine the association between class of antidepressant and the risk of infants being born SGA, according to trimester of exposure. **Methods:** A 'Medication and Pregnancy' registry, built by linking three databases (RAMQ, Med-Écho, ISQ) and data from a questionnaire was used. Eligible women had 1) to be 15-45 years of age at the beginning of pregnancy, 2) be insured by the RAMQ drug plan for ≥12 months prior to the first gestational day and during pregnancy, 3) have ≥1 diagnosis of psychiatric disorder before pregnancy, 4) have used antidepressants for ≥30 days in the year prior to pregnancy, and 5) have a pregnancy ending with a live singleton birth. Cases were defined as newborns with birth weight ≤10th percentile for that gestational age. Relative risks were estimated using modified Poisson regression. **Results:** Among the 3061 pregnancies meeting inclusion criteria, 419 (13.7%) infants were born SGA. New antidepressants used during the second trimester such as SNRIs were associated with SGA at birth (new antidepressants vs. none: aRR 1.88, 95% CI 1.05, 3.34). However, SSRIs and tricyclics were not associated with an increased risk of infants being born SGA. **Conclusion:** These data suggest that the use of new antidepressants during the second trimester of pregnancy is associated with an increased risk of infants being born SGA.

142. Are controlled asthmatic pregnant women more at risk of prenatal outcomes than non-asthmatic women?

Faranak Firoozi [1], Francine M Ducharme[2], Catherine Lemière[3], Marie-France Beauchesne[1, 3], Anick Bérard[1], Amélie Forget[3], Lucie Blais[1,3]
[1] UdeM, Qc, [2] Children hospital, Qc, [3] Sacré-Cœur hospital, Qc

Background: It is reported that the risk of adverse infant outcomes, such as preterm birth, low birth weight and small for gestational age (SGA) does not seem to differ significantly between optimally treated asthmatic women and women without asthma. However, the scientific evidence related to this topic is scarce. **Methods:** A large population-based cohort of pregnant asthmatic and non asthmatic women was reconstructed by linking three administrative databases of the Canadian province of Quebec, between 1990 and 2002. Asthma during pregnancy was considered controlled if a woman did not have any short-course of oral corticosteroids, hospitalisation or ED visit for asthma, and had low dose of inhaled short-acting beta$_2$-agonists (SABA). Outcomes under study were SGA defined as a birth weight below the 10th percentile for gestational age, using new Canadian standards, preterm birth (< 37 weeks of gestation) and low birth weight (LBW: < 2500 g). Logistic regression models were used to obtain odds ratios adjusted for several potential confounders related to asthma, pregnancy and maternal chronic diseases. **Results:** The cohort included 40893 pregnancies from asthmatic and non-asthmatic women. 13040 pregnancies were from asthmatic women and 35.9% of them had uncontrolled asthma. The risk of adverse infant outcomes was found to be significantly higher in controlled asthmatic women than in non-asthmatic women: SGA (adjusted odds ratio (aOR) =1.29; 95% CI: 1.21-1.38), preterm birth (aOR =1.56; 95% CI: 1.45-1.69), and LBW (aOR=1.59; 95% CI: 1.47-1.73). Moreover, women with uncontrolled asthma were found to be more likely to have a SGA baby than women with controlled asthma (aOR=1.17; 95% CI: 1.07-1.27). **Conclusions:** Women with controlled asthma may have minimal symptoms but still are potentially more at risk to deliver SGA, premature or low birth weight babies. Asthma in itself appears to be risky for the fetus, but asthma control should be attained since uncontrolled asthma can even further increase the risk.

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143. Impact of non-adherence to bisphosphonates on the incidence of osteoporotic fractures : a nested case-control study

Julie Blouin[1], Alice Dragomir[1], Yola Moride[1], Louis-Georges Ste-Marie[2], Julio C Fernandes[3], Sylvie Perreault[1]
[1]Faculty of Pharmacy, University of Montreal; [2]Centre de Recherche du CHUM,Montreal; [3]Orthopaedic Research Laboratory, Sacre-Coeur Hospital, Montreal

Background: Suboptimal adherence to bisphosphonates (alendronate and risedronate) has been reported in many observational studies. We aimed to evaluate the association between non-adherence to bisphosphonates and the risk of osteoporotic fracture among postmenopausal women. **Methods**: We conducted a nested case-control study using the RAMQ databases. The cohort consisted of 49 755 women >= 68 yr old who started alendronate or risedronate between January 1998 and June 2005. Cases included all women with an incident osteoporotic fracture (defined by ICD-9 or medical procedure code) after >= 6 months of therapy. Each case was matched with up to 10 controls using incidence density sampling, according to age and duration of follow-up. The index date was defined as the date of fracture for cases and the date of selection for controls. Adherence was calculated using medication possession ratio. A woman was non-adherent if she was exposed to therapy <80% of time. Rate ratios (RR) for fractures were estimated through conditional logistic regression analysis, adjusting for potential confounders: prior osteoporotic fracture, diagnosis of osteoporosis, socioeconomic status, co-medications (glucocorticoids, anticonvulsants, narcotics, etc), and co-morbidities (rheumatoid arthritis, risk of fall, etc). **Results**: There were 3340 fracture cases, corresponding to an incidence rate of 3 fractures/100 person-years. Mean age was 78 yr. Median duration of follow-up was 1.5 yr. Among women followed ≤ 1 yr, compared to adherent, non-adherent women did not show a higher risk of fracture. For women followed > 1 year, the risk of total, nonvertebral (including hip) and hip fracture was statistically significantly increased in non-adherent women: RR 1.18 (95% confidence interval (CI), 1.08-1.29), RR 1.21 (95% CI, 1.10-1.32), and RR 1.28 (95% CI, 1.09-1.49), respectively. **Conclusion**: For a duration of therapy > 1 yr, postmenopausal women exposed to alendronate or risedronate < 80% of time have a higher risk of all types of osteoporotic fractures compared to those exposed >= 80% of time.

144. Population-based study: statin adherence on non fatal stroke among patients for primary prevention.

Laura Ellia[1], Alice Dragomir[1], MSc, Lucie Blais[1], PhD, Robert Côté[2], MD, FRCPC, Sylvie Perreault[1], PhD.
[1]Faculty of Pharmacy, Université de Montréal and [2]Faculty of Medicine, McGill University, Montréal, Québec

Aim: Clinical trials have demonstrated that statins can reduce cerebrovascular disease among patients having hyperlipidemia. Observational studies reported that more than 50% of patients stop their therapy after 2 years, but no study has evaluated the impact of statin adherence on stroke for primary prevention. **Objective**: To evaluate the impact of statin adherence on the rate of stroke. **Methods**: A cohort of 29,926 patients was reconstructed using the RAMQ databases. All patients aged form 45 to 75 years old who were newly treated with statins between 1999 and 2000 were eligible. A nested case-control design was used to study non fatal stroke. Every case was matched for age and follow-up period with 15 controls. Adherence level was reported as the percentage of the prescribed doses of statin used during follow-up period, and was classified as ≥ 80% or <80%. Conditional logistic regression models were used to estimate the rate ratio (RR) of non fatal stroke adjusting for covariables. **Results**: The rate of stroke was at 3.4%. Among patients followed up for more than one year, those with adherence of ≥ 80% had less stroke (RR=0.74, 0.62-0.88). Risk factors such as male (RR=1.27, 1.07-1.52), diabetes (RR=1.23, 1.02-1.48), hypertension (RR=1.35, 1.12-1.63) and higher CDS score (RR=1.82, 1.50-2.20) had a significantly higher risk of non fatal stroke. **Conclusion**: This analysis indicated that adherence of ≥ 80% and for more than 1 year is essential to reduce non fatal stroke. Our results confirm the importance of a long term adherence with statins.

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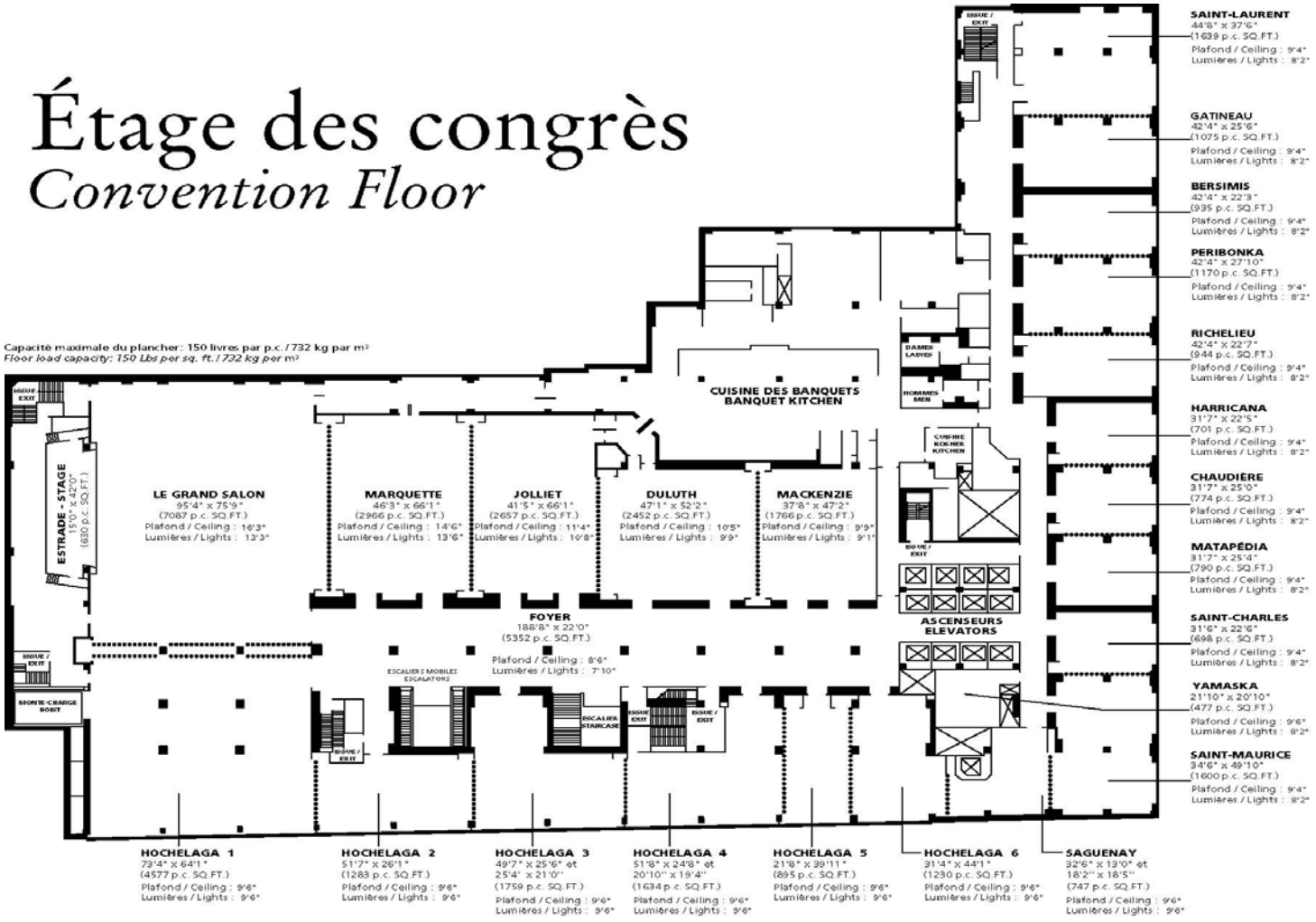
145. Two-stage nested case-control study of the control and severity of maternal asthma during pregnancy and the incidence of asthma in the offspring.

Marie-Josee Martel, Evelyne Rey, Marie-France Beauchesne, Jean-Luc Malo, Sylvie Perreault, Amelie Forget, Lucie Blais.
Universite de Montreal, Faculty of Pharmacy and affiliated hospitals, Montreal, Quebec, Canada

Background: Children of asthmatic mothers tend to have a higher risk of asthma than those of non-asthmatic mothers, but the extent to which the incidence of asthma in children is influenced by maternal asthma control and severity in pregnancy is unknown. **Objectives**: To evaluate the association between maternal asthma control and severity during pregnancy and the incidence of asthma in the offspring in the first 10 years of life. **Methods**: A two-stage case-control study, nested in a cohort of 8 226 children born to asthmatic mothers between 1990 and 2002, was conducted using 3 interlinked administrative health databases from Quebec and a mailed questionnaire. A child was considered as a case if it had received at least one diagnosis and a prescription for asthma within a 2-year period. Up to 20 controls/case were selected and matched for age at case occurrence. Maternal asthma control and severity were measured with validated indexes. Using a balanced two-stage sampling strategy, 3 254 randomly selected mothers were mailed questionnaires to obtain information on additional confounders. The final estimates, adjusted odds ratios, were obtained using logistic regression and were corrected with corresponding sampling fractions. **Results**: From the cohort, 2 681 asthma cases and 30 381 controls were identified. The questionnaire response rate was 44% (671 cases, 758 controls). Among children of asthmatic mothers, the increased risk of asthma in the offspring seen in the adjusted first-stage analysis (adjusted rate ratio:1.24 95%CI:1.11-1.38, comparing children of mothers with moderate-to-severe uncontrolled asthma during pregnancy vs those of mothers with mild controlled asthma), did not remain statistically significant in the final model (adjusted odds ratio:1.15 95%CI:0.95-1.40) combining first- and second-stage variables. **Conclusions**: This study showed no statistically significant increases in the risk of asthma among children whose mothers had a poorer control and increased severity of asthma during pregnancy.

Étage des congrès
Convention Floor



Fairmont
THE QUEEN ELIZABETH

PART 2.0

MINUTES OF AFPC MEETINGS

2006 - 2007

AFPC Association of Faculties of Pharmacy of Canada
Association des Facultes de Pharmacie du Canada

3919 West 13th Ave, Vancouver, BC V6R 2T1

MINUTES TELECONFERENCE MEETING

FRIDAY OCTOBER 20, 2006
10:00 AM PDST

Welcome, roll call and approval of the agenda:
President Anne Marie Whelan welcomed participants to the teleconference and called for the role. Present and accounted for were Anne Marie Whelan (President), Zubin Austin (Past President), Simon Albon (President Elect), Linda Hensman (ADPC Representative), Ingrid Price (UBC), Roy Dobson (Sask), Mike Namaka (Man), Mary MacCara (Dalhousie) and Frank Abbott, Executive Director.

Regrets: Sharon Mitchell (Alta), Lalitha Raman-Wilms (Toronto), Dan Thirion (Montreal), Jean Lefebvre (Laval) and John Hawboldt (Memorial).

The agenda was approved with the addition of Chair of the Communications Committee under other business.

Session 1 (45 minutes)

Strategic planning: Approval of mission statement and goals: Roy Dobson led the discussion based on the draft strategic plan that was circulated prior to the meeting. The 1998 mission statement and goals were included for reference along with the mission statement and goals developed in 2006. The mission statement (2006) was accepted as is and discussion centered on the goals. Five of the proposed goals were revised to four with work still to be done on the bullet points under each goal. Roy, Ingrid and Simon are to work on these prior to the midyear meeting. Tables of action with timelines will be the focus of our next planning session in February 2007.

Session 2: (45 Minutes - AFPC Business)

1) **Program Evaluation**: Ingrid reported on the progress of the task force and was concerned about a number of issues. She is currently in the throes of a tenure application and the administrative assistant assigned to the task force is uncertain of next steps. This was based on the fact that AACP did not identify champions of

program evaluation that we might contact and there is little in the literature on program evaluation for health sciences. After considerable discussion it was recommended that Frank and Ingrid should meet with David Fielding and Kristin Wright and also begin to look for a consultant. It was also recommended that the working group be expanded should the need arise.

2) **PEP Canada:** Frank and Ingrid reported on recent PEPC activities. The web pages for the APFC web site are being planned and Frank has obtained the cooperation of the web master to help with placing the materials related to PEPC initiatives on the web. Ingrid said that a recent teleconference by PEPC was positive about the progress being made. The strategic plan is being finalized and planning is underway for the group to present at the AFPC meeting in Montreal in 2007. Frank reported from the recent ADPC annual meeting regarding Faculty funding of PEPC activities. While funding was guaranteed for PEPC members to attend the 2007 meeting, the Deans were not prepared to give carte blanche funding for subsequent meetings. Some evidence of progress being made with benefits derived for the individual Faculties would be required. Preceptor training, evaluation and assessment, was supposed to be a high priority of the group and it is not certain if that is still part of their agenda. Frank and Ingrid are to communicate with co-chairs Harriet Davies and Annie Lee on these issues. Frank also reported on the AACP Learning Institute, the most recent being on experiential learning. George Mackinnon of AACP had enquired whether Canadian Faculties would participate if the experiential session was repeated next spring. At first this seemed ideal for the PEP Canada group to attend, but the format of the institute is for five members from an individual faculty to make up the team. Frank is to follow up with George Mackinnon to see what the options might be.

3) **Clinical Tenure Document:** Zubin reported that the manuscript “Tenure and Promotion Guidelines for Scholarly and Clinical Activity” will be published in the next few weeks in the journal, Pharmacy Education. Once the paper is published the manuscript will be removed from the web site and replaced with a link to the published journal article. Reporters Note: During the ADPC annual meeting, Frank had asked

the Deans if their faculty had found the article to be useful for promotion and tenure applications. Jake Thiessen of Waterloo University said that he had found the information extremely useful for recruiting professors to the pharmacy practice stream for the new school at Waterloo.

4) **Entry Level Pharm D outcomes - levels and ranges:** Zubin and Frank reported on the communications that had occurred between a consultant in Montreal with respect to writing the levels and ranges for the new ELPD degree. NAPRA had also considered this same consultant for a review of their practice competencies and a proposal was generated that would include both activities. Unfortunately for AFPC, the costs for the proposal were well over the budget of $5,000. In the proposal was a major review of the educational outcomes for the bachelor's, the post baccalaureate Pharm D and the ELPD, the latter being recently created by an AFPC task force. Discussion around this issue suggested the following options: 1) Proceed with the educational outcomes without the levels and ranges. This was not a popular option given that several Faculties wanted the levels and ranges in place. 2) Look for another consultant to complete the task. Frank was to contact NAPRA to learn of other consultants who had replied to their request for a proposal on the practice competencies. Simon suggested that AFPC begin to save for the eventuality of having a review of the educational outcomes for all the pharmacy degrees.

5) **CPJ Editorial Board Representative:** Frank spoke to the invitation from Ross Tsuyuki, editor of the Canadian Pharmacist Journal, that AFPC appoint a member to the board of the journal. That board member would be responsible for either writing or soliciting at least two papers per year for publication in the journal. In return, CPJ will offer free subscriptions to CPJ for all AFPC members who wish to subscribe. The notice of this offer was published in the September-October Communications newsletter. After discussion, it was recommended that Frank poll the Faculties for suggestions of potential representatives to the CPJ Board. The board representative would then be appointed by Council at the midyear meeting in Toronto.

6) **Report on ADPC Meeting:** Linda and Frank spoke to the AFPC report to the ADPC annual meeting. Much of the material in the report had already been covered in the discussions that have occurred around PEP Canada and the program evaluation. The response to our proposal for a fund raising committee to be headed by a Dean or Director of Pharmacy was generally favorable but the final decision will be delayed. Dean Wayne Hindmarsh, the suggested chair of this committee, will be on six months administrative leave as of January 2007.

7) **Database:** Frank reported that he was beginning to have the materials uploaded onto the web site and hopefully these will be accessible within 2-3 months time.

8) **Finances:** Frank stated that a review of the finances for this year confirmed the anticipated $11,000 deficit due to the withdrawal of funding for the Student Research Poster Awards. The good news was that Roy and Jim Blackburn had discovered further income for AFPC in the sharing agreement with the LLLP Conference. This income together with a final grant from the LLLP Conference should cover most of the deficit for 2006.

9) **Awards:** Roy confirmed that the awards book had been sent out with revisions made to the Student Research Poster Awards now sponsored by AFPC. Wal-Mart Canada has recently committed to a new award that will fund a student from each of the 10 Canadian Faculties to attend the AFPC annual meeting. Details of the award have still to be worked out.

10) **2007 Meeting Update:** Details of the program are forthcoming from Dan Thirion. Frank reported that he had worked with Pierre Moreau at the ADPC meeting on the conference fundraising letter and sponsorship form. Details of the program will be posted on the web site as soon as they are available. As an addendum, Zubin reported that Lalitha Raman-Wilms, Andrea Cameron and he have begun work on the 2008 Joint Conference with AACP to take place in Chicago. PEP Canada had been invited to present. Innovative teaching and assessment methods are suggested

themes.

11) **Midyear Meeting:** It was agreed that the midyear meeting would proceed as usual with Frank investigating a less expensive hotel in Toronto. Dates for the meeting will be Saturday and Sunday, February 3 and 4, 2007. Zubin suggested that AFPC use the room facilities in the new Leslie Dan Faculty of Pharmacy building on the University of Toronto campus.

12) Other business

12.1 Chair of the Communications Committee: Anne Marie stated that Jean Lefebvre, because of unforeseen commitments, had requested that he be relieved of responsibilities for chairing the communications committee. President elect and former chair of the communications committee Simon Albon agreed to complete Jean's term.

13) Adjournment: 11:50 AM PDST.

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AFPC ASSOCIATION OF FAULTIES OF PHARMACY OF CANADA
ASSOCIATION DES FACULTES DE PHARMACIE DU CANADA

3919 West 13th Ave, Vancouver, BC V6R 2T1

MID-YEAR COUNCIL MEETING
Minutes

February 4, 2007
Faculty Council Room – 1210
Leslie Dan Faculty of Pharmacy
144 College Street
Toronto, ON

Sunday, February 4, 2007:

Faculty Council Room, 1210:

9:00 Business Meeting

1. Remarks, roll call and approval of the agenda President Anne Marie began the meeting by welcoming everyone and thanking Zubin and Lalitha for their kind hospitality and for their efforts in facilitating the meeting in the new Leslie Dan Faculty of Pharmacy Building. Before the business of the meeting began, Anne Marie asked that we take some time to review the previous day's progress on the strategic planning for the benefit of Mary MacCara and herself (travel delayed because of weather) and to refresh those who had participated. Sharon Mitchell and Ingrid Price reviewed the document prepared by Ingrid. It was agreed by all to proceed with the actions intended. Ingrid, Frank and Roy to proceed with the revisions and after preliminary review by Council to call a teleconference to final edit and approve the revisions.

Roll Call: Ingrid Price (UBC), Sharon Mitchell (Alberta), Mike Namaka (Manitoba), Lalitha Raman-Wilms (Toronto), Dan Thirion (Montreal), Mary MacCara (Dalhousie), John Hawboldt (Memorial), Anne Marie Whelan (President), Zubin Austin (Past President), Simon Albon (President Elect), Frank Abbott (Executive Director).
Regrets: Roy Dobson (Education business in Trinidad), Linda Hensman (ADPC).

Approval of the agenda: The agenda was approved as submitted on a motion by Sharon and seconded by Zubin.

2. Approval of Council Meeting Minutes
Annual Council Meeting, Friday, June 2, 2006
New Council Meeting, Monday, June 5, 2006

For Information: Committee Charges 2006-2007

The minutes were approved on a motion from Zubin and seconded by John.

3. Business Arising from the Minutes:

3.1 Update on the Educational Outcomes for Entry Level Pharm D:
Anne Marie reported that editing of the document was underway and Susan Mansour would be sending it out to the task force committee for final revisions. It is anticipated that the edited outcomes document will be available for the AGM in Montreal. Zubin spoke to the difficulty in attempting to find a writer to complete the levels and ranges for the entry-level Pharm D educational outcomes. Completing the levels and ranges was a proviso of accepting the outcomes document but it is turning out to be a costly exercise. Zubin suggested that with NAPRA revising the standards of practice that we might consider looking at the educational outcomes for all our professional degrees once this is complete. Simon asked what does it mean if we do not complete the levels and ranges for the ELPD degree. Levels and ranges are of most benefit for educators themselves but not having them does not stop progress on implementing the degree program. Simon felt there was a need to budget for developing the levels and ranges in the future.

3.2 Position paper on Interprofessional Education: Zubin reported that the paper had been sent to Pharmacy Education and was now in the revision stages.

3.3 PEP Canada progress:
Ingrid referred to her education committee report that was distributed at the meeting. The report included reference to educational initiatives of PEPC to present at the Montreal Conference in 2007 and in Chicago in 2008. The PEPC terms of reference are being finalized. PEPC is meeting on a regular basis by teleconference with the costs being borne by AFPC. Annie Lee of University of Toronto has worked with the Canadian Hospital Pharmacists Residency Board to promote teaching and precepting of students as a standard within the CHPRB residency programs in Canada. Karen Wolfe of the National Association of Pharmacy Regulatory Authorities (NAPRA) is interested in working with PEP Canada on experiential programs as NAPRA updates their entry to practice competencies. Development of a national resource centre for PEP Canada using the AFPC web site is being delayed by a lack of funding. Discussion occurred around the costs of the PEPC web site development and whether we should invest in this right now. An alternative was to have the web site developed elsewhere, such as one of the Faculties, and then link this to the AFPC web site.

3.4 Program Evaluation Guide Task Force:
Ingrid again referred to the education report. It was confirmed by Roy during the meeting that he is indeed the Saskatchewan representative. The report outlined preliminary steps to developing the program evaluation guide. Ingrid and David Fielding at UBC met with David Hill, Executive Director of CCAPP to review what the key elements of such a guide might look

like. Having done this, Ingrid and David began developing a template based on the UBC strategic plan and linking this to program evaluation. The RAND Corporation Logic Model was being used to develop the template. This action was to continue with a working group meeting planned to occur sometime in April or May of 2007. A report to the Deans is anticipated for the AFPC annual meetings in Montreal.
Ingrid and Roy thought that the program evaluation task force could evolve into a special interest group (SIG). The hiring of a consultant for the task was discussed but Ingrid was not sure what we would ask that person to do. The program evaluation guide activities will be reviewed again at the annual meeting.

3.5 PEBC representative: Frank confirmed that Lavern Vercaigne, University of Manitoba has agreed to be the AFPC representative to the Pharmacy Examining Board of Canada (PEBC) starting on July 1, 2007. Lavern replaces Linda Suveges, University of Saskatchewan who completes her tenure on the PEBC Board this year. Lavern's initial appointment will extend until February of 2010.
A recommendation that Lavern Vercaigne serve as the AFPC representative to PEBC was approved on a motion by Mary and seconded by Zubin. Frank was to inform John Pugsley of this action in writing.

3.6 CPJ Editorial Board Representative: Frank reported that the Canadian Pharmacists Journal is having second thoughts about AFPC representation on the editorial board. There has been considerable disappointment by the Journal in the poor response from faculty members to their offer of a free subscription. Council members were uncertain of the reason for this. Colleen Metge of the University of Manitoba had indicated her interest in serving as the AFPC representative and that information had been forwarded to CPJ.

3.7 Conference on Improving Pharmaceutical Care in N.A.: Anne Marie updated Council on the progress of this group of pharmacists representing Mexico, Canada and the USA. The thrust of the organization is to move towards a more clinical approach to pharmacy education and practice in Mexico. There is still talk about having a conference that will occur in 2007. Down the road, if changes do occur in the practice of pharmacy in Mexico, AFPC will likely be invited to contribute to educational program development.

4. New Business:

4.1 CPhA Centennial Awards: Frank provided a report listing the names of past Deans and faculty members that AFPC might consider nominating for a CPhA centennial award. Council members were urged to follow up on the individuals who had served in their respective Faculties. CPhA was also requesting missing biographies for individuals who were likely to receive nomination because of their past service to CPhA.

4.2 NAPRA – Review of the Professional Competencies for Canadian Pharmacists at Entry to Practice: Susan Mansour (Dalhousie) attended a workshop on the development of competencies in Ottawa, January 22-24, 2007. Susan submitted a report of the workshop experience. Frank indicated that we would need a reviewer for the revised competencies and suggested that Susan also serve that role.

4.3 Canadian Hospital Pharmacy Residency Board Accreditation Standards 2010: Anne Marie, on behalf of AFPC, attended the CHPRB accreditation standards review workshop held prior to PPC in Toronto on January 27, 2007. She reported that the term "pharmaceutical care" has been deleted from the standards and was not an item for discussion at this workshop. There was debate as to whether or not a standard regarding drug distribution/dispensing should be left in the document. A recommendation for consideration of development of levels and ranges for the outcomes in the standards was made as some of the outcomes are very similar to those in the AFPC educational outcomes documents. Changes will be made to the standards following the workshop and will be sent out to stakeholders for further feedback. Additional workshops will be held at the CSHP AGM in August 2007 and at PPC in January 2008. If possible, Anne Marie would recommend that AFPC continue to be represented at these workshops.

4.4 CIHR Clinical Research Scholar Award: On behalf of Ingrid Sketris, Anne Marie stated that Ingrid was concerned that pharmacy faculty are not eligible for the Canadian Institutes for Health Research Clinical Scientist Training Award. Frank said that he would look into it.

4.5 Blueprint for Pharmacy Task Force: Frank reported that the Blueprint Task Force for Pharmacy was active and that we were most pleased to have Terri Schindel from the University of Alberta as the AFPC representative. Dean Dennis Gorecki serves as a representative from ADPC.

4.6 PDW Issues: Toronto had raised issues around the disruption to experiential training caused by the timing of the PDW Conference in January. Lalitha and Zubin expanded on the discussion. It was decided that Frank would invite the President and President Elect of CAPSI to attend the Annual Council Meeting in Montreal to discuss this issue as well as other topics of mutual interest.

5. Committee Reports:

5.1 Awards Committee: In the absence of Roy, Frank spoke to the current state of awards for 2007. There is a healthy competition this year in all the award categories. The Faculties are to be congratulated on their effort to nominate excellent candidates for the various AFPC awards. Frank said that he had been in communication with Wal-Mart Canada about developing the scholarship award for students to attend the AFPC Conference. It was agreed that this award would be very similar to that offered by AACP and Wal-Mart in the USA.

5.2 Bylaws Committee: Zubin Austin is to present the report to the Annual Council Meeting and to the AGM in Montreal for approval. Frank had edited the changes based on communications with Corporations Canada. The mission statement and goals have yet to be finalized and incorporated into the report. The Bylaw changes need to be distributed for information to the membership at least two months prior to the AGM.

5.3 Communications Committee: Simon Albon presented his report that focused on the newsletter and the format that was required to ease the work of our editor, Rebecca Law. Simon stressed the need for council members to respond to their Faculty Spotlight. Statistics of the AFPC web site use were provided. The maintenance of the French mirror web site is presently non-

existent and needs to be addressed. In the discussion that followed it was suggested that teaching tips could be added from the faculty that is in the spotlight. Mike asked about web site revenue and Frank responded that advertising revenue was expected to be down this year. The database project was discussed and priority was given to make the research database search engine available as soon as possible. Simon and Frank were to work with the web master to have this completed.

5.4 Conference Planning Committee (2007): Dan Thirion provided an updated version of the Conference program. Frank was to update the web site and Dan to send to CSPS for inclusion in the overall program for the joint conference.

5.5 Joint meeting with AACP in 2008: Zubin and Lalitha reported on the proposed program contribution from AFPC. Andrea Cameron has been added to the planning group. The AFPC program sections would be given as if AFPC were a special interest group (SIG). AFPC would thus have three 3-hour blocks, one devoted to PEP Canada, one on OSCE and a third as a teaching and learning block. There would be three speakers in each group with a panel for discussion at the end.

5.6 Education Committee: Ingrid Price referred to her earlier reports on the PEP Canada Initiative (3.3) and the Program Evaluation Guide task force (3.4).

5.7 Nominating Committee: Zubin Austin reported that Roy Dobson had accepted the President Elect position for 2007-2008. Frank was to remind the Deans at UBC, Alberta and Manitoba of the need to elect a council member for the 2007-2010 term.

5.8 Planning and Finance Committee: In the absence of Roy, Anne Marie and Frank presented the Financial Statement for 2006 and the budget for 2007. The financial statement notes and the notes for the budget had been distributed beforehand.

5.9 Research Committee: Mike Namaka reported that the research template that was originally developed to collect data on research funding is still a viable option for the New Council and the new chair of the research committee to consider. Recent effort on completing the research database has taken priority over work on the template.

6. Report of Representatives to External Groups:

6.1 ADPC Representative: Frank spoke on behalf of Linda Hensman and indicated that the Deans had just completed their midyear meeting one day prior to the AFPC meetings. Strategic planning had dealt with identifying the key stakeholders with whom the Deans should meet and the issues that would be important to discuss. Some of these meetings were tentatively planned to take place during the CPhA Conference in Ottawa in June, 2007. The Deans held meetings with Alan Malek, VP Pharmacy and Nadine Saby, President and CEO, Canadian Association of Chain Drug Stores. Rav Kumar, VP Regulatory Affairs and Pharmaceutical Development, GlaxoSmithKline Canada Inc met to report on recent developments with the Canadian Society for Pharmaceutical Sciences and with Rx and D. Frank updated the Deans on progress of the

PEP Canada initiative, the Program Evaluation Guide project and the web database. The 2007 annual meeting of ADPC will take place in Kelowna, BC in October.

6.2 CPhA Human Resources Project: Zubin Austin spoke briefly to the progress being made stating that the expected outcome is not to project the need for pharmacists but to provide valuable trends in demand and opportunity. The project is vitally important to the future of pharmacy practice and education and is unusual in its scope.

6.3 CCAPP: Sylvie Marleau indicated that a report will be available for the Annual Meeting.

6.4 CPhA Academic Board Member A report will be available for the annual meeting.

6.5 PEBC: A report will be available for the annual meeting.

6.6 CCCEP: Frank to request a report from Yvonne Shevchuk.

6.7 USP: Frank to request a report from Raimar Löbenberg.

6.8 Canadian Pharmacy Practice Research Group (CPPRG): Anne Marie reported that the CPPRG is continuing with its work. The AFPC AGM was advertised in the most recent issue of their Newsletter. CSHP has increased their interest in primary care and is partnering with CPhA to form a joint Primary Care Pharmacists PSN. Membership applications can be made directly to either organization (for CSHP: www.cshp.ca/cshpNetwork/psn/index_e.asp; for CPhA: www.pharmacists.ca/primary.care)

7. **Executive Director's Report**: Frank presented an outline of the proposed report and obtained feedback from council.

8. **Other business:** There was none**.**

Frank Abbott
Recorder

For Information:

MID-YEAR COUNCIL MEETING
Strategic Planning Notes

February 3, 2007
Faculty Council Room – 1210
Leslie Dan Faculty of Pharmacy
144 College Street
Toronto, ON
Phone: 416-978-2889

Saturday, February 3, 2007:
Strategic Planning Session: 1:00 PM 5:00 PM

12:00 (Noon) Lunch in the Faculty Council Room (1210) and a chance to see the building.
Present: Zubin, Lalitha, Sharon, Ingrid, John, Simon, Roy, Frank, Mike, Dan (Anne Marie and Mary-delayed because of weather)

Planning session: Roy Dobson and Ingrid Price co-chaired the session. The group was asked to rank the objectives under the 4 Goals.
Main groups were:

1. Promote excellence in pharmacy education, research and scholarly activity
2. Provide meaningful leadership for academic pharmacy
3. Support members, Deans and Faculties in advancing knowledge skills and expertise critical to pharmacy education, research and scholarly activity.
4. Secure independence through consistent long term funding for the ongoing operations of AFPC and will allow for special projects.

<u>Ranking:</u>

a. Meaningful leadership (include the voice of leadership)
    a. Roy
    b. Lalitha
    c. Sharon
    d. John
b. Promote excellence
    a. Ingrid
    b. Zubin
    c. Simon
    d. Frank
c. Support advancement
d. Secure long term funding
e. Recognized by external organization

Objective 1.1 - Provide meaningful leadership for academic pharmacy

1. Develop and continually update Educational Outcomes.
    a. Establish a standing committee to review outcomes and determine the future of pharmacy in light of current trends
    b. Establish educational outcomes for each pharmacy area (BSc., PharmD, Entry-level Pharm D, etc.)
    c. Committee to review outcomes every 5 years or as directed by council
2. Provide guidelines ("how to") for evaluation of programs
    a. Establish a standing committee to evaluate programs
    b. Establish guidelines for program evaluation
    c. Committee to periodically review guidelines
3. Provide timely information on current issues to the future of academic pharmacy
    a. Council will identify topic for information/position paper at AGM
    b. Council will identify appropriate individual(s) to lead in preparing the paper
    c. Facilitate discussion regarding the information document at AGM
        i. Potentially have SIG groups created (may not fit here)
        ii. On an as needed basis (not annually)
4. Provide an educational forum for the development and advancement in pharmacy education (links to objective 1.2)
    a. Council will identify appropriate themes in an timely manner for the AGM
5. Promote AFPC to National and International organizations
    a. Identify (council) common themes and interest with other organizations and co-ordinate mutual collaboration
    b. Council representative attends and participates in meetings of National/International organizations of relevance to us
    c. Invite others to our meetings

Objective 1.2 - Promote excellence in pharmacy education, research and scholarly activity. (research and scholarly activity related to pharmacy education)

- Who is our audience? All members of the teaching community in pharmacy education (faculty, students, preceptors, etc.)
    - Change focus of AFPC to Association of Pharmacy Educators of Canada
    - Pharmacy education is not sufficiently valued or recognized in Canada (pharmacy educators do not think that there is value in their work).

Actions & Tasks:

1. Showcase and promote innovations in pharmacy teaching and research.
    a. Advocate for pharmacy education (build it from grass roots)
    b. Broaden membership (community colleges, residency program, residency programs, CE, Pharm D students)
    c. Venues:
        1. Conference
            a. Organize a conference that focuses on teaching pharmacy – change name of conference to "Pharmacy Education in Canada" (or something like that)

b. Create round table opportunities for discussion
c. Facilitate discussion forums on significant issues
d. Create SIGs to meet at conference
e. Prepare extended abstract (5-6 pages) from presenters
f. Bring in education experts from within Pharmacy and beyond to enhance pharmacy education across Canada
g. Have more forums for showcasing excellence in education in pharmacy
h. Have graduate teaching sessions

2. Newsletter
    a. Teaching tips or showcase courses/programs
    b. Alert Faculties to opportunities for funding/conferences, etc. (already happening)
3. Journal?
    a. On-line
    b. Once a year (after conference)
    c. Perhaps in the future?
4. Web site
    a. Alert Faculties to opportunities for funding/conferences, etc. (already happening)

2. Recognize and reward excellence and leadership through awards.
    1. Create senior/junior faculty awards
    2. Create an excellence in teaching pharmaceutical sciences award
    3. Create an excellence in graduate teaching award
    4. Create an excellence in practice education award
        Preceptor award
    5. 3M advocacy
    6. Fellowships for pharmacy educators
        Research SSHRC/CIHR/Health Canada/ISMP (Institute for Safe Medication Practices) fellowship opportunities
    7. Fellowship status for contributions to AFPC

Originally in document (omit – not necessary anymore?)

2. Through the Communications Committee and the Conference Planning Committee make greater/more effective use of newsletters, annual conference and website to celebrate our achievements

AFPC Association of Faculties of Pharmacy of Canada
Association des Facultes de Pharmacie du Canada

AFPC Council and Executive Teleconference

Wednesday, March 28, 2007
10:00 a.m. Pacific Daylight Saving Time

Meeting Notes:

1) **In Attendance:** Anne Marie Whelan, Mary MacCara, John Hawboldt, Dan Thirion, Lalitha Raman-Wilms, Roy Dobson, Sharon Mitchell, Ingrid Price, Simon Albon and Frank Abbott. Regrets: Linda Hensman, Zubin Austin and Mike Namaka.

2) **Strategic Plan:** President Anne Marie Whelan chaired the session. Roy thanked the strategic plan focus group of Ingrid, Simon and Frank for making the initial changes to the plan as a follow up to the midyear meeting. The focus of the teleconference was to complete the mission statement and the goals and objectives summary page so that Frank could include these in the Bylaws report for approval at the AGM in Montreal in June.

Roy presented a combined version of pages 2 and 3 of the strategic plan. In the discussion that followed, wording changes were suggested to all sections of the goals and objectives plus the addition of a second objective under goal 2 – to showcase and promote innovations in pharmacy teaching and research. **Action**: Roy was to do the editing based on the teleconference discussion and to consider further edits sent to him by email. **Done**. The final version of the mission statement, goals and objectives was approved by consensus and Frank included these in the Bylaws report distributed by President Anne Marie for information on March 30, 2007.

It was agreed at the teleconference that further changes in detail to the strategic plan would be discussed at the next New Council meeting in Montreal.

3) **School Posters at the Annual Conference in Montreal 2007:** Several council members raised this issue. The responsibility of a school poster for the conference most often fell on the shoulders of the respective council member and this was generally regarded as a great deal of work without much evidence for a return from the presentation being made. The pros and cons of the school poster were discussed in detail with suggestions that we require this every other year with the midyear meeting deciding the theme for the posters. **It was finally agreed that no school poster would be required for 2007.** The issue would be discussed at the Annual Council Meeting in Montreal and should be included in the strategic plan discussion by the New Council. The joint meeting

of AFPC with AACP next year in Chicago might be a good time to present school posters from Canada.

4) **Other items of business:**

4.1 New council meeting time in Montreal. Frank suggested that we complete business on Saturday June 2 by no later than 11:30 AM. A box lunch would be arranged.

4.2 Videoconferencing: Frank raised the possibility of holding video-conferences using personal computers. Most felt the cost was a negative consideration.

4.3 Accreditation issues regarding non-traditional Pharm D degrees by Canadians: John Hawboldt raised this issue and sent the following information to Frank regarding changes to the non-traditional Pharm D program at the University of Washington in Seattle: U of W will be unable to accept any pharmacists without degrees from US schools of pharmacy and the required advanced pharmacy practice experiences in all program pathways must be conducted in the United States or its territories and possessions. Subsequent to this John obtained further information suggesting that not all schools in the USA are following the decisions made at the University of Washington. Further clarification will be required.

4.4 Frank reported that progress was being made on establishing the Wal-Mart student scholarship award.

4.5 Simon reported that the search function for the research data base is now complete and should soon be posted on the web site.

Adjourned after 1 hour and 15 minutes

AFPC Association of Faculties of Pharmacy of Canada
Association des Facultes de Pharmacie du Canada

MINUTES
AFPC ANNUAL COUNCIL MEETING
FAIRMONT QUEEN ELIZABETH HOTEL, MONTREAL
BATISCAN ROOM
WEDNESDAY, MAY 30, 2007

8:30 AM

1. **Opening Remarks:** President Anne Marie Whelan welcomed everyone to the annual council meeting and gave special greetings to Nancy Waite (Waterloo) who has just joined Council for her very first meeting. Anne Marie said that she was looking forward to an excellent conference and meetings in Montreal.

2. **Roll Call and Approval of Agenda:** Present and accounted for were Anne Marie Whelan (President), Simon Albon (President Elect), Zubin Austin (Past President), John Hawboldt (Memorial), Mary MacCara (Dalhousie), Dan Thirion (Montreal), Lalitha Raman Wilms (Toronto), Nancy Waite (Waterloo), Mike Namaka (Manitoba), Roy Dobson (Saskatchewan), Sharon Mitchell (Alberta). Linda Hensman (ADPC representative) was delayed because of weather. Regrets: Ingrid Price (British Columbia), Jean Lefebvre (Laval).
Agenda: Approved on a motion by Roy Dobson and seconded by Simon Albon.

3. **Council Meeting Minutes**

3.1 *Midyear Council Meeting, Toronto February 4, 2007:* Roy noted that he was in Trinidad, not Jamaica. Revised minutes were approved on a motion from Roy Dobson and seconded by Zubin Austin.

3.2 *Teleconference Meeting Notes, March 28, 2007:* Approved on a motion by John Hawboldt and seconded by Lalitha Raman Wilms.

3.3 *Notes from Strategic Planning Session Midyear Council Meeting, Toronto February 3, 2007* – for information

4. **Business Arising from the Minutes**:

4.1 *Update on Position paper on Interprofessional Education:* Zubin Austin reported that this paper, submitted to Pharmacy Education was soon to be published.

4.2 *Educational Outcomes for Entry-level Pharm D:* Anne Marie Whelan presented the report on behalf of chairperson Susan Mansour (Dalhousie). Susan reported that the work of the committee was now complete. The final review by the committee of the latest feedback on the

4.3 *Program Evaluation Task Force Update:* It was decided to leave this item until the Education Committee report by Ingrid Price.

4.4 *Steering Committee: Conference on Improving Pharmaceutical Care in North America*: Anne Marie Whelan presented her report to Council. A tentative date for the Conference has been set for October 2007. AFPC will participate by recommending speakers and contributing to fundraising initiatives.

4.5 *CPhA Centennial Awards:* Frank thanked all who had helped by nominating worthy individuals and by sending in photos and information to assist CPhA in completing nominations of individuals that they considered high on their list of nominees. Frank circulated the final list from CPhA of the selected Centennial Pharmacists and about one third of the awardees are either former or current academics. The award recognizes the contribution by these individuals to pharmacy and to society as a whole for their leadership and the positive profile that they brought to the profession.

4.6 *NAPRA – Review of the Professional Competencies for Canadian Pharmacists at Entry to Practice:* Frank spoke again of the contribution by Susan Mansour (Dalhousie) in attending the workshop held in January of 2007. The report, produced from that workshop, was in turn reviewed by Glenn Rodrigues, also of Dalhousie University.

4.7 Canadian Hospital Pharmacy Residency Board Accreditation Standards 2010: Anne Marie had represented AFPC at the initial workshop review held in Toronto in February of 2007. Changes to the standards were sent out to stakeholders for feedback. Anne Marie felt that AFPC should continue to provide input to this process and Nancy Waite gave her support to help Anne Marie in this endeavour. A representative from AFPC was needed to attend the CSHP annual meeting in Regina in August. Roy Dobson (Saskatoon), being close, said that he would fulfill that role.

4.8 CIHR Clinical Research Scholar Award Update: Frank said that he had followed up with CIHR on this issue and was assured that given funding, CIHR would be able to include Pharm D applicants in the competition for Clinical Research Scholar Awards. While that implied that CIHR was not adverse to providing Clinical Research Scholar Awards to Pharm Ds, Frank felt that we should continue to lobby CIHR on this issue. He was then informed that Lisa Dolovich and Tom Brown (Toronto) and Colleen Metge (Manitoba) were active in such a lobby.

12:00 Noon: Working Lunch – This time was reserved to meet with Wal-Mart Canada regarding the establishment of the AFPC/Wal – Mart Canada Conference Scholarship Award. Wal-Mart Canada representatives were Pharmacy Services Manager Vijay Akileswaran, and local representative Yvan Lagacé. Frank had earlier distributed a draft description of the award that Council had an opportunity to edit but the award description still needed input from the sponsor. The Wal-Mart Canada award was designed to encourage outstanding students in pharmacy to commit to a career in academia through their participation in the AFPC Annual Meetings and Conference. This award was closely patterned after the Wal Mart Scholarship Program recently established at AACP.

AFPC council members expressed their gratitude to Wal-Mart Canada for their generosity in establishing the award. In turn Council was pleased to learn from Vijay that Wal-Mart Canada had a strong commitment to this venture and that he would continue to work towards making this a highly attractive award for our students. The award description was then discussed in detail and several changes were agreed upon. A new title was proposed: "Wal-Mart Canada/AFPC Future Academic Leader Award". Instead of the original 10 award recipients, it was decided to limit the annual award to 5 student winners that would be selected by AFPC reviewers from a pool of up to 2 applicants from each of the 10 Faculties. From a financial point of view this decision was more realistic in that the available funds could then cover the expenses of both students and their faculty mentors to attend the Conference. The prestige of the award would also increase.

Wal-Mart representatives did not have any problems with the stated eligibility for the award but expressed a desire to have access to the students during the Conference and Meetings. Wal-Mart was happy to leave the evaluation of the applications in the hands of AFPC. Dates were agreed upon with an application deadline of January 15 and announcement of the winners by April 1 in any given year. Frank was to make the changes in the award description for submission and approval as part of the awards report at the AGM on May 31, 2007. The intent is to have the inaugural 5 recipients of the Wal-Mart Canada/AFPC Future Academic Leader Award attend the 2008 Conference and Meetings to be held jointly with AACP in Chicago.

1:30 PM – Session resumes:

5. Committee Reports:

5.1 *Awards Committee*: Roy Dobson presented the Awards Committee report. Special thanks were made to the reviewers and Roy stressed the importance of having responsive reviewers in order to meet timelines. The report was approved for acceptance on a motion by Roy and seconded by John Hawboldt.

5.2 *Bylaws Committee:* The report of the Bylaws committee was approved for acceptance on a motion by Zubin Austin and seconded by Sharon Mitchell. Discussion occurred on how the Bylaw changes were to be presented during the Annual General Meeting.

5.3 *Communications Committee*: Simon Albon presented a summary of the communications committee report. He said that he would clarify the dates of the Communications Newsletter with Rebecca Law, our editor. Simon also said that he would recognize the good work of Rebecca at the AGM. Web site stats will be forthcoming. The French Mirror site is a problem and is considerably out of date. Possible solutions were discussed. John Hawboldt offered to monitor the web site to look for problems. Once the English site is tuned up, then attention can be brought to what needs to be translated. The research database is to be posted for use very soon. The teaching database should be ready by the end of summer. Maintaining the databases is going to be a problem unless we have a straightforward updating process in place. A great deal of the responsibility for the database will fall on the individual faculty members. The Dean's administrative assistants could help with this task by working with the AFPC council members. Some search function changes to the research database may be required once the information is in place. The Communications report was approved for acceptance on a motion from Simon and seconded by Roy Dobson.

5.4 *Conference Planning Committee 2007*: Dan Thirion reported that registration was fairly good for AFPC, about 70 in total. The GRUM organization of the Université de Montréal is responsible for a large number of student posters. Importantly the budget is on target, although Council was reminded that the Queen Elizabeth Hotel is expensive and costs for the opening dinner will be about $100 per person and could impact the budget. The interactions with CSPS have been good and Dan was confident that the conference would proceed smoothly.

5.5 *Conference Planning Committee 2008*: Zubin Austin spoke to the report that described elements of the planned program. AACP and AFPC programs will be fully integrated. The theme for the AFPC contributions will be linking practice and academia. Lalitha Raman Wilms and Andrea Cameron of the University of Toronto and Nancy Waite of the University of Waterloo will continue to develop the program. Zubin and Rob McGregor of the University of Toronto will focus on fund raising. Frank said that they would need to coordinate with the planned activities of the new fund raising committee.

5.6 *Education Committee*: Anne Marie presented the report on behalf of committee chair Ingrid Price. The report included updates on Program evaluation and PEP Canada. Under **Program Evaluation** Ingrid provided a synopsis of progress accomplished to date and stressed the importance of obtaining the perspective of CCAPP on what program evaluation might look like. In the discussion that followed, John Hawboldt had questions about why there was an intended link to the strategic plan instead of the educational outcomes. Lalitha thought that the working group should be consulted before the final template is completed. An early

5.7 *Nominating Committee*: Zubin Austin presented the report of the nominating committee.
President Elect: Roy Dobson (Saskatchewan) by acclamation.

New Council Members 2007-2010

Alberta:	Nese Yuksel (new member of Council)
British Columbia:	Ingrid Price (second term)
Manitoba:	Payal Patel (new member of Council)

Note: A new council member from Saskatchewan will be appointed to replace Roy when he moves to President Elect.

The report of the Nominating Committee was approved for acceptance on a motion from Zubin Austin and seconded by Roy Dobson.

5.8 *Planning and Finance Committee:* Roy Dobson presented Frank's financial statement and notes for 2006 and the **2006 Audited Financial Statements**. There was some revision from the midyear statement in that miscellaneous income was adjusted to account for $5,119 assigned to accounts receivable for 2005. While there has been some saving on expenses, the lack of a sponsor for the AFPC Pharmacy Student Research Poster Award creates a funding deficit for the year of $4,254. Some discussion occurred on the potential for web banners as a new source of revenue. The Auditors Report on the 2006 financial statements was approved

for acceptance on a motion by Roy and seconded by Sharon Mitchell.

2007 Budget: Roy presented the budget for 2007. A small deficit of $4,000 is projected. Income includes billing for the first year of the program evaluation project. Expenses are increased slightly to account for planning the 2008 meeting in Chicago. The budget for 2007 was approved for acceptance on a motion by Roy and seconded by Lalitha Raman Wilms.

5.9 *Research Committee:* Mike Namaka presented the report and gave special mention to the increased number of abstracts at the Montreal meeting. Related to that, Sharon Mitchell (Alberta) said that we should encourage PEP Canada to be regular poster presenters at our conferences. Mike ends his tenure with AFPC Council as of the AGM on May 31 and he thanked everyone for the support that he had been offered throughout his two terms on Council. Applause and thanks from Council. The report of the Research Committee was approved for acceptance on a motion from Mike and seconded by Roy Dobson.

5.10 *Strategic Planning Committee*: Roy Dobson presented the Strategic Plan, 2007-2012 containing the mission statement and goals and objectives that were produced and agreed upon during the March 28, 2007 teleconference. These changes are now incorporated in the Bylaws to be presented for approval at the AGM on May 31, 2007. Roy said that the working document that was last updated on March 19/07 will be presented for the midyear meeting in 2008. The report of the strategic planning committee was approved on a motion by Roy and seconded by Sharon Mitchell.

6. **Report of Representatives to External Groups:**

6.1 *Pharmacy Human Resource Project*: Zubin Austin supplied the English and French versions of the Moving Forward June 2007 Newsletter called Momentum. The newsletter contains a summary of the national study of the pharmacy technician workforce. Zubin stated that there are a large number of pharmacy technicians who are not formally educated and there is not great support for them to obtain certification. Next steps of the Pharmacy Human Resource Project will be a survey of Faculty HR needs. The report of the pharmacy human resource project was approved for acceptance on a motion from Zubin and seconded by Linda Hensman.

6.2 *Blueprint for Pharmacy Task Force*: AFPC representative Terri Schindel (Alberta) provided a report on the task force. The Blueprint document will be officially launched at the Townhall meeting at CPhA on June 2. Terri was to be a speaker representing pharmacy education at this event. CPhA is inviting feedback on the document from academia and this is to be funneled through AFPC. The report of the Blueprint for Pharmacy Task Force representative was approved for acceptance on a motion by Sharon Mitchell and seconded by John Hawboldt.

Note: Blanket approval for the acceptance of the following reports was made by Council.

6.3	*Pharmacy Practice Research Group:*	Anne Marie Whelan
6.4	*CPhA Academic Board Member*:	Rita Caldwell
6.5	*CCAPP* :	Sylvie Marleau
6.6	*PEBC* :	Louise Mallet
6.7	*CCCEP*:	Yvonne Shevchuk
6.8	*USP*:	Raimar Loebenberg

The USP report is forthcoming and will be included in the Proceedings.

7. Executive Director's Report: Executive director Frank Abbott summarized his report and thanked Council for the great support received during the past year. He was looking forward to another productive year in 2007-2008.

8. In Camera Session

9. **New Business**

9.1 *Future Conferences:* Frank stated that AFPC was having trouble connecting with CPhA in Halifax in 2009 and asked for ideas of alternative organizations with which we could meet in 2009. It was suggested that AFPC look at Vancouver for the 2010 Conference to coincide with the year of the Winter Olympics.

9.2 *NAPRA – Pharmacy Technician Competency Development Workshop*: This workshop will be held in Toronto on June 23-24, 2007. Zubin offered to find someone in the Faculty at the University of Toronto to attend on behalf of AFPC. Frank was to email NAPRA with the information.

9.3 *Health Informatics: Potential topic for AFPC Conference – Implementation in Pharmacy Practice and Implications for Training Students:* This idea came about through support by AFPC (letter from President Anne Marie) for a grant proposal by Dr. Christine Hughes (Alberta) for a CIHR grant on the impact of community pharmacists access to laboratory values on patient care in an elderly population. If the grant is funded and the information obtained shared with AFPC, a workshop on health informatics at our annual conference might be an appropriate outcome.

9.4 *CAPSI items:* Frank stated that he had made arrangements to meet with executive members of CAPSI during the CPhA conference and asked for topics to add to the agenda.

- 9.4.1 PDW 2008, January 18 in Edmonton – invitation to sponsor and attend the Health Fair. CPhA/CAPSI Government Relations workshops proposal to the Deans.
- 9.4.2 Items for discussion with President Elect Omolayo Famuyide
  Several items were proposed with the most important being the timing of PDW in relation to PEP rotations. Professionalism was another important item.

10. Before adjourning, Anne Marie thanked Mike Namaka for his many years of service on Council and as chair of the research committee. Sharon Mitchell was thanked for her relatively short but busy time on Council especially with the Conference being held in Edmonton in 2006. Zubin Austin was recognized as his term ends as past president and all were sorry to see him go after so many years on Council.

Adjournment 4: 25.

AFPC Association of Faculties of Pharmacy of Canada
Association des Facultes de Pharmacie du Canada

Minutes
Annual General Meeting
Fairmont Queen Elizabeth Hotel,
Montréalais 2 Room
Montréal, Québec
Thursday, May 31, 2007
11:30 AM – 1:00 PM

1. *Opening Remarks and Introduction of Council:* President Anne Marie Whelan welcomed everyone to the 64th AFPC Annual General Meeting. Anne Marie introduced the Executive and Council for 2006-2007. President Anne Marie Whelan (Dalhousie), Past President Zubin Austin (Toronto), President Elect Simon Albon (University of British Columbia), Linda Hensman (ADPC Representative), John Hawboldt (Memorial University of Newfoundland), Mary MacCara (Dalhousie University), Dan Thirion (Université de Montréal), Lalitha Raman-Wilms (University of Toronto), Nancy Waite (University of Waterloo), Mike Namaka (University of Manitoba), Roy Dobson (University of Saskatchewan), Sharon Mitchell (University of Alberta), and Frank Abbott, Executive Director. Regrets: Ingrid Price (UBC) and Jean Lefebvre (Laval).
2. *Approval of Agenda:* Copies of the agenda with appended reports and the minutes of the 2006 Annual General Meeting were distributed to those in attendance. Attendance was recorded and the list of attendees will accompany these minutes. Roy Dobson, chair of the strategic plan committee asked that his report under item 8.8 be moved to 8.2 just prior to the Bylaws report. Moved/seconded by Anne Marie Whelan/Roy Dobson that the agenda as amended be approved. Carried.
3. *Acceptance of 2006 Annual General Meeting Minutes, Saturday, June 3, 2006 in Edmonton, Alberta*: Moved/seconded by Zubin Austin/Sharon Mitchell that the minutes be approved. Carried.
4. *Conference Committee Announcements:* There was no pressing comments or announcements from Conference Chair Dan Thirion.

5. *Greetings from the American Association of Colleges of Pharmacy:* Marilyn K Speedie, President of AACP and Dean of the College of Pharmacy, University of Minnesota brought greetings to the AGM on behalf of the Board and membership of AACP. Marilyn wished AFPC a very successful meeting in Montreal and said that there was excitement about the joint meeting of AFPC and AACP planned for next year in Chicago. The theme of the meeting is to be the interface of education and practice. She commented briefly on the fact that there are now one hundred schools or more of Pharmacy in the USA and this has led to serious shortages of experiential education sites and experienced faculty to do the teaching. Recruitment and development by Pharmacy Schools is particularly strong in areas of Pharmacy Practice Research, Drug Development, and the Clinical Scientist. She also stated that AACP was pleased to introduce this year at the 2007 annual meeting in Orlando, the Crystal APPLE Awards that will recognize outstanding preceptors.

6. *Memorial to Deceased Members:* President Anne Marie Whelan called for a moment of silence in memory of Ron Micetich (Alberta), Tony Noujaim (Alberta), John Samuel (Alberta), Donald Zuck (Saskatchewan).

7. *President's Address:* Anne Marie Whelan presented her report that highlighted the key activities during the year – the development of PEP Canada, the Program Evaluation Initiative and Strategic Planning were singled out for comment. Anne Marie thanked AFPC Council for all their hard work and support during the past year and gave special praise to Conference Organizers Dan Thirion and Mo Jamali for planning what appears to be an outstanding meeting in Montréal.

8. *AFPC Committee Reports:*

   8.1 *Awards Committee Report:* Committee chair Roy Dobson presented the awards committee report by congratulating the winners and thanking the reviewers who are so essential to the awards process. Roy also mentioned that there had been a strong competition this year for all of the awards and hoped that this trend would continue. Included with the report was a draft of the new Wal-Mart Canada/AFPC Future Academic Leader Award designed to encourage students to undertake a career in academia. This new award was closely patterned after the Wal-Mart Conference Scholarship Program offered through AACP. It is anticipated that the first five recipients of the Wal-Mart Canada/AFPC Future Academic Leader Award

will attend the joint meeting of AFPC and AACP in Chicago in 2008. Moved by Simon Albon and seconded by Zubin Austin that the awards committee report be approved. Carried.

8.2 *Strategic Plan:* Committee chair Roy Dobson presented the most recent changes to the Strategic Plan. The report summarized the new mission statement and goals and objectives that were approved by Council for inclusion in the Bylaws.

8.3 *Bylaws Committee Report:* Committee chair Zubin Austin presented a fairly lengthy Bylaws committee report. The report had earlier been circulated to members 2 months prior to the AGM as required in the AFPC Bylaws. Because of the length, the report was dealt with in sections and motions for approval made for each section. The recommendation to remove the email voting from the 2004 report and the new mission and goals under 2.1 and 2.2 were approved under a motion by Zubin and seconded by Linda Hensman. The changes recommended for defining constituent faculty and student members under 4.2.1 and 4.2.5, respectively, was approved on a motion by Zubin and seconded by Nancy Waite. Changes in wording to include honorary members as part of the general assembly under 8.1, changes in notice of meetings under 9.6 and notice of meeting for council under 9.8 were approved on a motion from Zubin and seconded by Roy Dobson. Changes in the order of business to Robert's Rules of Order under 9.10, Council voting rights to include the President under 9.11 and a change of wording under 9.14, indemnification, were approved on a motion by Zubin and seconded by Nancy Waite. Changes to the wording under Officers (11.0) regarding the ADPC representative, voting rights and procedures under 12.6 to include the President and orders of business under 14.5 and voting under 14.6 were approved on a motion from Zubin and seconded by Linda Hensman. Lastly recommendations for wording changes under 20.0 Amendments to "Repeal and Amendments" were approved on a motion from Zubin and seconded by Lalitha Raman-Wilms. The approved changes are to be forwarded to Corporations Canada for final approval.

8.4 *Communications Committee Report*: Committee chair Simon Albon presented his report that summarized the AFPC newsletter operation and reminding everyone of the formatting issues that seem to crop up every year. Simon acknowledged the continued great work of our newsletter editor, Rebecca Law (MUN) and she was given a standing ovation. AFPC website statistics were not available at reporting time. The issue of maintaining the French mirror site and the need for a strategy to overcome this problem was reiterated. The

report also described the status of the Research and Teaching databases. Sylvie Marleau (Montréal) was singled out for recognition of her work on the database project. Moved by Simon and seconded by Rebecca that the communications report be approved. Carried.

8.5 *Education Committee Report:* Anne Marie Whelan presented the report on behalf of committee chair Ingrid Price. The report dealt with program evaluation and PEP Canada. Progress on the program evaluation project was summarized with a working group representing all Faculties now selected, a meeting with CCAPP director David Hill, and a general strategy describing how to approach the preparation of a guide to program evaluation and the tools to perform the task. Work continues on the preparation of the template for the guide, collecting information from the Faculties and preparing for workshops on program evaluation this fall. **PEP Canada** (PEPC) activities and development include educational initiatives that entail a presentation by PEPC during the 2007 conference in Montreal and PEPC has accepted an invitation to present next summer at the joint meeting in Chicago. Strategic items are the finalization of terms of reference for the committee and establishing a regular schedule of teleconferences between annual meetings. Networking opportunities included a meeting to review the draft Canadian Hospital Pharmacists Residency accreditation standards and with Karen Wolfe of NAPRA with regard to information on experiential programs across Canada and an update on the entry level standards of practice for pharmacists in Canada. High on the list of new initiatives for PEPC is the facilitation of sharing of resources to enhance experiential programs and establishing the PEPC web pages on the AFPC web site. Inaugural co-chairs Annie Lee of Toronto and Harriet Davies of Dalhousie complete their duties as of the PEP Canada meeting in May of 2007. Moved by Anne Marie Whelan and seconded by Zubin Austin that the report of the education committee be approved. Carried.

8.6 *Nominations Committee Report:* Past President Zubin Austin presented the report of the nominating committee.

President Elect: Roy Dobson (Saskatchewan) by acclamation.

New Council Members 2007-2010

Alberta:	Nese Yuksel (new member of Council)
British Columbia:	Ingrid Price (second term)
Manitoba:	Payal Patel (new member of Council)

Note: A new council member from Saskatchewan will be appointed to replace Roy when he assumes the office of President Elect.

Moved by Zubin and seconded by Pierre Moreau that the report of the nominations committee be approved. Carried.

8.7 *Research Committee Report:* Committee chair Mike Namaka presented the research committee report and provided abstract data for the 2007 Conference program. This was Mike's final year as a council member and he wished council every success in the years ahead. Moved by Lalitha Raman-Wilms and seconded by Roy Dobson that the research committee report be approved. Carried.

8.8 *Educational Outcomes for Entry-level Pharm D degree:* Anne Marie Whelan presented the report of the task force on behalf of committee chair Susan Mansour (Dalhousie). The final edited form of the document was available in the reports handout. Susan stated that next steps should include establishing of a review process for the outcomes and a mechanism to create the levels and ranges. Moved by Anne Marie Whelan and seconded by Sharon Mitchell that the report be approved. Carried.

Frank asked that we obtain approval for posting of the educational outcomes for the entry-level Pharm D degree as an official document on the AFPC web site. Moved by Anne Marie and seconded by Nancy Waite that the document be so posted. Carried.

9. *Reports from Special Committees and Delegates (for information):*

9.1 *Academic Board Member of CPhA:* Rita Caldwell (Dalhousie) submitted an extensive report that summarized the main activities of CPhA during the past year. The Blueprint for Pharmacy, the Human Resources Project and the National e-Pharmacy Task Force were at the head of the list. Rita made special reference to the many past and present AFPC members that were recognized as Centennial Pharmacists by CPhA in this the 100 year anniversary of CPhA. The list of Centennial Pharmacists was included in the report.

9.2 *Appointee to CCAPP:* The report from Sylvie Marleau (Montreal) outlined the progress made on the standards for the entry-level Pharm D program. The standards are to be sent to stakeholders for comment and approval by CCAPP is anticipated in September 2007. CCAPP has been active in developing standards for the accreditation of pharmacy technician programs

in Canada and has participated with the Association of Faculties of Medicine of Canada on a grant proposal to develop standards for inter-professional education.

9.3 *Appointee to CCCEP:* Yvonne Shevchuk (Saskatchewan) provided a summary of activities during 2006-07. Dr. Arthur Whetstone assumed duties as Executive Director of CCCEP as of June 1, 2006. Reviews of accreditation processes were undertaken and the number of accredited programs was increased by 6.6% over the previous year. Priorities for CCCEP include governance, new revenue streams, infrastructure, system operations, and potential new services for pharmacy continuing education.

9.4 *Report of Representative to CPhA Pharmacy Human Resources in Canada Study:* Zubin Austin, representative to this task force now called the "Moving Forward-Pharmacy Human Resources for the Future" gave his report in the form of the English and French versions of the Moving Forward June 2007 Newsletter called Momentum. The newsletter contains a summary of the national study of the pharmacy technician workforce. Zubin stated that one of the recent goals of Moving Forward is to obtain input on the degree of innovative practice and the changing role of the pharmacist. Academic pharmacy is also to undergo a study.

9.5 *Blueprint for Pharmacy Task Force:* Terri Schindel (Alberta) provided a brief update on the task force activities. A Townhall meeting to discuss the draft form of the blueprint document is to occur on June 2 in Ottawa. Terri is scheduled to be one of the speakers. Feedback on the document will be requested of the pharmacy stakeholder organizations and AFPC will be asked to define a process for obtaining that feedback.

9.6 *Pharmacy Practice Research Group:* Anne Marie Whelan (Dalhousie) provided a brief report on the activities of the Canadian Pharmacy Practice Research Group.

9.7 *PEBC Representative:* Lavern Vercaigne (Manitoba) will be the new representative to the Pharmacy Examining Board of Canada to replace Linda Suveges (Saskatchewan) who ends many years of service to the PEBC Board. The report includes the 2007 Annual Board Meeting Summary for PEBC.

9.8 *USP Representative:* Raimar Loebenberg (Alberta) will provide an AFPC report on USP Membership that will be included in the 2007 AFPC Proceedings.

10. *Report of Executive Director:* Frank Abbott presented the report of the executive director, stating that AFPC was on track to fulfill many of the goals and objectives of the strategic plan. This achievement is entirely due to the hard work and devotion of Council Members and the committed faculty who volunteer considerable time and effort to create and carry out the positive vision that AFPC has for academia in Canada. The organization continues to be financially stable but activities are limited because of a lack of discretionary funds. There has been some decline in the membership from industry and there is a need to have the chain stores more responsive to AFPC fund raising. The fundraising committee should be active this fall to restore contacts in the industry and to take the message to new potential sources of revenue. The conferences remain a chief source of annual funding. The 2006 Conference in Edmonton was a bit more expensive than anticipated but provided excellent programming along with a very successful research day held jointly with CPhA. The 2007 Conference is shaping up to be a one of our more successful annual meetings. Dan Thirion and his committee have produced an excellent program, sponsorship is above average and the full joint meeting with CSPS is a first for the organization. Next year AFPC will hold a fully integrated meeting with AACP in Chicago, also somewhat of a first. Toronto and Waterloo Universities are the host faculties in organizing the events and we hope to have a good turnout of Canadians at the event. Under awards, AFPC is delighted to have reached agreement with Wal-Mart Canada to launch the Wal-Mart Canada/AFPC Future Academic Leader Award designed to encourage talented students to seek a career in academia. Frank thanked AACP Executive Vice President Lucinda Maine for letting AFPC use a significant amount of wording from the Wal-Mart award offered through AACP. A sponsor still needs to be found for the AFPC Pharmacy Student Research Poster Award, another task for the fund raising committee. Frank commented on the success of academics in earning CPhA Centennial Pharmacists Awards and thanked council members and other faculty who pitched in to nominate worthy candidates. ADPC activities for the year are contained in the report and Frank acknowledged the two new Deans from the Faculties of Pharmacy in Quebec. Requests for enrollment data from a variety of sources during the year prompted Frank to include recent enrollment data in the report. Baccalaureate enrollments have increased about one third since the year 2000 and will increase further once Waterloo begins their program. The choice of pharmacy as a profession within universities remains strong with 8100 applicants in 2006 with a success rate of acceptance of 15%. Frank gave

special thanks to the executives of AFPC and ADPC for their generous support during the year and to AFPC President Anne Marie Whelan and ADPC President Bob Sindelar for their help to create and fulfill the vision of academic pharmacy in Canada.

11. *Audited 2006 Financial Statements and Budget for 2007:* Committee chair Roy Dobson presented the report and spoke to some of the more significant changes that have affected the finances compared to previous years and for the proposed budget for 2007. Moved by Roy Dobson and seconded by Zubin Austin that the auditors report and the budget for 2007 be approved. Carried.
12. *Appointment of Auditor, Wolrige Mahon LLP, Chartered Accountants, Vancouver:* Moved by Roy Dobson and seconded by Mary MacCara that Wolrige Mahon be approved as the auditor for 2007-08. Carried.
13. *New Business:* There was no new business.
14. *Transfer of Presidency:* Outgoing President Anne Marie Whelan invited Simon Albon (British Columbia) to the chair and pledged her support for the coming year. Simon introduced himself by stating that his previous experience with AFPC had been as the representative from UBC and he had chaired the 2004 Conference in Vancouver prior to stepping down from Council for a year's sabbatical. He said that he was glad to be back on Council again and as incoming chair his first duty was to recognize Anne Marie for her hard work and leadership as President during the past year. In keeping with the progress that has been recently made Simon pledged that the year ahead would be a busy one. He finished by stating that it was an honor to be elected as AFPC President.
15. *Confirmation of Signing Authority:* Moved by Mary MacCara and seconded by Zubin Austin that Simon and Frank be given signing authority for the coming year. Carried.
16. *Adjournment*: The meeting adjourned at 12:55 PM.

Recorder

Frank Abbott.

AFPC Annual General Meeting, Montréal, Québec, May 31, 2007
List of Attendees

Roy Dobson	University of Saskatchewan
Marlene Gukert	University of Alberta
Louise Mallet	Université de Montréal
Guylaine Bertrand	Université de Montréal
Nancy Waite	University of Waterloo
Sharon Mitchell	University of Alberta
Franco Pasutto	University of Alberta
Zubin Austin	University of Toronto
Marilyn Speedie	University of Minnesota
Frank Abbott	AFPC
Rosemin Kassam	University of British Columbia
Simon Albon	University of British Columbia
John Hawboldt	Memorial University of Newfoundland
Gilles Leclerc	Université de Montréal
Lesley Lavack	University of Toronto
Cheryl Cox	University of Alberta
Payal Patel	University of Manitoba
Annie Lee	University of Toronto
Debra Moy	University of Toronto
Ranjith Garlapati	Memorial University of Newfoundland
Lucinda Maine	AACP
Linda Hensman	Memorial University of Newfoundland
Sebastien Fortin	University of Laval
Bev Allen	University of Saskatchewan
Silvia Alessi-Severini	University of Manitoba
Nancy Kleiman	University of Manitoba
Kelly Brink	University of Manitoba
Mike Namaka	University of Manitoba
Mary MacCara	Dalhousie University
Anne Marie Whelan	Dalhousie University
Mona Kwong	University of British Columbia
Angela Kim-Sing	University of British Columbia
Tania Choquette	Université de Montréal
Hanan Eliman	Université de Montréal
Francois Bussieres	Université de Montréal
Pierre Moreau	University of Montreal
William McLean	University of Ottawa
Karen Wolfe	NAPRA
Lalitha Raman-Wilms	University of Toronto
Rebecca Law	Memorial University of Newfoundland
Harriet Davies	University of Dalhousie
Geoffrey Johnson	Wyeth Pharmaceuticals

AFPC Association of Faculties of Pharmacy of Canada
Association des Facultes de Pharmacie du Canada

MINUTES
AFPC NEW COUNCIL MEETING

FAIRMONT QUEEN ELIZABETH HOTEL, MONTREAL
SAINT MAURICE ROOM
SATURDAY, JUNE 2, 2007

9:00 AM:

1. **Opening Remarks**: President Simon Albon welcomed returning council members to the meeting and gave a special welcome to new council member Payal Patel from the University of Manitoba and new council member Nancy Waite from the University of Waterloo.
2. **Roll Call and Approval of the Agenda:** Present and accounted for were Simon Albon (President), Anne Marie Whelan (Past President), Roy Dobson (President Elect), Linda Hensman (ADPC Representative), John Hawboldt (Memorial University of Newfoundland), Mary MacCara (Dalhousie University), Dan Thirion (Université de Montréal), Lalitha Raman-Wilms (University of Toronto), Nancy Waite (University of Waterloo), Payal Patel (University of Manitoba), Sharon Mitchell for Nese Yuksel (University of Alberta).

   Regrets: Ingrid Price (University of British Columbia), Jean Lefebvre (Université Laval). Still to be appointed: Representative from the University of Saskatchewan.

   Agenda: Simon suggested that we add entry-level Pharm D educational outcomes under appointments and charges to committees: Moved by Roy and seconded by Anne Marie to approve the revised agenda. Carried.

3. **Appointments and Charges to Committees**

   3.1 **Awards Committee:** Mary MacCara agreed to assume the chairperson role for the awards committee. This change will relieve President Elect Roy Dobson of some of his many duties. Roy said he would continue to assist with the awards administration if called upon to do so. Roy stressed the need for new reviewers (in particular, bilingual reviewers) and suggested that each council member identify three individuals from their respective Faculty to act as

reviewers. Nancy Waite mentioned Ken Potvin of her School as a potential reviewer. The Rx & D Award needs publicity in each Faculty since we have not had a candidate for the last two years. Up to $ 4,000 is available for an individual to spend time in the pharmaceutical industry in Canada. Council members were asked, in consultation with Frank, to publicize this award within their Faculties over the next year. A new award to be administered by the Awards Committee in the coming year is the Wal-Mart Canada/AFPC Future Academic Leader Conference Scholarship Award.. Roy also suggested that we consider converting the awards process to an electronic format. Frank indicated that he would help Mary by working to convert the GlaxoSmithKline Graduate Student Research Award to electronic format for this upcoming year.

3.2 **Bylaws Committee:** The chair of the bylaws committee is to be assumed by Past President Anne Marie Whelan. The priority this year is to have Corporations Canada approve the Bylaws amendments approved at the Annual General Meeting on May 31, 2007 in Montreal. Anne Marie was also asked to review the Bylaws for further revision and updating.

3.3 **Communications Committee:** Simon Albon offered to continue chairing this committee in 2007-2008. He spoke of the serious need to review and update the web site content. John Hawboldt offered to help with the web site review. Simon indicated that he had consulted Rebecca Law (MUN) regarding the AFPC newsletter, Communication, and she has agreed to continue as editor. The dates for the three annual newsletters in 2007-08 were affirmed to be September/October, January/February and April/May. Rebecca requested that information for the newsletter be submitted by AFPC councilors on the last Wednesday of the first month with publication early in the second month. Simon was to consult with Rebecca regarding the insertion of pictures within the newsletter. The research database is almost complete and will be posted by Simon as soon as possible. When posted, council members will be asked to use the site, test the search function and identify future functionality improvements to the research database search function . Following discussion, council suggested initial changes to the research database be sent directly to Frank. In the future, individual members will be asked to update their information on a yearly basis using an appropriate mechanism determined by the Communications Committee. The next major task will be to refine and ready the teaching database for posting. Simon will take responsibility for this work. The French site is largely out of date. Dan Thirion and John Hawboldt volunteered to identify

individuals who could help with the translations and make the French site sustainable. In terms of communicating AFPC activities to individual Faculties, Frank asked council members if they were comfortable with the current arrangement of sending information meant for the general faculty through each individual council member. Council agreed that that AFPC news items continue to be distributed through the AFPC representatives. It was recommended that reporting by the AFPC council member be a standing item of Faculty Meeting agendas.

3.4 **Conference Planning Committee 2008, 2009:** Lalitha Raman-Wilms reported that Andrea Cameron had been added to the planning committee for the joint AACP/AFPC Conference in 2008 in Chicago. Associate Dean, Rob McGregor and Zubin Austin will work on the Conference 2008 finances while Lalitha, Nancy Waite and Andrea would work on the conference program. Lucinda Maine (AACP) was to send an updated program template upon her return to Washington. Lalitha Raman-Wilms, Nancy Waite, Simon Albon and Frank Abbott have requested a formal meeting to discuss the joint conference at this year's AACP meeting in Orlando. It was suggested that one of the themes described in this year's report for the 2008 meeting might be changed depending on the interest for the topic and the availability of speakers from Canada. An ad hoc conference planning meeting held on Thursday, May 31 at the AFPC Conference in Montreal with Lucinda Maine and Marilyn Speedy generated a great deal of enthusiasm for the joint AFPC/AACP meeting in 2008.
Conference 2009: Frank said that he and Rita Caldwell, the academic board member of CPhA, would be meeting with Jeff Poston in Ottawa at the Centennial CPhA conference to discuss issues around a joint AFPC/CPhA conference in Halifax in 2009. Alternatively, AFPC could investigate another joint conference with CSPS in Halifax in 2009. Interest from CSPS had been expressed based on the highly successful meetings in Montreal. Simon and Frank had spoken earlier of having the 2010 Meetings and Conference in Vancouver (site of the 2010 Winter Olympics) but no firm decision was made.

3.5 **Education Committee:** Ingrid Price (UBC) had requested that she no longer be chair of this committee to allow her to focus on the program evaluation project. A new chairperson with a possible link to the PEP Canada group would be ideal so Nancy Waite (Waterloo) agreed to chair the education committee for 2007-2008. The education committee chair is to be the de facto AFPC representative to the PEP Canada working group. Anne Marie and Dan Thirion

will contribute to the education committee activities. It was felt that it was time to revisit the terms of reference for the education committee.

3.6 **Executive Committee:** The executive committee will be made up of Simon Albon (President), Anne Marie Whelan (Past President), Roy Dobson (President Elect), Linda Hensman (ADPC Representative) and Frank Abbott, Executive Director. Responsibilities in 2007-08 will include a continuing review of the strategic plan, web site upgrades, monitoring the progress of the program evaluation project and providing strong leadership in AFPC outreach to external stakeholder groups. A solution to providing the levels and ranges for the entry-level Pharm D educational outcomes has still to be found. Attention to fundraising is to be high on the agenda for the executive committee.

3.7 **Nominating Committee:** Past president, Anne Marie Whelan is to head up the nominating committee. Council member terms are complete for representatives from Toronto (renewable), Laval, and Memorial (renewable) Universities. Some discussion occurred as to leading candidates for President Elect in 2008.

3.8 **Planning and Finance Committee:** Roy Dobson is to continue as chair of this committee. It was stressed that the fund raising committee needed to ramp up and plans for visits to the industry were discussed for this fall. Councillors were asked to identify names and contact people for the committee fund raising activities. Sharon mentioned that the Katz group is an excellent contact. It was suggested that a poster describing AFPC's mission and activities should be designed for fund raising purposes and displayed at our annual conference and other events involving AFPC.

3.9 **Research Committee:** John Hawboldt (MUN) agreed to take on the chairperson role of the research committee with former chair Mike Namaka having completed his two terms. One charge to the committee was to develop the protocol to maintain the research database. New directions and goals should be developed for the research committee. Payal Patel (Manitoba) agreed to help with maintaining contacts with the pharmacy practice research group.

3.10 **Strategic Planning Committee:** Roy Dobson will continue as chair. The plan is to be updated and brought forward for review at the midyear meeting of council. Nancy Waite stated that each of the committees should have a close look at the strategic plan in terms of developing their committee work plans.

3.11 **Program Evaluation Task Force:** It was agreed that Ingrid Price would continue as chair of the Program Evaluation Committee. Further discussion centered upon the option for buying-out some of Ingrid's teaching time in 2007-08 so that she might focus primarily on the development of the program evaluation guidebook. The use of a consultant was also on the table. Nancy Waite made reference to the AACP documents on assessment and suggested that we did not want to recreate the wheel. Bringing in a consultant to discuss the process of program evaluation and/or provide a learning experience would be a reasonable approach to consider. Lalitha said to ask Ingrid to send out to the working group what has been done to date and then hold a teleconference to discuss the options and work on the project. Perhaps the midyear would be time for scheduling a learning experience. John stated that CCAPP should continue to be part of the task force deliberations. Linda spoke to the possibility of a student in education taking on the project. In the end, Lalitha stated that the working group in program evaluation would welcome some opportunity to provide input as well as to accept work that would help move this project along.

3.12 **Pharmacy Experiential Programs Canada:** Education committee chair Nancy Waite will be the liaison person with PEP Canada. Frank will continue to facilitate their teleconferences including a recent proposal for subcommittees to meet via this mechanism. The group would also be making contributions to the AFPC newsletter. The research potential for some of PEP Canada's proposed activities was discussed at some length.

3.13 **Other: – Fund Raising Committee:** This item was covered under the charges to the Executive and Finances Committee.

3.14 **Entry-level Pharm D Educational Outcomes document:** Producing the levels and ranges for the ELPD Outcomes is still an issue. Sharon Mitchell stated that we should be reviewing the educational outcomes for the Baccalaureate and Postgraduate Pharm D as well as the ELPD. In the short term, Sharon stated that she would agree to undertake the development of the ELPD levels and ranges document once she has approval from her Dean. In the longer term, council would undertake the review of the existing Baccalaureate, Postgraduate Pharm D, and Entry-level Pharm D educational outcomes along with levels and ranges necessary to facilitate curriculum development within the Faculties.

4. **Confirmation of AFPC Representatives, Delegates and Council Member Assignments**

4.1 **ADPC Representative:** Linda Hensman will continue as the representative from the Association of Deans of Pharmacy of Canada.

4.2 **Canadian Council for Accreditation of Pharmacy Programs**: Based on the information from CCAPP Executive Director, David Hill, we will soon need a replacement for Sylvie Marleau who will be completing her service to CCAPP as past president. Dan Thirion and Nancy Waite expressed an interest in serving.

4.3 **CPhA Human Resources Project Planning Committee:** President Simon Albon is to confirm that Zubin Austin (Toronto) will continue to act as the AFPC representative.

4.4 **Canadian Council for Continuing Education in Pharmacy**: President Simon Albon is to confirm that Yvonne Shevchuk (Saskatchewan) will continue to be the representative to CCCEP.

4.5 **Communications Editor:** Simon has confirmed that Rebecca Law (MUN) will continue as the editor of the Newsletter. Rebecca will be offered free registration to the annual conference in recognition of her fine work.

4.6 **Pharmacy Examining Board of Canada:** Lavern Vercaigne (Manitoba) joins Louise Mallet (Montreal) as part of the representative team from AFPC. Lavern will assume his duties as of July 1, 2007.

4.7 **Representative to United States Pharmacopoeia**: Frank is to confirm that Raimar Löbenberg (Alberta) will continue as the AFPC representative to USP.

4.8 **AFPC Representative to CPPRG:** Payal Patel (Manitoba) and Anne Marie Whelan (Dalhousie) both offered to connect with the Canadian Pharmacy Practice Research Group during this coming year.

4.9 **AFPC Representative to Blueprint for Pharmacy Task Force.** Terri Schindel (Alberta) will continue in this capacity.

4.10 **Other Appointments:** Under other appointments, the writing of new position papers on behalf of AFPC was raised. Frank and Sharon have still to provide an information paper on the entry-level Pharm D degree in Canada. Simon spoke to the possibility of producing a position paper on the place for science in the pharmacy program.

5. **Business arising from the May 30, 2007 Council Meeting and May 31, 2007 AGM:** Frank was to follow up with Dean Jean-Pierre Gregoire on the status of the representative from Laval.

6. **New Business:**
   6.1 Confirmation of Date and Time for Mid-year Meeting in 2008: Frank was to coordinate the dates of the meeting in conjunction with conference dates for CACDS and PPC in Toronto.
   6.2 Confirmation of Date and Time for 2008 Conference: The AACP/AFPC joint meeting in Chicago will occur July 18 – 22 of 2008.
   6.3 Confirmation of Date and Time for 2009 Conference: TBD
   6.4 Insurance for Council and Executive: Frank raised this item based on a question from the auditor. After much discussion it was decided that the Executive Committee should take this under consideration for a report at the next meeting.

7. **Strategic Planning Session:** Charges to the various committees was accomplished under the appropriate agenda items. Council agreed to review the strategic plan at the 2008 mid-year meeting.

8. Adjournment: 11:15 AM

Frank Abbott, recorder.

PART 3

REPORTS OF AFPC

STANDING COMMITTEES,

REPRESENTATIVES AND

DELEGATES

2007

Association of Faculties of Pharmacy of Canada (AFPC)
Annual General Meeting
May 31, 2007
Montréal, QC

President's Report

I am pleased at this time to report on some of the important activities achieved by your Association this year. First, I would like to thank the AFPC Council and Executive and all of you who have volunteered your time and energies for the betterment of the organization. A volunteer organization is nothing without dedicated members who contribute so generously of their time and expertise. Without volunteers, this organization would not be able to function – so I thank all of you for your dedication and support. The 2006-2007 academic year has been filled with significant accomplishments and I would like to briefly highlight a few of those for you. You will hear complete details of these and all the work of AFPC via the Committee reports to be presented shortly.

PEP Canada: This network of experiential coordinators from across the country, under the leadership of Harriet Davies (Dalhousie University) and Annie Lee (University of Toronto), has made substantial progress working together with the common goal of enhancing the quality of our practical training programs. We are excited, that, as a group, they will make their first educational contribution to an AFPC meeting Friday afternoon at the Teachers Conference. We look forward to their continued growth and further contributions.

Program Evaluation Task Force: The Task Force, co-chaired by Dr.Ingrid Price and Dr. Sharon Mitchell, with the support of the Deans, has been working on developing a guide for program evaluation for our faculties. The goal of the task force is to provide all faculties with tools to aid with program evaluation to allow us to improve our curricula in a meaningful, efficient and effective manner.

Strategic Planning: Dr. Roy Dobson, Chair of our Strategic Planning Committee, with the aid of Dr.Ingrid Price, has been instrumental in leading the Council through the final stages of planning. The working document has now been finalized and we have a new mission statement, clear objectives and

flexible action plans for achieving our goals. This strategic plan will be a valuable document to guide Council and Executive in the upcoming years.

Acknowledgments: Thank you once again to the AFPC Council and Executive for your hard work and support this year. A special thank you to Dr. Frank Abbott who continues to serve this organization with dedication, unfaltering commitment and enthusiasm! I would also like to thank the conference organizing committee, who under the leadership of Dr. Dan Thirion and Dr. Fakhreddin Jamali have put together a terrific meeting. We look forward to the opportunity to meet with AACP next year in Chicago and share with our colleagues from the United States.

In conclusion, it has been a privilege to serve as your President this past year. This opportunity to work with so many wonderful, talented individuals has been an incredible experience! I wish all the best to Simon Albon who will be your President for the 2007-2008 year.

Respectfully submitted,
Anne Marie Whelan, PharmD
May 31, 2007

AFPC AWARD RECIPIENTS 2007

AFPC/AstraZeneca New Investigator Research Award

The AFPC Award Committee reviewed 4 applications to the 2007 AstraZeneca Award competition. The recipient is:

Zubin Austin, Leslie Dan Faculty of Pharmacy, University of Toronto.

AFPC/Bristol-Myers Squibb National Award for Excellence in Education

The AFPC Award Committee reviewed 2 applications to the 2007 BMS Award competition. The recipient is:

Louise Mallet, Faculté de pharmacie, Université de Montréal

AFPC/Pfizer Research Career Award

The AFPC Award Committee reviewed 4 applications to the 2007 Pfizer Award competition. The recipient is:

Tom Einarson, Leslie Dan Faculty of Pharmacy, University of Toronto

AFPC/GlaxoSmithKline Graduate Student Research Award

The AFPC Award Committee reviewed 11 applications to the 2007 AFPC/GSK Award competition. The recipient is:

Patrick Ronaldson, Leslie Dan Faculty of Pharmacy, University of Toronto.

P. Ronaldson and R. Bendayan, 2006. "HIV-1 Viral Envelope Glycoprotein Gp120 Triggers an Inflammatory Response in Cultured Rat Astrocytes and Regulates the Functional Expression of P-glycoprotein." Molecular Pharmacology; 70 (3): 1087-98.

Merck Frosst Postgraduate Pharmacy Fellowship

The AFPC Award Committee reviewed 4 applications to the 2007 Merck Frosst competition. The recipient is:

Vivian Leung, Faculty of Pharmaceutical Sciences, University of British Columbia

AFPC- Pharmacy Student Research Poster Awards / Prix de la AFPC pour la Recherche en Pharmacie

Dalhousie University: 2007

Stephanie Lucas (Stephanie.Lucas@dal.ca **)**
Supervisor: David Jakeman
"Synthesis of 2-deoxy-2-fluorosugars for use as glycosyltransferase enzyme probes".

Memorial University of Newfoundland: 2007

Mr. Ranjith Garlapati (Ranjith@mun.ca)
Supervisor: Mohsen Daneshtalab
"Design, synthesis, and biological evaluation of thieno[2,3-*b*]quinolones as topoisomerase II inhibitors with potential antineoplastic activity".

Laval University: 2007

Sébastien Fortin (sebastien.fortin.1@ulaval.ca)
Supervisor: René C.-Gaudreault
"Design, synthesis, biological evaluation and determination of the mechanism of action of new anticancer agents: the arylchloroethylurea-combretastatin hybrids".

Université de Montréal: 2007

Mukandila Mulumba (mukandila.mulumba@umontreal.ca)
Supervisor: Sylvie Marleau
"The QFRP peptides modulate adipogenic genes in differentiated 3T3-L1 cells"

University of Toronto: 2007

Nedzad Pojskic - nedzad.pojskic@utoronto.ca
Supervisor: L. MacKeigan
"Physician readiness to collaborate with community pharmacists on drug therapy management"

University of Manitoba: 2007

Robert Hardy (**"'**Rob Hardy**'"** **robhardy007@yahoo.ca**)
Supervisor: Xiaochen Gu
"Effect of polyethylene oxide (PEO) content and drug solubility on polymer swelling and drug dissolution"

University of Saskatchewan: 2007

Erin Boyd (erin.boyd@usask.ca)
Supervisors: Ed Krol and Jane Alcorn
"Induction and inhibition of cytochrome P450 and phase II enzymes by the flaxseed plant lignans secoisolariciresinol and secoisolariciresinol diglucoside"

University of Alberta: 2007

Welson Wen-Shang Wang (wwang@pharmacy.ualberta.ca)
Supervisor: Mavanur R. Suresh
"Dendritic Cell Targeted Nanovaccine Formulations"

University of British Columbia: 2007

Pavan Dillon (pavan_dhillon@hotmail.com)
Supervisor: John McNeill
"The effect of metoprolol on energy metabolism in the diabetic heart."

New Award for approval at the 2007 AGM Meeting in Montreal

Wal-Mart Canada/AFPC Future Academic Leader Award[1]

Full name of the award: Wal-Mart Canada/AFPC Future Academic Leader Conference Scholarship Award.

Description of the award:
The Wal-Mart Canada/AFPC Future Academic Leader Award provides support for 5 students to attend the annual AFPC Conference and Meetings. Wal-Mart Canada in association with AFPC will sponsor the award providing financial support for registration and other meeting expenses for the selected students to attend and participate in the annual conference.

Purpose of the award:
Wal-Mart Canada and AFPC recognize the need of Faculties to recruit new outstanding faculty as enrollments increase and to meet the growing need for expertise in the teaching of primary health care to pharmacy students at all levels. The goal of the academic leader program is to strengthen the skills and commitment of each of the award winners to a career in academic pharmacy through their participation at the AFPC Annual Meetings and Conference.

Eligibility:
Professional students (BSc Pharm, Pharm D), graduate students (MSc, PhD), and hospital or community pharmacy residents, along with their faculty mentors, are eligible to apply for the conference scholarship awards.

Each student applicant must have a faculty mentor or designate who will support the application and who will commit to attend the conference should that student be selected.

Applicants must be enrolled in a professional pharmacy degree program or graduate program at an AFPC constituent Faculty, have a strong interest in enhancing their preparation for a career in academic pharmacy, have a minimum of 75% average in coursework, and be a Canadian citizen or landed immigrant. Hospital and Community Pharmacy Residents should be enrolled in programs affiliated with a Faculty of Pharmacy.

The awardees and their mentors must commit to attending the daily sessions and all associated functions related to the Conference. Recognition of the awardees and their faculty mentors will be made at the Awards Banquet with representation from Wal-Mart Canada.

To complete eligibility, awardees must commit in writing to provide a report on their conference experiences with appropriate recognition being given to Wal-Mart Canada and AFPC.

No individual shall receive the award more than once.

[1] Wording of this award is very similar to the 2006 AACP Wal-Mart Annual Conference Scholarship Program – by permission.

Application Procedures:
Complete applications can be mailed (address on the appended application form), faxed (604-222-2574) or emailed (fabbott@telus.net) to the Executive Director of AFPC: The faculty mentor is to submit the application and to verify that the transcript of marks of the student is a true copy.

Application deadline is **January 15** in any given year.

The application must consist of:

1. Details of the student and contact information.
2. Details of the faculty mentor and contact information.
3. Transcript of marks.
4. Student's statement of career goals
5. Faculty mentor support of the student

Evaluation of Applications:
Each Faculty of Pharmacy in Canada will identify two worthy candidates for the Wal-Mart Canada/AFPC Academic Leader Award and submit the applications to the AFPC Executive Director by the application deadline. A team of AFPC leaders will evaluate the applications. The evaluation team will look for a thoughtful, organized, articulate, and complete application, with evidence that both parties have a strong interest in enhancing the preparation of the student for a career in academic pharmacy.

1. *Credentials of the Student (60% of the mark)*: The transcript and student's statement of career goals are used for this criterion. Evaluation involves an assessment of how closely the personal and academic credentials of the student match with the goal of the Academic Leader Award.

2. *Faculty Mentor's Support of Student (40% of the mark)*: The faculty mentor's description of the student's qualifications and capacity to succeed in the Academic Leader program is used for this criterion. The degree to which the faculty mentor believes the student will benefit from participating in the program and the potential for an academic career is evaluated.

Scholarship Notification:
Award recipients will be announced by **April 1.**
Funds will be forwarded to the designated recipients no later than **May 1.**
AFPC will announce the award recipients in the AFPC Newsletter, on the AFPC web site, the Conference Program and the Annual Proceedings.

Application Form: Wal-Mart Canada/AFPC Future Academic Leader Award

Student's name (underline surname): _____

Gender: (F/M) _____

Residency: Canadian Citizen or Landed Immigrant _____

University: _____

Degree program: _____

Anticipated graduation date (M/Y) _____

Current mailing address: (Street/Apt. No) _____

City: _____ Province _____ Postal Code: _____

Phone including area code: _____Email (Faculty and Other) _____

_____

Permanent Address if other than above: _____

_____Phone: _____

Faculty Mentor Name: _____

Title and degree: _____

Faculty Address: _____

_____

Phone including area code:_____ Email : _____

I certify that this application is complete (transcript enclosed) and if successful, an evaluation report of the conference experience will be prepared and submitted once the conference is over.

Student Signature: _____ Date: _____

Faculty Mentor Signature: _____ Date: _____

Signature of the Dean: _____ Date: _____

Application Form: Wal-Mart Canada/AFPC Future Academic Leader Award

Student's Statement of Career Goals:

Name: _____

The Wal-Mart Canada/AFPC Future Academic Leader Award provides the recipients with financial assistance to attend the annual AFPC Conference and Meetings. Describe why you want to participate in this conference and meetings, indicate your career goals and provide other academic and personal attributes you would like the evaluators to consider. *Not to exceed two double-spaced pages.*

Please sign and date your document.

==========

Application Form: Wal-Mart Canada/AFPC Future Academic Leader Award

Faculty Mentor's Support of the Student:

Name: _____

Describe your reasons for wanting to sponsor the student for this Award and describe the student's qualifications and capacity to succeed in a career in academic pharmacy. Not to exceed two double-spaced pages.

Please sign and date your document.

Mail, Fax or Email your application by January 15 to:

Frank S. Abbott, PhD
Executive Director of AFPC/ADPC
3919 West 13th Ave
Vancouver, BC
V6R 2T1
Ph: 604-222-0221
FAX: 604-222-2574
fabbott@telus.net

Wal-Mart Canada/AFPC Future Academic Leader Award

Student's Evaluation of the Conference and Academic Leader Award Experience

Name of Award Recipient: _____

Faculty represented: _____

Name of Faculty Mentor: _____

Date evaluation submitted: _____

Student's Signature: _____

Faculty Mentor's Signature: _____

Student award recipients, please attach your evaluation, should be two pages in length, and include the following:

1. Personal impressions of the AFPC Teachers Seminar and poster sessions.
2. Personal impressions of the AFPC Annual General Meeting.
3. Your reasons for wanting to pursue a career in academic pharmacy.
4. The impact of the experience on your personal, academic, and career goals.
5. Other comments and impressions of the Academic Leadership Award including suggestions for improvement.

Please mail final reports by the end of August 2008 to:

Frank S. Abbott, PhD
Executive Director of AFPC/ADPC
3919 West 13th Ave
Vancouver, BC
V6R 2T1
Ph: 604-222-0221
FAX: 604-222-2574
fabbott@telus.net

2007 AFPC AWARDS COMMITTEE

Chair:

Roy Dobson

Reviewers:

Jane Alcorn, University of Saskatchewan
Ed Krol, University of Sasaktchewan
Rebecca M. Law, Memorial University of Newfoundland
Jean Lefebvre, Université Laval
Mary McCara, Dalhousie University
Sylvie Marleau, Université de Montréal
Colleen Metge, University of Manitoba
Payal Patel, **University of Manitoba**
Fred Remillard, University of Saskatchewan
Yvonne Shevchuk, University of Saskatchewan
Jacques Turgeon, Université de Montréal
Pollen K.F. Yeung, Dalhousie University

Respectfully submitted,

Roy Dobson, Awards Chair, AFPC
May 30, 2007

AFPC By-Laws Amendments

Draft for approval at the next AGM, May 31 in Montreal
Committee: Zubin Austin (Chair)
Sylvie Marleau, Susan Mansour and Frank Abbott

In 2004 several changes to the bylaws were recommended and approved. When submitted to Corporations Canada, there was a major issue with the following:

Update the bylaws so that consideration of issues and voting can take place by e-mail between the mid-year and annual general meetings.
Currently the by-laws do not include documentation allowing consideration of issues and voting to take place by e-mail between meetings.

***Recommendation*:** Under 9.11, add a second paragraph labeled as follows:

b.) On occasion, voting on issues between council meetings may be required. In these cases, counselors may be informed of, and vote on, an issue(s) via e-mail. All other voting rights and procedures will apply.

***Recommendation*:** Under by-law 10.4 a. wording of the bylaw should be revised to read "……prepare and circulate to the voting members an electronic (e-mail) or written ballot containing……". Under 10.4 c. wording of the bylaw should be revised to read " ….on the basis of majority votes cast by e-mail or written ballot , as verified by……"

***Recommendation*:** Under 12.6, add another paragraph labeled as follows:

c.) On occasion, voting on issues between Executive Council meetings may be required. In these cases, members of the Executive Council may be informed of, and vote on, an issue(s) via e-mail. All other voting rights and procedures will apply.

The changes recommended to include voting by e-mail require a great deal of security considerations as obtained from feedback from Corporations Canada.

Council has considered the reply from Corporations Canada and recommends that we do not pursue the change to E-mail voting as a formal way of conducting Council or Executive business. Nor will we pursue the voting between meetings since Corporations Canada indicates that such voting may not replace director's meetings.

New items for By-Law changes:

2.0 Mission and goals

2.1 Mission
Current version:
To develop and implement policies and programs which will provide a forum for exchange of ideas, ensure a liaison with other organizations and foster and promote excellence in pharmaceutical education and research in Canada.

Recommendation
Replace current version with statement approved in the 2007 AFPC Strategic Plan.

New:
To advance the interests of academic pharmacy by supporting, promoting and recognizing innovation, excellence and leadership in pharmacy education, research and scholarly activity.

Rationale
The By-Laws currently include the old mission statement.

2.2 Goals

Current version:
(a) To foster and promote progress in pharmaceutical education and research.

(b) To stimulate and provide opportunity for exchange of ideas and discussion among pharmaceutical educators with a view to improving curricula and teaching methods.

(c) To encourage high and uniform standards of education in pharmacy throughout Canada by assuming an advisory role for the development of policies and standards used for the accreditation of programs of pharmaceutical education.

(d) To establish and maintain liaison with pharmacy and appropriate educational associations, other health professionals, government agencies and members of the pharmaceutical industry that may further the development, support, and improvement of pharmaceutical education, practice and research.

(e) To represent, support and protect the interests of members and to give recognition for achievement.

Recommendation
Replace current version with goals and objectives statement approved in the 2007 AFPC Strategic Plan.

New:

2.2 Goals and Objectives:

(a) Foster advancement of academic pharmacy in Canada
- To promote excellence in pharmacy education, research and scholarly activity.
- To support members, Deans and Faculties in advancing knowledge, skills and expertise critical to pharmacy education, research and scholarly activity.
- To encourage high standards by assuming an advisory role for the development of policies, guidelines and standards used for the accreditation of pharmaceutical education programs.

(b) Stimulate and provide opportunity for the development and exchange of ideas among pharmacy educators with a view to improving curricula, teaching and learning.

- To showcase and promote innovations in pharmacy teaching and research.
- To provide members and external organizations with the ability to easily identify and access AFPC members with expertise and skills in teaching and research.

(c) Establish and maintain liaison with pharmacy and relevant educational associations, other health professions, governmental agencies, and members of the pharmaceutical industry to further the development, support, and improvement of pharmacy education, practice, and research.

- To be recognized by external organizations as the leading representative on academic pharmacy affairs in Canada.
- To be seen as "the voice" of academic pharmacy in Canada.

(d) Support and advance the interests of AFPC members.

- To secure independence through consistent, long term funding for the ongoing operations of AFPC and for special projects.
- To be valued by faculty members so as to increase their involvement in AFPC.
- To be valued by the Deans so that they look to AFPC for assistance on relevant projects and support faculty member involvement in AFPC.

Rationale
The By-Laws currently include the old goals and do not include objectives.

4.2.1 Constituent Faculty

Recommendation
Define requirements for membership for Constituent Faculties and define a constituent Faculty.

New:
Membership in the Association requires that a Constituent Faculty be representative of the mission and goals of the Association. A Constituent Faculty is a Faculty, College or School of Pharmacy that delivers a professional program accredited by the Canadian Council for the Accreditation of Pharmacy Programs (CCAPP).

Rationale
This By-Law states that Constituent Faculties are "any Canadian faculty of pharmacy that meets the requirements for membership." However, the requirements for membership are not defined nor is Constituent Faculty defined.

4.2.5 Student Member

Recommendation
The current By-Law is "A student member shall be any person enrolled in a program of undergraduate or graduate studies at a constituent faculty."

Change to “A student member shall be any person enrolled in a program of undergraduate or graduate studies at a constituent faculty who is granted membership by that constituent faculty.”

Rationale
Current wording appears to indicate that all students are members. 4.1 indicates that student memberships are granted by Constituent faculties as described in section 4.2.5. Addition of the phrase above would clarify that students are not automatically members and makes this more consistent with the definition of individual members.

8.1 Administrative Structure

Recommendation
The current wording is “…shall consist of a General Assembly of individual members…”. Change to “…shall consist of a General Assembly of individual and honorary life members…”

Rationale
Honorary life members have annual meeting voting and other privileges and therefore are part of the General Assembly.

9.6 Meetings

Recommendation
The last sentence from 9.7 which refers to special meetings should be modified and included here as “Notice of a meeting shall contain sufficient information on special business to permit the member to form a reasoned judgment on the decision to be taken.”

Rationale
This will comply with section D5 of the Not-for-profit Policy Summary from Corporations Canada which indicates that this information must be contained in a notice of meeting.

9.8 [Council] Notice of Meeting

Recommendation
Change from “A written notice of any meeting of the Council shall be sent to each member at least 21 days (exclusive of the day on which notice is sent, but inclusive of the day for which notice is given) before the meeting is to take place. Notice of such meeting or any irregularity in the calling or conduct thereof, can only be waived by the unanimous consent of all members of the Council.”

Change to “a. A written notice of any meeting of the Council shall be given to each member of the Council either: i. By e-mail, facsimile transmission or courier delivery at least 7 days before the meeting is to take place, or ii. By mail. Such notice shall be sent at least 21 days prior to the meeting (exclusive of the day on which it was sent, but inclusive of the day for which notice is given).”

Rationale
This changes the notice time for Council meetings to match that of executive meetings and accounts for the more rapid methods of communication especially e-mail.

9.10 Order of Business

Recommendation
Change Bourinot's Rules of Order to Robert's Rules of Order.

Rationale
Robert's Rules of Order is more commonly used today.

9.11(a) [Council] Voting Rights and Procedure

Recommendation

Remove the clause that indicates that the President cannot vote.

Rationale
Section D4 of the Not-for-profit Policy Summary from Corporations Canada indicates that all directors have a right to vote. Disallowing the President to vote appears to contravene this statement.

9.14 Indemnification

Recommendation
In the text the word "indemnification" should be replaced with "indemnified".

Rationale
This appears to have been a typographical or grammatical error (the statement in of the Not-for-profit Policy Summary from Corporations Canada is consistent with this change).

11. Officers

Recommendation
Create an 11.1 (a) The ADPC appointee will be made by ADPC.

Rationale
Section E1 of the Not-for-profit Policy Summary from Corporations Canada indicates that the manner of appointment or election of officers must be included in the bylaws. The election of president-elect is detailed which seems to satisfy the three presidential positions. However, the By-Laws indicate only that the ADPC appointee is one of the officers without specifying the manner of appointment.

12.6 (b) Voting Rights and Procedures

Recommendation
Remove the clause that implies that the President cannot vote except in the case of an equality of votes.

Rationale

Section D4 of the Not-for-profit Policy Summary from Corporations Canada indicates that all directors have a right to vote. Disallowing the President to vote appears to contravene this statement.

14.5 Order of Business

Recommendation
Change Bourinot's Rules of Order to Robert's Rules of Order.

Rationale
Robert's Rules of Order is more commonly used today.

14.6 Voting

Recommendation
Remove the clause that implies that the President cannot vote except in the case of an equality of votes.

Rationale
Section D4 of the Not-for-profit Policy Summary from Corporations Canada indicates that all directors have a right to vote. Disallowing the President to vote appears to contravene this statement.

20.0 Amendments

Recommendation
Change section title to "Repeal and amendments". Add to 20.0 (a) "The By-laws of the Association may be repealed or amended by a majority of votes cast at a meeting of the Council and sanctioned by an affirmative vote of at least two-thirds of the voting members of the Association present at an annual general meeting duly called for the purpose of considering the repeal or amendment of the By-laws. The repeal or amendment of the By-laws shall not be enforced or acted upon until the approval of the Minister Industry Canada has been obtained."

Rationale
Section I of the Not-for-profit Policy Summary from Corporations Canada specifies that By-laws must include repeal as well as amendments.

Action: Council will forward recommended changes to the By-Laws for your consideration and approval at the 2007 meeting in Montreal.

Respectively submitted,

May 30, 2007

Zubin Austin
Past President

Association of Faculties of Pharmacy of Canada
Annual General Meeting
May 31, 2007
The Queen Elizabeth Hotel
Montreal, Quebec

Communications Committee Report

Membership: Simon Albon, Chair as of September 2006 (UBC)
Rebecca Law (Memorial University of Newfoundland)
Jean Lefebvre (Laval University)
Sharon Mitchell (University of Alberta)

Committee Activities:

1) AFPC Newsletter:

The newsletter continues to be published three times per year (January, June, September). AFPC councilors in each Faculty provide newsletter submissions to Rebecca Law, the newsletter editor, for publication. On a rotating basis (approximately once every three years) each Faculty is asked to provide a "Spotlight" for the newsletter highlighting specific activities within the Faculty. Scheduled spotlights for 2007 include Alberta, Manitoba and Saskatchewan. The newsletter format (including content headers and **bolding**) is provided for reference below to help streamline the editing process for Rebecca:

1) Academic Appointments, Promotions, Resignations, Retirements

2) General Faculty New: any issues of a broad faculty-wide nature

3) Individual Faculty News:

- presentations, publications, honours and awards, other noteworthy contributions etc.
- Grants (or as New Patents, New Grants, Grant Renewals etc.)
- Student News (eg. Degrees Granted, major student awards or achievements, etc.)

4) Major Visitors

5) Other things: (eg. Opportunities, Education Corner, In Memoriam, etc.)

6) AFPC Communication Newsletter Formatting Issues

For consistency of submissions in the newsletter, please use the following guidelines in your submissions:

- Please **do not** indent paragraphs, or use hanging indents.
- Please **do not** format with additional spacing before or after each paragraph (as is done here with this paragraph). To separate paragraphs, please <return> twice to give an extra blank line between paragraphs.
- Please **do not** double-space your entire submission. Use single spacing except between paragraphs.
- Please **DO** use Times New Roman, Normal, 11 font. (This is the usual font type in the newsletter).
- Please submit the document in Microsoft Word, if possible. (Rebecca can convert from Word Perfect if necessary).

NOTE: The Communications Committee would like to thank Rebecca for the outstanding job she continues to do as editor of the AFPC Newsletter.

2) AFPC Website

a) Website Stats: website stats will be monitored by Google Analytics. A new version of Google Analytics has recently required an updating of all pages to be monitored on the www.afpc.info site and as a result, no website stats are available at this time.

b) French Mirror Site: the French version of the site has not been updated in some time. A strategy for the on-going maintenance of the site is needed.

c) AFPC Teaching and Research Expertise Databases: development of the databases continues. The research expertise database is complete and will be made available to the AFPC membership by the end of June 2007. A template for the teaching database is under development and will be ready for data entry by September 2007. **The Communications Committee would like to thank Mike Namaka (and the Research Committee), Sylvie Marleau and Frank Abbott for the tremendous work that has been put into this initiative.**

Respectfully submitted,

Simon P. Albon

AFPC Annual General Meeting
Education Committee Report
May 31, 2007: Montreal, Que.

Committee Members: Ingrid Price, Chair (University of British Columbia), Sharon Mitchell (University of Alberta), Lalitha Raman-Wilms (University of Toronto), Daniel Thirion (University of Montreal), Anne-Marie Whelan (Dalhousie)

1. Program Evaluation

Charge: To develop "An AFPC Guide for Program Evaluation for Canadian Faculties of Pharmacy"
Details: This guide should provide a model with tools (emphasis on tools) that any faculty member can use (even if not expert in program evaluation). It is requested that schools are provided with tools/information as it becomes available (e.g., admission evaluation tools).

Activities to date:

1. *Identified chair and working group*

   AFPC: Anne Marie Whelan <Anne.Marie.Whelan@dal.ca>
   ADPC: Linda Hensman <lhensman@mun.ca>
   CCAPP: David Hill <David.Hill@UCHSC.edu>
   MUN: John Hawboldt <hawboldt@mun.ca>
   Dalhousie: Mary MacCara <Mary.MacCara@dal.ca>
   Laval: Julie Racicot <julie.racicot@pha.ulaval.ca>
   Montreal: Claude Mailhot <claude.mailhot@umontreal.ca>
   Toronto: Lalitha Raman-Wilms <l.raman.wilms.a@utoronto.ca>
   Waterloo: Jake Thiessen <director@pharmacy.uwaterloo.ca>
   Manitoba: Silvia Alessi-Severini <alessise@ms.umanitoba.ca> and Colleen Metge <metge@ms.umanitoba.ca>
   Saskatchewan: Roy Dobson
   Alberta: Sharon Mitchell <sharon.mitchell@ualberta.ca> *(Co-chair)*
   UBC: Ingrid Price <iprice@interchange.ubc.ca> *(Chair)* and David Fielding <dwfield@interchange.ubc.ca>

2. *Met with David Hill (CCAPP)*

   CCAPP has made it clear that the strategic plan is an important document for all Faculties. Their accreditation review puts a lot of emphasis on the strategic plan and how it is being evaluated.

<u>What CCAPP requires/is looking for in terms of Program Evaluation (D. Hill's comments):</u>

- Commitment to continuous quality improvement (CQI), not just because CCAPP wants it, but because it is seen as a good management tool by the Faculty
- Truly planned & structured as an entity within the faculty
- Flow of activities: a) ongoing, day to day activities (part of principle program), b) things identified in strategic plan (goals & objectives)
  - Should have ways to monitor accomplishments in both of these

- Set up these streams with measures of accomplishment in mind (should know what target is before put into place)
- This should be ongoing, can draw conclusions to identify whether plans/targets are being met and can modify activities in response to this evaluation
- Rather than approach from standard – approach from a CQI process
- AFPC Program Evaluation Guide could provide a minimal and maximal CQI process
- Evaluation is continuous, ongoing process that must benefit the Faculty – this must be valued by the Faculty.

Strategic Plan
- Set goals around different areas of Program (related to core areas noted below)
  - Identify how to evaluate each of these
  - How CCAPP evaluates depends on the emphasis placed on different goals & outcomes
- The better the strategic plan, the better prepared the Faculty is to develop an effective evaluation process
- In order to ensure that the guide is as useful as possible to Canadian Pharmacy Schools, it will include an additional component on strategic plan development and tools to link this to program evaluation

Four levels of Evaluation in the CCAPP Standards
1) Evaluation of Performance
2) Academic Program Evaluation
3) Assessment of Student Learning
4) Individual Faculty Evaluation (Faculty Development)

Within these levels, identify 2-3 things that are important to your Faculty and evaluate these

3. Began developing template for guide
- During the discussion with David Hill it was agreed that the best way to proceed would be to use the UBC strategic plan as a model to develop this link between strategic plans and program evaluation
- Ingrid Price and David Fielding have begun linking UBC Strategic Plan with Program Evaluation based on RAND Corporation Logic Model
- Ingrid Price is also working on identifying other means of developing strategic plans and linking these to program evaluation in order to ensure that the guide will be useful to all pharmacy schools

4. Next Steps
- David Fielding & Ingrid Price continue to work on linking the UBC strategic plan with program evaluation
- Ingrid Price will meet with other individuals at UBC who have expertise in program evaluation as well as continue to research this area
- Finish developing template for guide
- Gain input from working group on specific aspects of guide (current program evaluation practices, tools for strategic plan development, feedback on model/process outlined in guide template)
- Further develop details of guide in keeping with feedback from working group
- Develop and lead a workshop with the working group to support individuals to use guide for Program Evaluation in their schools. This workshop will ensure that individual differences in culture, resources and objectives for program evaluation are respected so that each school can create an evaluation method that is beneficial to their particular school.
- Project completed by June 2008.

Respectfully submitted by:

Ingrid Price (Chair of AFPC Education Committee).

2. PEP Canada Update

Since June 2006 the PEP Canada committee has met via teleconference to continue their work and collaborations. Teleconferences were held on September 14 and November 30, 2006, and February 8, 2007. PEP Canada will hold their annual meeting on May 30 and May 31, 2007. Please see the attached agenda for the committee's schedule and meeting plans.

Educational Initiatives

PEP Canada will present on Friday June 1, 2007 at the AFPC Teachers Conference. Annie Lee from the University of Toronto and Cheryl Cox from the University of Alberta will present: *Supporting Pharmacists to be Effective Practice Based Teachers: Developing a National Pharmacy Preceptor Development Strategy.* PEP Canada has accepted an invitation to present next summer during the joint AACP/AFPC Chicago meeting. The group recognizes this as an excellent opportunity to network with the large base of American pharmacy practice experience programs. PEP Canada has started discussions with the program planners for this event and the topic is part of the agenda for the PEP Canada annual meeting May 30th.

Strategic Plan Initiatives

I. Establishing PEP Canada Committee

Developing terms of reference

The committee plans to finalize the terms of reference during the May 2007 annual meeting.

Establish regular meeting schedule for PEP Canada committee

A regular schedule of teleconference meetings was established this year and will continue to be followed. A teleconference link was generously supplied by AFPC.

II. Establish Local, Regional and National Networking Opportunities

Annie Lee represented PEP Canada at the January 27, 2007 CHPRB (Residency) stakeholder consultation meeting to review the draft Residency Accreditation Standards for 2010. PEP Canada is interested in promoting teaching and precepting of students as a standard within the CHPRB Residency Programs in Canada. PEP Canada will review the latest draft of the 2010 CHPRB standards during the annual meeting.

Karen Wolfe from NAPRA has contacted PEP Canada for information on experiential programs across Canada. In addition to the information provided by Co-Chair Annie Lee, a copy of the PEP Canada

Strategic Plan has been forwarded to Karen Wolfe. Karen Wolfe will be presenting an update on the entry level standards of practice for Canadian Pharmacists to PEP Canada.

III. Develop Best Practices for SPEP Curriculum

Facilitate Sharing of Resources to Enhance PEP programs

Information regarding preceptor training programs in Canada is being collated by a sub-committee of PEP Canada for discussion and sharing of resources at the next teleconference meeting. Recent sharing of information amongst members has covered such topics as: immunization policies, matching processes, criminal record check policies, rotation manuals and provincial pharmacy student licensing regulations. Regular e-mail and communication occurs between members on issues related to PEP in Canada.

Development of a National Resource Centre to Disseminate and Share resources

Co-Chair Annie Lee has been communicating with Dr. Frank Abbott on behalf of the committee to develop a website that would serve as a national resource for pharmacy practice experience programs in Canada. The PEP Canada web site has been linked with the AFPC website. The web page is presenting under construction by the web developer at U of T and the committee is continuing to compile various documents and resources to post on the website. The website should be ready by the summer 2007.

New Co-Chairs for 2007/2008

PEP Canada will nominate new committee co-chairs at the May meeting.

In closing, PEP Canada would like to thank ADPC, AFPC, and CACDS for their generous financial support provided to this group.

Respectfully Submitted by PEP Canada Co-Chairs 2006/2007:

Harriet Davies, Coordinator of Clinical Education, College of Pharmacy, Dalhousie University
&
Annie Lee, Lecturer, Faculty of Pharmacy, University of Toronto

Association of Faculties of Pharmacy of Canada
Annual Meeting
May 31, 2007 – Montreal QC

Nominating Committee Report

1. Nese Yuskel has been appointed the Council representative for the University of Alberta, effective May 2007, for a three year term.
2. Payal Patel has been appointed the Council representative for the University of Manitoba, effective May 2007, for a three year term.
3. Ingrid Price has been re-appointed the Council representative for the University of British Columbia, effective May 2007, for a three year term.
4. Roy Dobson has been acclaimed President-Elect effective May 2007.
5. Simon Albon will move from President-Elect to President Effective May 2007.
6. The University of Saskatchewan will appoint a Council representative to replace Roy Dobson.

Respectfully submitted

Zubin Austin
Past-President

AFPC - AGM Research Committee Report
May 31, 2007 Montreal, Quebec

Committee Members: Chair (Mike Namaka), Lisa Dolovich (liaison member and Chair of Pharmacy Practice Research Committee), Roy Dobson (liaison member from the AFPC awards Committee,

Analysis of Submitted Research for Poster Presentations:

The research committee has received the required data from Dr Abbott regarding the numbers and categories of the poster submissions submitted for the current AGM in Montreal. The committee has prepared a graphical representation of this data for the 2007 year and would like to request the approval of council to present this information on the AFPC website. Based on some current changes, the clinical and the pharmacy practice categories have been merged into 1 category which is now called Pharmacy Practice Research. Although in the past the committee prepared a comparative graphical representation of the collected data since 2003, the merging of the 2 above categories will prevent this from occurring this year. The committee fully supports the merging of the 2 categories and would like to suggest tocontinue the annual comparative analysis from this point forward given the new defined categories. The committee would like to thank Dr Abbott for all his help in always providing the data and would ask for his continued assistance in the upcoming years. Please see the attached graphs depicting the 2005/06 comparative analysis and the current 2007 graphical distribution of presented research.

I would like to thank all the members of AFPC for all their support during my 2 successive terms on council. I will truly miss everyone and wish AFPC all the best in all their future endeavors.

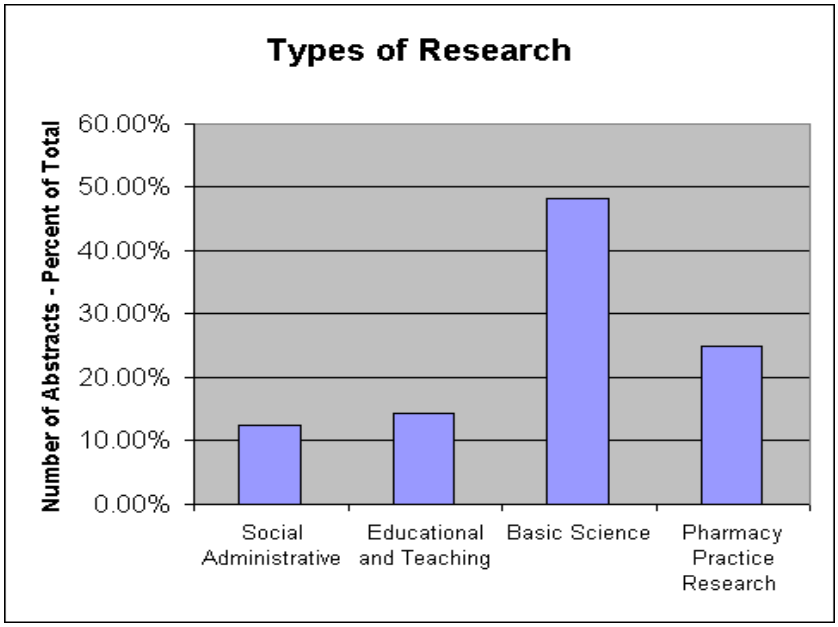
Respectfully submitted by

Mike Namaka (Chair of AFPC Research Committee). The information presented above was conducted on behalf of the entire Research Committee Members outlined above.

AFPC Research Graph 2007 of Presented Abstracts

	Number	Percent
Social Administrative	7	12.50%
Educational and Teaching	8	14.30%
Basic Science	27	48.20%
Pharmacy Practice Research	14	25.00%

Total	56	



Task Force on Educational Outcomes for an Entry-level Doctor of Pharmacy Graduate in Canada

Report to AFPC Council
May 31, 2007

Since the 2006 AGM the Task Force has completed their work on the Educational Outcomes for an Entry-level Doctor of Pharmacy Graduate in Canada. As agreed at the 2006 AGM, the Task Force completed a final review of feedback received in 2005/2006 and made minor changes to the original document. The Outcomes have also been edited. Since the work on these Outcomes began in the fall of 2004 it is likely that a new review process and a mechanism for developing levels and ranges need to be initiated.

Sincere thanks to the Task Force members:

Tom Brown
Claude Mailhot
Sylvie Marleau
Sharon Mitchell
Anne Marie Whelan

Respectfully submitted,
Susan Mansour, Chair, Task Force on Educational Outcomes for an Entry-Level Doctorate of Pharmacy Graduate in Canada
April 30, 2007

Association of Faculties of Pharmacy of Canada

Educational Outcomes for

Entry-Level Doctor of Pharmacy Graduates in Canada

February 10, 2005

(minor revisions March 30, 2007)

TABLE OF CONTENTS

ACKNOWLEDGEMENTS

Two documents from the Association of Faculties of Pharmacy of Canada, "Educational Outcomes for a Baccalaureate Pharmacy Graduate in Canada, May 25, 1998" and "Educational Outcomes for a Post-Baccalaureate Doctor of Pharmacy Graduate in Canada, June 12, 1999" were used as the starting point for these outcomes. Many of the outcomes are reproduced with modifications and reorganization. Several other documents were used as resources including two documents from the American Association of Colleges of Pharmacy Center for the Advancement of Pharmaceutical Education "Educational Outcomes 1998" and "Educational Outcomes 2004", the National Association of Pharmacy Regulatory Authorities "Model Standards of Practice 2003" and the Faculty of Pharmacy, University of Montreal "Educational Outcomes for a Professional Doctor of Pharmacy (Pharm.D.) graduate, Working Paper, December 10, 2003". With permission, the format and much of the content of the general outcomes has been adapted from the Faculty of Pharmacy, University of Montreal "Educational Outcomes for a Professional Doctor of Pharmacy (Pharm.D.) Graduate, Working Paper, December 10, 2003". The Task Force would like to acknowledge the work of the faculty members from the University of Montreal Faculty of Pharmacy.

Financial support was provided to the AFPC Task Force on Entry-Level Pharm. D. Outcomes by Merck Frosst who also supported the translation of the "Educational Outcomes for a Professional Doctor of Pharmacy (Pharm.D.) Graduate, Working Paper, December 10, 2003" in April 2004.

Members of the AFPC Task Force on Educational Outcomes for an Entry-Level Doctor of Pharmacy Graduate included Tom Brown, Claude Mailhot, Susan Mansour (Chair), Sylvie Marleau, Sharon Mitchell, and Anne Marie Whelan.

INTRODUCTION

The AFPC Task Force on Educational Outcomes for an Entry-Level Doctor of Pharmacy Graduate was struck by the Council of AFPC in 2004. The Task Force was charged with the responsibility to develop Educational Outcomes for Entry-Level Doctor of Pharmacy Graduates. An initial draft was presented to Council in June 2004 to begin the process of feedback and revision. Feedback was obtained on two separate occasions from each Faculty/College/School of Pharmacy through the AFPC Council. This feedback was reviewed and modifications made.

A major change in the formatting of these outcomes compared with previous AFPC outcomes is the expansion and specificity of general ability-based outcomes. The Task Force felt that these outcomes require more explicit explanation and detail for this type of degree. It was noted that this is consistent with several other health professions.

Knowledge is not shown as a general or specific outcome; rather it is considered essential to meet all or most of the outcomes. Broad-based and pharmacy-specific knowledge are both **required** of pharmacy graduates.

Changes from the AFPC document "Educational Outcomes for a Baccalaureate Pharmacy Graduate in Canada, May 25, 1998"to other general outcomes include the following:

- thinking has been expanded to general outcome #2 "Scientific reasoning, critical thinking and problem-solving";
- planning is found under general outcome #4 "Teamwork/interdisciplinarity", general outcome #6 "Leadership" and specific outcome #6 "Understand and apply management principles";
- communication has been expanded in general outcome #3 "Communication";
- values and ethical principles have been expanded in general outcomes #1 "Professionalism and ethical behaviour";
- self-directed learning has been expanded in general outcome #5 "Self-directed learning abilities/life-long learning";
- professionalism is found under general outcome #1 "Professionalism and ethical behaviour" and general outcome #7 "Advocacy";
- citizenship is found under general outcome #6 "Leadership".

Specific outcomes have also been expanded in some areas where it was considered important to provide a deeper understanding of their meaning for this level of graduate. Elements have been added to Outcome #1 "Practice Pharmaceutical Care" and Outcome #2 "Assume Legal, Ethical and Professional Responsibilities". Previous outcomes 3 and 4 for the baccalaureate degree "Provide Drug and Drug Use Information and Recommendations" and "Educate About Drugs, Drug Use and Health Promotion" have been combined and slightly expanded into Outcome #3 "Provide Drug Information, Educate About Drugs and Promote Health". The previous outcome #5 "Manage Drug Distribution" has been changed and expanded in "Coordinate Drug Distribution and Service Delivery". The previous outcome #6 "Understand Practice Management Principles" has also been changed to "Understand and Apply Practice Management Principles" and reflects a higher level of expectation. The previous outcome #7 "Apply the Principles of Scientific Inquiry to Contribute to the Profession and Society" has been split into several outcomes. General Outcome #2 now encompasses the principles of scientific inquiry more broadly into "Scientific Reasoning, Critical Thinking and Problem-Solving". Elements of the ideas in the old specific outcome #7 are also found in general outcomes #1, 6 and 7. Finally, the new outcome #6 "Participate in Research" retains the need to understand and be able to participate in pharmacy research.

It should be noted that while the “Educational Outcomes 2004” from the American Association of Colleges of Pharmacy Center for the Advancement of Pharmaceutical Education have become more generalized than the “Educational Outcomes 1998”, the Task Force felt that it was important to retain a certain level of detail in the AFPC Educational Outcomes for an Entry-Level Doctor of Pharmacy Graduate.

General Ability-Based Outcomes

General Outcome One

Professionalism and Ethical Behaviour

Outcome Unit

Pharmacy graduates exhibit altruism, excellence, honesty and integrity, accountability, a sense of duty, commitment and respect for others.

Outcome Elements

1.1. Respect their patients, consider their needs and expectations and, in a broader sense, respect others.

1.1.1. "subordinate their personal interests to those of their patients
1.1.2. are fair and avoid any preconceived judgments or discrimination
1.1.3. respect the basic rights and freedoms of others
1.1.4. respect and protect the individual's right to confidentiality
1.1.5. demonstrate sensitivity and tolerance within a culturally diverse society"[1]

1.2. Exhibit a sense of belonging, pride and commitment to the profession.

1.2.1. consistently maintain and develop their competencies
1.2.2. contribute to the advancement and development of the profession
1.2.3. exhibit a professional attitude, particularly in terms of the image that they project and the language that they use
1.2.4. acknowledge the roles of professional organizations and professional development

1.3. Exhibit a sense of professional responsibility.

1.3.1. are accessible and demonstrate due diligence
1.3.2. assume responsibility for the results of their actions with patients and colleagues
1.3.3. recognize their limitations and ask for help whenever necessary

[1] from: American Association of Colleges of Pharmacy Center for the Advancement of Pharmaceutical Education "Educational Outcomes 1998"

1.4. Exhibit a sense of ethics and integrity in the performance of their duties.

1.4.1. make decisions while respecting ethical considerations
1.4.2. show integrity in dealings with patients, colleagues and organizations
1.4.3. honour personal values and apply ethical principles in professional and social contexts
1.4.4. demonstrate behaviour that recognizes cultural and personal variability in values, communication and life styles

1.5. Seek and provide mentorship.

1.5.1. share their knowledge and experience with their peers
1.5.2. participate in the training of future professionals
1.5.3. provide advice and support to and watch over and foster progress of others
1.5.4. seek experienced and trusted advisors for life-long development

General Outcome Two

Scientific Reasoning, Critical Thinking and Problem-Solving

Outcome Unit

Pharmacy graduates apply the principles of the scientific process and critical thinking to contribute to patient care, to the Profession and to society.

Outcome Elements

2.1. Implement the principles of the scientific process and use them to solve problems commensurate with their complexity and within their clinical, scientific, social, cultural and legal context.

- 2.1.1. identify the elements of problems and state them clearly and accurately
- 2.1.2 raise important and relevant questions
- 2.1.3. systematically gather relevant information using a variety of research methods and tools
- 2.1.4. analyze information carefully
  - a. evaluate the premises, including biases and prejudices, on which the opinions of others are based
  - b. validate the use made of mathematical calculations and statistical tools
  - c. ensure the accuracy, quality, meaning, relevance and completeness of information, arguments and sources of information
- 2.1.5. propose plausible solutions based on analyses of the information
- 2.1.6. arrive at well reasoned solutions through testing alternatives against relevant criteria
- 2.1.7. consider the context in which solutions are formulated as well as their practical consequences and underlying values
- 2.1.8. determine and implement informed, defensible solutions
- 2.1.9. re-evaluate the process, identify successful and unsuccessful elements, and make the appropriate changes

2.2. Possess the skills and attitudes associated with critical thinking.

- 2.2.1. exhibit curiosity and open-mindedness
- 2.2.2. broaden their field of expertise and knowledge
- 2.2.3. call on the reasoning of others to enrich their own understanding of issues
- 2.2.4. recognize and accept contradiction, ambiguity and the relativity of certain information
- 2.2.5. are able to adjust their ideas
- 2.2.6. have the confidence to submit the results of their conclusions to the critical examination by others

General Outcome Three

Communication

Outcome Unit

Pharmacy graduates communicate effectively with diverse audiences, using a variety of strategies that take into account the situation, the purpose of the communication and the target audience.

Outcome Elements

3.1. Communicate non-verbally and verbally with others.

- 3.1.1. demonstrate active listening skills and respond appropriately
- 3.1.2. exhibit empathy, tact and respect in their dealings with others
- 3.1.3. are sensitive and adapt well to intercultural and interdisciplinary situations
- 3.1.4. effectively use verbal and non-verbal communication techniques
- 3.1.5. when speaking, use organized thought processes and appropriate vocabulary
- 3.1.6. adapt the content of their arguments to specific contexts and audiences

3.2. Communicate in writing.

- 3.2.1. exhibit comprehension and appropriate interpretation in reading activities
- 3.2.2. write clearly, using organized thought processes and appropriate vocabulary
- 3.2.3. correctly apply the rules of syntax, grammar and punctuation.
- 3.2.4. adapt the content of their arguments to specific contexts and target audiences

3.3. Speak to an audience.

- 3.3.1. appear comfortable, are able to capture and maintain audience attention, use appropriate tone and pace, and use nonverbal language where appropriate
- 3.3.2. organize presentation and have the ability to set and adhere to appropriate time limits
- 3.3.3. respond to and manage interaction with the audience

3.4. Use communication technology.

- 3.4.1. demonstrate sufficient understanding of information systems to integrate computer and related technology into effective communication
- 3.4.2. use appropriate etiquette when using information technology

General Outcome Four

Teamwork/Interdisciplinarity

Outcome Unit

Pharmacy graduates are cooperative and show respect when working in a team. Pharmacy graduates effectively contribute to determining and achieving objectives. Pharmacy graduates respect their field of expertise and those of others when working in interdisciplinary teams.

Outcome Elements

4.1. Cooperate with team members.

- 4.1.1. consider and pay attention to the interests and needs of others
- 4.1.2. make their points of view known, listen to and respect the opinions of others, defend points of view if necessary
- 4.1.3. adapt their roles to the circumstances and requirements of the team; are able and willing to lead the team
- 4.1.4. contribute to planning, organizing and performing the work to be done and evaluating the results
- 4.1.5. respect the rules established by the group
- 4.1.6. help maintain a healthy work environment and assist with conflict management
- 4.1.7. provide constructive feedback

4.2. Participate in interdisciplinary teams.

- 4.2.1. actively make their expertise available to others and willingly agree to share relevant information, using language that can be understood by all
- 4.2.2. clearly but not rigidly differentiate their discipline from those of other professionals in the interdisciplinary team
- 4.2.3. effectively contribute to defining objectives shared by all of the disciplines concerned
- 4.2.4. actively support other professionals and accept their support without feeling that their professional autonomy is being threatened

General Outcome Five

Self-directed Learning Abilities/Life-long Learning

Outcome Unit

Pharmacy graduates recognize their learning needs; develop, use and evaluate learning strategies to gain knowledge and foster the development of competencies and skills throughout their professional lives.

Outcome Elements

5.1. Determine the desired areas of knowledge or competency in which they are lacking.

- 5.1.1. practice self-assessment and use the feedback of others to determine their weaknesses and knowledge gaps
- 5.1.2. remain curious and willing to learn
- 5.1.3. develop methods for identifying knowledge gaps

5.2. Use appropriate learning activities to ensure their personal and professional development.

- 5.2.1. update their knowledge, skills and attitudes on an ongoing basis to maintain professional competence
- 5.2.2. set learning objectives and determine the learning styles and types of activities that suit them to meet identified needs
- 5.2.3. participate in a variety of learning activities to achieve targeted objectives
- 5.2.4. critically analyze and assess continuing education activities

5.3. Manage and document learning.

- 5.3.1. create personal archival and retrieval information management systems
- 5.3.2. create and maintain learning portfolios

General Outcome Six

Leadership

Outcome Unit

Pharmacy graduates proactively improve the profession, facilitate the betterment of the health care system and the health and well being of the community; exhibit self-confidence, initiative, creativity, vision, flexibility and citizenship.

Outcome Elements

6.1. Demonstrate realistic confidence in their abilities.

- 6.1.1. defend their ideas or positions even when unpopular
- 6.1.2. remain positive and professional in difficult situations

6.2. Develop proactive strategies to prevent or solve problems.

- 6.2.1. determine situations in which they should assume leadership
- 6.2.2. clearly put forward their views with conviction

6.3. Develop creative ideas and solutions.

- 6.3.1. are open to new information and approaches
- 6.3.2. challenge conventional methods and propose innovative solutions
- 6.3.3. act as agents of change

6.4. Have vision regarding the future of the profession and its place in the health care system and community.

- 6.4.1. predict emerging roles for the profession within the health care system
- 6.4.2. recognize opportunities, limitations, and potential obstacles to the development of the profession and take steps to address them

6.5. Adapt to people and circumstances.

- 6.5.1. observe their environment and react by adapting their behaviour to the demands of changing work situations
- 6.5.2. react promptly to new opportunities and problems

6.6. Demonstrate responsible citizenship.

6.6.1. “demonstrate an appreciation of the obligation to participate in efforts to help individuals and to improve society and the health care system”[2]

[2] from: American Association of Colleges of Pharmacy Center for the Advancement of Pharmaceutical Education “Educational Outcomes 1998”

General Outcome Seven

Advocacy

Outcome Unit

Pharmacy graduates advocate for patients and for the profession.

Outcome Elements

7.1. Advocate for groups of patients to ensure appropriate access to products and services

- 7.1.1. assist groups of patients in the identification of their needs
- 7.1.2. develop action plans, in consultation with patient groups, considering desired outcomes, risks and costs
- 7.1.3. document support for the actions required to meet patients' needs
- 7.1.4. present information in appropriate written and/or verbal formats to patient groups

7.2. Advocate for the profession.

- 7.2.1. promote the role of the pharmacist and the impact of the pharmacist in achieving patient outcomes

Specific Outcomes

Specific Outcome One

Practice Pharmaceutical Care

Outcome Unit

Pharmacy graduates practice pharmaceutical care ethically and compassionately in a professional manner. In partnership with patients and other health care providers, pharmacists use their knowledge and skills to meet patients' drug-related needs, with the objective of achieving optimal patient outcomes and maintaining or improving the patients' quality of life.

Outcome Elements

1.1 Develop professional[3] relationships with their patients and/or the patients' agent[4] that conform to the Code of Ethics of the profession.

1.1.1. establish and maintain rapport with their patients
1.2.2. demonstrate a caring, empathetic, and professional attitude respecting their patients' dignity, need for privacy, education, culture, beliefs, interests and desires
1.1.3. determine, in conjunction with their patients, the responsibilities of the pharmacist and the patient, the benefits of acceptance of these responsibilities and the consequences of not accepting these responsibilities

1.2 Determine their patients' needs and desired outcomes of drug therapy.

[3] A relationship in which the patient and the pharmacist establish a framework for decision making based on the patient's values. There are obligations and expected benefits for both the health care provider and the patient.

[4] In the remainder of this document, patient means patient and/or the patient's agent.

1.2.1. use a variety of information sources to elicit their patients' values, desired level of care, health concerns, scope and breadth of health problems and facilitators and impediments to health
1.2.2. assess the accuracy, relevance and impact of the above information
1.2.3. in conjunction with their patients determine reasonable, feasible and desired health-related outcomes
1.2.4. prioritize the desired outcomes

1.3. Identify and prioritize their patients' actual and potential drug-related problems.[5]

1.3.1. use a variety of sources to collect the information required to identify the patients' drug-related problems. Includes but not limited to:
a. patients' drug therapy, medical and psychosocial history
b. relevant information from the patients' medical charts
1.3.2. establish professional contact with the patients' other health care providers in order to gather related health and drug information
1.3.3. perform selected aspects of physical assessment
1.3.4. order lab tests as necessary and permitted by legislation
1.3.5. consult scientific literature
1.3.6. identify drug-related problems
1.3.7. prioritize the drug-related problems

1.4. Develop therapeutic and monitoring plans designed to achieve optimal patient outcomes and to resolve/prevent the patients' drug-related problems.

1.4.1. assess alternative strategies (including no treatment, preventive strategies, non-drug treatment, non-prescription and prescription drugs) and select therapeutic options (evidence-based when possible) best suited to their patients in consultation with the patients and, when appropriate, other health care providers
1.4.2. determine the desired therapeutic endpoints
1.4.3. identify appropriate monitoring parameters
1.4.4. formulate monitoring plans
1.4.5. determine the responsibilities of the pharmacist, the patient and the other health care providers

1.5 Refer when appropriate.

1.5.1. determine if referrals are necessary
1.5.2. identify the appropriate health care providers or agencies for referral

1.6 Implement therapeutic and monitoring plans and assess the progress of their patients in order to evaluate the outcomes.

1.6.1. implement therapeutic care plans, which may include but are not limited to:
a. recommend no treatment, nonprescription drugs, prescription drugs, compliance aids, medical devices and/or nonpharmacologic measures
b. prescribe/administer drugs in compliance with the legal guidelines/standards/rules

[5]See Glossary for types of drug-related problems.

c. initiate or adjust drug therapy according to prescriptions
d. supply their patients with the appropriate treatments
e. provide emergency first aid treatment and cardiopulmonary (CPR) if other more qualified personnel are not available

1.6.2. counsel patients on relevant information regarding their therapeutic care plans
a. choose and adapt verbal information to meet their patients' needs
b. choose and adapt written information to meet their patients' needs

1.6.3. convey relevant information verbally or in writing to other members of the heath care team and/or to patients' caregivers to ensure continuity of care

1.6.4. provide services in accordance with legal obligations, professional and ethical standards and health care policies

1.6.5. assume responsibility for all recommendations

1.6.6. implement the monitoring plans for follow-up care

1.7. Revise the patients' lists of drug-related problems, the prioritization, and the therapeutic and monitoring plans when appropriate.

1.7.1. interpret relevant information collected as determined in the monitoring plan

1.7.2. evaluate the safety and efficacy of the therapeutic and monitoring plans relative to the desired patient outcomes

1.7.3. refine or revise the plans as necessary

1.7.4. provide ongoing care, education and counselling

1.7.5. obtain feedback on the quality of the care process

1.7.6. undertake required communication with other health care providers, including continuity of care/transfer of care to other pharmacists.

1.8. Document pharmaceutical care activities including patient information, desired outcomes, drug-related problems, assessment, referrals, recommendations, interventions, follow-up and outcomes.

1.8.1. identify the objectives of the documentation

1.8.2. maintain medication profiles, medical history and patient information

1.8.3. document the required patient-specific information and care provided and outcomes/follow-up

1.8.4. document communication with other health care providers and health/social agencies

1.8.5. document communication with third party payers

1.8.6. participate in adverse effect notification and medication error reporting programs.

Specific Outcome Two

Assume Legal and Ethical and Professional Responsibilities

Outcome Unit

Pharmacy graduates will be able to practice within legal requirements, and the ethical and professional standards of practice, and fulfil professional responsibilities.

Outcome Elements

2.1. Demonstrate an understanding of the Canadian health care system and the profession of pharmacy's role within the system.

- 2.1.1. identify the federal and provincial governments' roles in the health care system
- 2.1.2. contribute to decision making regarding the safe, effective and efficient use of drugs
- 2.1.3. describe how policy development is influenced in public and private health care
- 2.1.4. describe utilization management, financing, and economic issues in drug therapy and pharmacist services

2.2. Practice in accordance with federal, provincial and territorial legislation, regulations and standards.

2.3 Practice in a professional and ethical manner which assures primary accountability to their patients.

- 2.3.1. ensure patient confidentiality
- 2.3.2. advocate their patients' best interests
- 2.3.3. involve their patients in decision-making
- 2.3.4. respect the right of patients to make their own choices
- 2.3.5. abide by the principle of nonabandonment[6]
- 2.3.6. use ethical frameworks in decision-making

2.4. Demonstrate an understanding of the ethical issues surrounding illicit drug use and the misuse and abuse of prescription drugs, non-prescription drugs and alternative/complementary therapies such as homeopathy, herbal and non-drug treatments.

2.5. Apply legal and ethical principles to given clinical situations in which legal, ethical, and professional issues are overlapping and/or conflicting.

[6] A graduate cannot be required to violate fundamental personal values, standards of scientific or ethical practice or law. When a patient's beliefs dictate decisions that run counter to the graduate's advice, the graduate is obliged to try to understand clearly the beliefs and the viewpoints of the patient. After a serious attempt to resolve differences, if the graduate is unable to carry out the patient's wishes, the graduate must withdraw and transfer care of the patient.

Specific Outcome Three

Provide Drug Information, Educate About Drugs and Promote Health

Outcome unit

Pharmacy graduates provide information and recommendations to health professionals and the public concerning drugs, drug use and health promotion to ensure optimum and cost effective patient care.

Outcome Elements:

3.1. Provide drug information to health professionals and the general public.

- 3.1.1. identify needs for information and recommendations on drugs
  - a. determine the contexts in which requests are made and the individuals' levels of knowledge and understanding
  - b. identify and reformulate the information needs of their target audience
- 3.1.2. respond to these needs with consideration of pharmacoepidemiology, pharmacoeconomics and pharmacotherapeutics
  - a. use the necessary retrieval techniques to access the required drug-related information
  - b. critically analyse the information
  - c. organize information for a variety of audiences, determine critical content, formulate recommendations as relevant, and use appropriate methods for dissemination/communication
  - d. evaluate the usefulness of the information provided
  - e. document the information provided
  - f. create archival and retrieval information management systems

3.2. Promote public awareness of health and disease.

- 3.2.1. identify needs for information and recommendations on drugs
  - a. identify barriers to and facilitators of health and wellness in individuals and groups
- 3.2.2. design, implement and evaluate educational programs for events related to drugs, drug use or health promotion
  - a. identify learning needs of their audience
  - b. collaborate with patients and other health care providers in the development of strategies
  - c. assess personal abilities to carry out particular educational plans
  - d. select educational techniques appropriate for the learners
  - e. select and organize content

f. implement their educational plans
g. assess outcomes

3.3 Develop and participate in programs on medications and their use.

Specific Outcome Four

Coordinate Drug Distribution and Service Delivery

Outcome Unit[7]

"Pharmacy graduates manage and use resources of the health care system to provide, assess and coordinate safe, accurate, cost-effective and time-sensitive medication preparation and dispensing to meet patients' requirements and to improve therapeutic outcomes of medication use in cooperation with patients, prescribers, other health care providers, and administrative and supportive personnel."

Outcome Elements

4.1. Participate in drug and health-related product preparation, distribution and delivery of services.

- 4.1.1. supervise and undertake:
  - a. interpretation of drug orders
  - b. pharmaceutical calculations
  - c. dispensing of pharmaceuticals and health-related products
  - d. preparation of extemporaneous compounds
  - e. preparation of sterile products
  - f. provision of professional services
- 4.1.2. identify storage and handling conditions, and stability problems
- 4.1.3. document, report and resolve drug errors
- 4.1.4. ensure the existence of programs to prevent, detect and resolve drug errors

4.2. Supervise inventory management.

- 4.2.1. choose appropriate sources of supply and maintain adequate supplies
- 4.2.2. ensure appropriate storage/disposal of pharmaceuticals and related products

4.3. Comply with relevant legislation, regulations and standards governing pharmacy practice.

- 4.3.1. adhere to distribution policies and procedures
- 4.3.2. identify and resolve problems in the drug distribution system
- 4.3.3. detect, document, report, and respond appropriately to situations of drug abuse or misuse

4.4. Justify and explain the value of provided services.

[7] from: American Association of Colleges of Pharmacy Center for the Advancement of Pharmaceutical Education "Educational Outcomes 1998"

Specific Outcome Five

Understand and Apply Practice Management Principles

Outcome Unit

Pharmacy graduates demonstrate an understanding of management principles with the goals of optimizing patient care and the use of practice resources. Pharmacy graduates apply relevant principles in everyday practice.

Outcome Elements

5.1. Participate in human resource management.

- 5.1.1. supervise the work team
- 5.1.2. delegate tasks appropriately
- 5.1.3. motivate the work team
- 5.1.4. participate in staff selection, training, development and evaluation

5.2. Effectively manage workload.

- 5.2.1. demonstrate organizational skills
- 5.2.2. prioritize and organize work flow
- 5.2.3. demonstrate time management skills

5.3. Understand, participate in, and develop quality improvement programs.

5.4. Demonstrate an understanding of marketing principles in the context of supply and demand for professional services.

5.5. Demonstrate an understanding of the role of technology to improve practice.

5.6. Demonstrate an understanding of the important components of management, including resource management, inventory management, formulary system, strategic planning, and policy development.

Specific Outcome Six
Understands and Applies Principles of Research Methods[8]

Outcome Unit

Pharmacy graduates, in partnership with researchers and other health care professionals, understand research principles and apply them to sustain and assist in the continual development of pharmacy as a profession, and the optimal design, delivery and utilization of medications.

Outcome Elements

6.1. Understand the need for the creation and discovery of new information as it pertains to the continual development of the profession and optimization of pharmacotherapy.

6.1.1. recognize the need for research and how it can be used in the profession of pharmacy
6.1.2. describe various research methods, their advantages, disadvantages and limitations
6.1.3. determine the essential components of a research project

6.2. Apply principles of research methods and participate in drug utilization evaluation, continual quality improvement and/or practice-based problems.

6.2.1. recognize relevant problems
6.2.2. define the parameters of the problems
6.2.3. retrieve and assess reports/literature relevant to the problems
6.2.4. formulate research questions/hypotheses
6.2.5. design projects

6.3. Use results from projects or from the literature to propose changes and re-evaluate the problems.

6.3.1. demonstrate an understanding of the process of making change
6.3.2. identify changes indicated by research results
6.3.3. plan for change
6.3.4. determine how changes will be evaluated

6.4. Understand and adhere to ethical research principles.

6.4.1. identify relevant ethical issues related to research
6.4.2. identify how the relevant issues could be addressed

[8] The term "participate" in this Outcome refers to pharmacy graduates' participation in research conducted or led by others. The term "applies" in the title of the Outcome and the phrase "uses results from" in 6.3 refer to the application of research results from the research of others. This Outcome should not be read to imply that every pharmacy graduate will conduct research.

GLOSSARY OF TERMS

Biomedical Sciences
- content in anatomy, biochemistry, biostatistics, immunology, microbiology, molecular biology, physiology and pathophysiology (from CCAPP, 1997)

Drug-related problem
- undesirable signs or symptoms which result when a patient:
  - is taking/receiving a drug for no medically valid indication
  - needs pharmacotherapy but is not receiving it
  - is taking/receiving the wrong drug
  - is taking/receiving too little of the right drug
  - is taking/receiving too much of the right drug
  - is taking/receiving the drug inappropriately
  - is experiencing an adverse drug reaction
  - is experiencing a drug interaction

Pharmaceutical sciences
- content in medicinal chemistry, pharmacology, toxicology and pharmaceutics (physical/chemical principles of dosage forms and drug delivery systems, biopharmaceutics and pharmacokinetics), and behavioural, social and administrative pharmacy (epidemiology, health care economics, pharmacoeconomics, practice management, history of pharmacy, ethical foundations of practice, and social and behavioural applications) (combined behavioural, social and administrative sciences with pharmaceutical sciences from CCAPP, 1997)

Pharmacy practice
- content in clinical laboratory medicine, clinical pharmacokinetics, communications applicable to pharmacy, complementary and alternative medicines, computer applications, delegated prescribing authority, disease-state management, drug distribution and drug administration, drug information and literature evaluation, emergency first-care, geriatrics, gerontology, health promotion and disease prevention, laws pertaining to practice, nutrition, outcomes documentation, paediatrics, patient evaluation, pharmacotherapeutics, physical assessment, prescription processing (from CCAPP, 1997)

Outcome
- pharmacy graduate context - what a graduate should be able to do with what they have learned
- patient context - desired therapeutic outcome

Outcome unit
- a general description of the outcome that includes the key indicators of the expected outcome

Outcome element
- a subsection of the outcome unit indicating the parts that are needed to accomplish the whole

Standard of practice
- standards of practice are those standards of practice required by the licensing bodies in each province

AFPC
Strategic Plan
2007-2012

Founded in 1944, first as the Canadian Conference of Pharmaceutical Faculties (CCPF), the Association of Faculties of Pharmacy of Canada (AFPC) is the national non-profit organization advocating the interests of pharmacy education and educators in Canada. Representing Canadian Pharmacy Faculties including their faculty and students pursuing undergraduate professional or graduate training, AFPC is committed to the development of and excellence in pharmacy education. As the representative organization of faculties of pharmacy, AFPC must address various opportunities and challenges as it seeks to fulfill its mandate.

Beginning in 2004, the AFPC Council has been engaged in the ongoing process of creating and implementing a comprehensive strategic plan. The process began with the redrafting of the mission statement and a review of the organization's goals and objectives, followed by the development and implementation of action plans. The mission statement, goals and objectives of AFPC are presented on the following page.

AFPC Mission Statement

To advance the interests of academic pharmacy by supporting, promoting and recognizing innovation, excellence and leadership in pharmacy education, research and scholarly activity.

AFPC Goals and Objectives

1. Foster the advancement of academic pharmacy in Canada

- 1.1 To promote excellence in pharmacy education, research and scholarly activity.*
- 1.2 To support members, Deans and Faculties in advancing knowledge, skills and expertise critical to pharmacy education, research and scholarly activity.*
- 1.3 To encourage high standards by assuming an advisory role for the development of policies, guidelines, and standards used for the accreditation of pharmaceutical education programs.

2. Stimulate and provide opportunities for the development and exchange of ideas among pharmacy educators with a view to improving curricula, teaching and learning

- 2.1 To showcase and promote innovations in pharmacy teaching and research.
- 2.2 To provide members and external organizations with the ability to easily identify and access AFPC members with expertise and skills in teaching and research.

3. Establish and maintain liaison with pharmacy and relevant educational associations, other health professions, governmental agencies, and members of the pharmaceutical industry that may further the development, support, and improvement of pharmacy education, practice, and research

- 3.1 To be recognized by external organizations as the leading representative of academic pharmacy affairs in Canada.*
- 3.2 To be seen as "the voice" of academic pharmacy in Canada.

4. Support and advance the interests of AFPC members

- 4.1 To secure independence through consistent, long term funding for the ongoing operations of AFPC and for special projects.*
- 4.2 To be valued by faculty members so they increase their involvement in AFPC.
- 4.3 To be valued by the Deans so they look to AFPC for assistance on specific projects and support faculty member involvement.

* Objectives identified by AFPC Council as being a priority for 2007-2008

Report From the AFPC Representative on the Canadian Pharmacists Association Board

May 31 2007

I have served one year as your academia representative on the CPhA Board. I attended a two day board orientation in August and two full Board meetings, one in October and the other in March. I have found it challenging to get up to speed on all the issues, however this is excellent since there really are a lot of exciting changes going on in our profession. I have provided input into issues that I feel have relevance to our academic programs, AFPC and ADPC mandates.

It is very exciting to see many past and present AFPC members recognized as CPhA Centennial Pharmacists. All these individuals (see attached list) have made changes to leading and building CPhA and the profession of pharmacy in Canada. They will be recognized at the Centennial Luncheon held on June 3rd at this year's conference.

If you have any comments or concerns please feel free to contact me at Rita.Caldwell@Dal.Ca.

Summary of Key Activities

Blueprint for Pharmacy

The *Blueprint* brings together pharmacists' groups in Canada to establish common principles, values and actions to help set the stage for the future of pharmacy and effect practice change. It will identify priority action steps within five key elements: pharmacy human resources; education and continuing professional development; information and communication technology; financial viability and sustainability; and legislation, regulation and liability. In June, a second stakeholder workshop provided input to the development of a consensus-based, actionable plan. In February 2007, the draft plan was reviewed at the first meeting of the *Blueprint Taskforce*, chaired by Dr. David Hill. Dr. Dennis Gorecki, Dean, University of Saskatchewan is representing ADPC on the task force and Dr. Terri Schindel, a faculty member from the University of Alberta is representing AFPC. Working groups will be created over the next few months which are responsible for developing the detailed implementation plan for each of the core strategies. Consultation on the implementation plan and obtaining support from stakeholders in government and other health professional organizations will take place over 2007. At the 2007 CPhA Conference a Blueprint Town Hall meeting will be held on Saturday, June 2nd, from 2:00-4:00 pm in the time slot used by the CPhA-CSHP National Pharmacy Forum. The complete blueprint draft document can be viewed at www.pharmacists.ca/blueprintconsultations

***Moving Forward*, Pharmacy Human Resources for the Future**

This 30 month project, funded by Human Resources & Social Development Canada, is an in-depth examination of the factors contributing to pharmacy human resources challenges in Canada. It will offer recommendations to ensure a strong pharmacy workforce prepared to meet the current and future health care needs of Canadians. Selected areas of research include innovative models of pharmacy practice and their human resource implications; the barriers and/or facilitators experienced by International Pharmacy Graduates in their quest to integrate into Canadian pharmacy practice; and the role, responsibilities and credentialing of pharmacy technicians. CPhA is managing the project, supported by a Management Committee (comprised of representatives from the project's seven other partnering pharmacy organizations) and a broad stakeholder National Advisory Committee. Dr. Dennis Gorecki, Dean of the University

Saskatchewan is serving as the ADPC representative and Dr. Zubin Austin, faculty member from the University of Toronto, is the AFPC Representative.

Dr. Kevin Hall, will be presenting a plenary session on Moving Forward at the CPhA conference on Sunday June 3rd. He will share some of the findings of the final report on "The Pharmacy Technician Workforce in Canada" Roles, Demographics and Attitudes. "The final report will be available online at www.pharmacyhr.ca. at the same time as the presentation.

The International Pharmacy Graduate surveys-one targeted at pharmacy employers, the other at IPGs themselves – are finalized and will be in the field in the first two weeks of June.

National e-Pharmacy Task Force

Most of the almost 400 million prescriptions filled in Canada annually are processed according to CPhA's Electronic Claim Standard. CPhA, in partnership with the Canadian Association of Chain Drugs Stores, has set up a National e-Pharmacy Task Force that is addressing pharmacy e-health issues: e-prescribing, e-dispensing, e-transacting, and e-health records (EHR). The taskforce will also look at patient care, policy, and business issues relating to the implementation of e-health standards, including CeRx and NeCST, as they apply to pharmacy. A first meeting was held in October with 16 participants representing a broad range of interests; a second meeting was also held on April 26, 2007 The CPhA Centennial conference will hold a plenary session on the state of e-pharmacy in Canada on June 5th, 2007

Continuing Education

There are now 17 lessons available in both English and French via CPhA's On Line Learning Centre. Since it was created in March 2004, over 3,700 lessons have been accessed. A new addition is *QUIT: Quit Using and Inhaling Tobacco,* a comprehensive smoking cessation training program for pharmacists developed by CPhA. Available online(www. pharmacists.ca/advance) or through a live workshop, training emphasizes the behavioural aspects of quitting and how to incorporate counselling into pharmacy practice.

Pandemic Influenza: A guide for pharmacists in pandemic preparedness

Assisted by a grant from the Public Health Agency of Canada, CPhA assembled and distributed pandemic communications material for pharmacists. Topics included the background of pandemic influenza; health care worker roles according to the Canadian Pandemic Influenza Plan; how to create a business continuity plan; and how to keep healthy. Links to federal and provincial information, tools and templates were also included. The information is available on the CPhA website www.pharmacists.ca/pandemic

eVolution,

In 2006, Ontario's *Transparent Drug System for Patients Act* had a major impact on pharmacy operations in that province. CPhA's approach has focused on supporting pharmacists in Ontario, helping pharmacists in the rest of the country understand the impact of these changes, and providing practice tools that will allow pharmacists' to develop professional services. One of these is *eVolution,* an innovative new web-based resource that will enable pharmacists to adapt and bring innovation to a rapidly changing health care environment. The program will help pharmacists establish new models of care and make a successful transition to more patient-centered ways of practicing.

Annual Conference

The 2006 conference in Edmonton held in conjunction with AFPC was a great success with 650 registrants. It featured an extensive CE program and guest speaker, Silken Laumann. The 2007 Conference will be held in Ottawa June 2nd – 5th and will mark CPhA's 100th Anniversary.

External Relations

A major focus in 2006 was on securing changes to the Non-Insured Health Benefits program (NIHB), which funds aboriginal health programs. CPhA coordinated meetings between executives of provincial pharmacy associations and federal MPs; we were able to garner support from all major political parties and the Chair of

the Health Committee. We have also extended the lobbying to groups such as the Canadian Dental Association, Canadian Nurses Association and Assembly of First Nations.

CPhA continued to meet with senior officials in Health Canada, the Deputy Minister of Health and the chair of the Standing Committee on Health to discuss various aspects of pharmaceutical policy. These include real world safety and effectiveness, cross border drug trade, the National Pharmaceutical Strategy, and the future of the health care system. We continue to meet regularly with provincial pharmacy associations (alone and as part of the Canadian Pharmacy Affairs Group), with stakeholder associations, disease associations and pharmaceutical manufacturers.

CPhA is part of the *Coalition for a Canadian Pharmaceutical Strategy*, with the Canadian Medical Association, Canadian Nurses Association, Canadian Healthcare Association and the Best Medicines Coalition. Prior to the July 2006 meeting of provincial and territorial premiers, the Coalition released an open letter to premiers along with its *Framework for a Canadian Pharmaceutical Strategy.* This outlines the elements necessary to ensure timely access to safe, effective and affordable prescription drugs for all Canadians.

Ongoing Consultations

CPhA continues to take part in dozens of committees and consultative processes each year. In 2006, some of the subjects included Ontario's Bill 102; PIPEDA; Patent Medicines Price Review Board; Competition Bureau; pandemic preparedness, Family Caregiver's project; HR planning; women's health; and pharmacist prescribing. CPhA is also working with CMA on the issues of collaborative care, scopes of practice and pharmacist prescribing. We were also pleased to work with both MSP and MPhA on Manitoba's Bill 41 – The Pharmaceutical Act.

Media Relations

Over 2006, CPhA responded to about 140 calls from the media for interview, comment, quotes or background information. Frequent callers from print media included Canadian Press, Canwest News, National Post, Globe & Mail and the Toronto Star. CPhA spokespeople also appeared on CBC TV, CBC Radio, Radio Canada, Radio Canada International, Global TV, CTV, and TV Ontario, among others. We also receive steady calls from publications such as Chatelaine, Today's Parents, Glow Magazine and Readers Digest looking for information and tips related to health and first aid treatments. In 2006, the largest number of calls was related to the cross border drug trade. Other topics of interest to media were emergency contraception; the National Pharmaceutical Strategy; prescriptive authority; drug safety; drug shortages; Bill 102; counterfeit drugs; and the pandemic.

Public Affairs

In 2006, we implemented a number of initiatives aimed at increasing the public's awareness of pharmacists. This included ads promoting the value of pharmacists that appeared in the Globe and Mail, Hill Times and other regional newspapers across Canada. In October 2006, the Globe & Mail published a three-page supplement on pharmacists. CPhA also distributed 220,000 brochures entitled "*Travelling with Prescription Medications*" to seniors across Canada, travel medicine clinics and the tourism industry. The brochure, the first of its kind, provides a series of tips related to international travel while carrying prescription drugs.

Pharmacy Practice Research

CPhA drafted the Canadian Pharmacy Practice Research Group (CPPRG) Spring 2007 newsletter. This issue emphasized knowledge translation; giving tips to hold effective meetings with decision-makers and ideas for developing partnerships with policy –makers. CPhA have been working closely with the CPPRG to promote pharmacy practice research in Canada, defining the parameters around student awards earmarked for pharmacy practice research to be promoted during the Centennial campaign.

As part of this years CPhA Centennial Conference researchers and practitioners were invited to submit abstracts on innovative pharmacy practice research or pharmacy practice initiatives to be considered for oral and poster presentations. Thirteen abstracts were accepted for oral presentations and sixteen for posters

e-Products

e-Therapeutics, an electronic clinical decision support tool developed by CPhA, was successfully launched in April 2006. Designed for primary health care practitioners, it provides point-of-care access to current, evidence-based Canadian drug and therapeutic information via a web portal and handheld applications. The Health Council of Canada's Annual Report, released in February 2006, included a number of references to e-Therapeutics and recommended its adoption. In October 2006, CPhA launched the latest release which integrated the e-CPS and e-Therapeutics electronic products, to offer both of them on the same technical platform. Enhancements provide a common look and feel for e-CPS and e-Therapeutics and many user friendly features were added.

Canadian Pharmacists Journal

In addition to six issues with its new look, CPJ published two well received special supplements on Hypertension and Collaborative Care. The journal will have its own exhibit booth at this years conference to facilitate promotion of both print and the new online version of the journal

Patient Safety Book

CPhA is partnering with Dr. Neil MacKinnon, Dalhousie University, on a new publication: *Safe and Effective? – Eight essential elements of an optimal medication use system.* The book will address both safety and quality and provide insight into how we can strive towards a stronger medication use system.

Rita K. Caldwell, BSc(Pharm), MHSA
Associate Professor and Director
College of Pharmacy, Dalhousie University

CPhA Centennial Pharmacists

As one of its Centennial activities, CPhA is recognizing 100 pharmacists who have made contributions to leading and building CPhA and the profession of pharmacy in Canada. Nominations for this award were received from many individuals and pharmacy organizations. A Selection Committee was established to review the nominations and choose 100 pharmacists who have contributed to pharmacy in Canada through their leadership in pharmacy organizations nationally and internationally, in the pharmaceutical industry and in government, and through innovations affecting patient outcomes. This award recognizes the contribution to pharmacy and Canadian society made by these pharmacists as a consequence of their leadership and the positive profile they have brought to the profession.

CPhA's Founders

- George A. Burbidge
- Alexander Campbell
- W.A. Chapman
- John Cochrane
- Alexander Ferguson
- George E. Gibbard
- A.W.P. Gourlie
- Alfred J. Laurence
- John Hargreaves
- Samuel H. Hawker
- Robert Martin
- J.F. Roberts
- E.O. Steeves
- John E. Tremble
- Henry Watters

CPhA Centennial Pharmacists Cont'd

Bev Allen
André Archambault
Frank Archer
Fares Attalla
John Bachynsky
Rosemary Bacovsky
Pauline Beaulac
Sylvia Bell
Rosemarie Biggs
Herbert Binder
James Blackburn
Roy E. Boates
David W. Bole
T. Frederick Boyle
Donald Cameron
Vernon Chiles
J. Esmonde Cooke
Garry Cruickshank
Leslie Dan
Dale Dodge
Lisa Dolovich
John Downton
Gordon Duff
John Dyck
Anne-Marie Picone Ford
Horace J. Fuller
Benjamin Gant
Yves Gariépy
Philip Goldman
Ronald Guse
Kevin Hall
David Hill
Wayne Hindmarsh
F. Norman Hughes
Mervyn J. Huston
Clarence Jackman
Kay Jancowski
J. Frank Janes
Raymond Joubert
Jean-Yves Julien
Murray Koffler
William Labow

Claude Lafontaine
Diane Lamarre
Roger Larose
Keith Lawton
Denise Leclerc
Stanley Lissack
Beverly Lloyd
Robert E. Luke
Linda Lytle
Jessie I. MacKnight
Ronald MacLean
Fred Martin
Janine Matte
A. Whitney Matthews
Garth McCutcheon
Carol McKiee
William McLean
Finlay A. Morrison
Raymond Murphy
J. Randolph Murray
Robert Nakagawa
James J. O'Mara
Ann O'Toole
G. Roy (Pat) Paterson
Margot Priddle
Kenneth A. Ready
Betty Riddell
Bernard E. Riedel
Nancy Roberts
Victor Robichaud
John J. Ryan
Byron Sarson
Alfred C. Scales
Bruce Schnell
François Schubert
Malcolm Seath
Connie Sellors
Donna Shaw
Barbara Shea
Sydney Shrott
Edward B. Shuttleworth
Ingrid Sketris
Patricia Smith
Bernd Staeben
Perrin Statia
Roy Steeves
Ernest Stefanson
Gordon Stueck
Jack L. Summers
Frederick A. Tilston
Ross Tsuyuki
Trevor Watson
William Wensley
William Wilkinson
William Wilson
David Windross
Marita Zaffiro

CCAPP report to AFPC Council

2007 AFPC AGM MEETING
May 31, 2007, Hôtel Reine-Elizabeth
900 Boulevard René-Lévesque, Montréal, Québec

- **Executive of CCAPP:**
  President - Sylvie Marleau, Université de Montréal
  President Elect – Ray Joubert, NAPRA
  Past President - Dennis Gorecki, University of Saskatchewan
  Executive Director: David Hill

Entry-level Pharm D program standards

- The standards committee prepared a new set of standards for pharmacy schools in Canada transitioning to the PharmD curriculum as the first professional degree in pharmacy. The committee, including David Hill, Ray Joubert, Susan Mansour, Blair Seifert and Sylvie Marleau (Chair), prepared the first draft to be sent to stakeholders for comment over the summer 2007. If this consultation process proceeds smoothly, the standards will be presented to the board for approval in early September.

Pharmacy Technician Programs

- A standing committee on pharmacy technician accreditation (PTA) was created with the mandate of developing standards for the accreditation of pharmacy technician programs in Canada. This new CCAPP Standing Committee include representation from a number of following stakeholders including CPTEA (Canadian Pharmacy Technician Educators Association), CAPT (Canadian Association of Pharmacy Technicians), CSHP (Canadian Society of Hospital Pharmacists), CPhA (Canadian Pharmaceutical Association), NAPRA/PRA's (National Association of Pharmacy Regulatory Authorities and pharmacy regulatory authorities not represented by NAPRA), PEBC (Pharmacy Examining Board of Canada) and a pharmacist educator. The accreditation process for these programs will be similar to the current CCAPP accreditation procedures and the standards will be based on the recently approved *Educational Outcomes for Pharmacy Technician Programs in Canada* from CPTEA and the NAPRA competencies for pharmacy technicians at entry to practice. The PTA committee is working on the preparation of a draft of standards relevant to the CCAPP Pharmacy Technician Program Accreditation needs.

Standards for Inter-professionnal education

- CCAPP was invited to participate in a consultation on accreditation of inter-professional education, hosted by the Association of Faculties of Medicine of Canada in Ottawa last March. The face-to-face meeting was followed by 2 teleconferences and the preparation of a grant proposal that was sent to Health Canada. The proposal aims specifically to the development of a common set of guidelines on inter-professional education for the 6 health science disciplines (medicine, pharmacy, occupational therapy, physiotherapy, nursing and social sciences) involved in the project. We are expecting interesting follow-up in the next months.

International scene

- CCAPP was also active on the international scene with a benchmark study of the pharmacy programs at the Health Sciences Division of the Higher Colleges of Technology in Abu Dhabi and Dubai, United Arab Emirates in April.

CCAPP Site Visits in 2005

- Accreditation on-site team visits were held at University of Manitoba (November 6-8) and University of Toronto (November 20-22). Université de Montréal site visit will be in November 2007.

Respectfully submitted,

Sylvie Marleau, Ph.D

AFPC delegate to CCAPP

2006-07 Annual Report from the AFPC Delegate to the Canadian Council on Continuing Education on Pharmacy (CCCEP)
May 22, 2007

Current council members include:

Provincial Delegates
Garry Meek (NB) President
Susan Lessard-Friesen MB) – Past President
Anick Minville (PQ)- Vice-President
Lucy Rachynski (AB)
Ashifa Keshavji (BC)

Barbara Thomas (NF)
Bev Zwicker NS)
Della Croteau (ON)
Anick Minville (QC)
Aleta Allen (SK)

National Association Delegates
Yvonne Shevchuk (APPC)
Ginette Bernier (CFP)

Barry Power (CPhA)
Dale Wright (until February), Julie Scott (beginning March)(CSHP)

Executive Director – Arthur Whetstone

Summary of activities over the past year

Council meetings were held June 1-2, 2006 (Edmonton) and November 9-10, 2006 (Toronto). There were also a number of teleconferences held throughout the year. The next meeting will May 31 and June 1st, 2007 in Ottawa.

Dr. Arthur Whetstone joined CCCEP as the Executive Director in June 2006.

Activities undertaken by CCCEP over the past year include:

- a plan to establish a database of CCCEP-accredited programs
- development of a CCCEP accreditation process for certificate programs for pharmacists
- redesign of CCCEP accreditation process to include criteria and guidelines for programs delivered at a distance via a variety of technology (e.g. E-learning)
- a formal evaluation of the CCCEP Approved Provider Pilot Program
- introduction of a Learning Review Panel checklist and a revised accreditation review process
- accreditation of 146 programs (6.6% increase compared to last year)
- electronic submission of all programs for review
- the development of a privacy policy
- A proposal for an agreement between Canadian Association of Pharmacy Technicians (CAPT) and CCCEP regarding accreditation of pharmacy technician programs
- Review of bylaws in conjunction with governance model review

Strategic planning was initiated in May 2005. The 4 priority Key Strategic Areas (KSAs) for 2006-07 were identified to be:
1. Review and revision of the Governance System
2. The development of new markets and revenue streams
3. Improve Infrastructure and Operations

4. The review of concepts and practices of Continuing Education and potential new services

Strategic initiatives for each of these KSA's can be found in the Annual Report 2006 available on the website at www.cccep.ca

Dr. Whetstone represents CCCEP on the Task Force on a Blueprint for Pharmacy

Significant change continues for CCCEP. If you have questions regarding CCCEP, please do not hesitate to contact me.

Respectfully submitted,

Yvonne M. Shevchuk, PharmD. ,FCSHP
University of Saskatchewan

momentum
News from the Moving Forward Initiative
June 2007

MOVING FORWARD
Pharmacy Human Resources for the Future

Welcome to Momentum

Meet the *Moving Forward* Team

A partnership of eight national pharmacy organizations is working closely with additional pharmacy stakeholder associations, educators, regulators and employers on the *Moving Forward* initiative. Together, until March 2008, we will research and deepen our understanding of Canada's current and future pharmacy human resources (HR) requirements and issues. The eight organizations leading the *Moving Forward* initiative are:

- Canadian Pharmacists Association (Secretariat)
- Association of Deans of Pharmacy of Canada
- Association of Faculties of Pharmacy of Canada
- Canadian Association of Chain Drug Stores
- Canadian Association of Pharmacy Technicians
- Canadian Society of Hospital Pharmacists
- National Association of Pharmacy Regulatory Authorities
- The Pharmacy Examining Board of Canada

Pharmacy in Canada is changing in many important ways and a collaborative of leading Canadian pharmacy organizations has come together to research and analyze the human resources challenges that accompany this change. This initiative, named *Moving Forward: Pharmacy Human Resources for the Future*, will propose recommendations and strategies that will benefit patients, the pharmacy profession, and the health care system as a whole. *Momentum*, our quarterly newsletter, is designed to keep you and other stakeholders apprised of our plans, progress and accomplishments.

We hope that *Momentum* will also serve as an invitation for dialogue. As you discover the questions and principles that are driving the process and as you learn more about the many research projects we will use to inform our answers, we hope you will share your thoughts and ideas with us.

Our work is being backed by nearly $1.5 million of funding from the Government of Canada's Foreign Credential Recognition program.

momentum

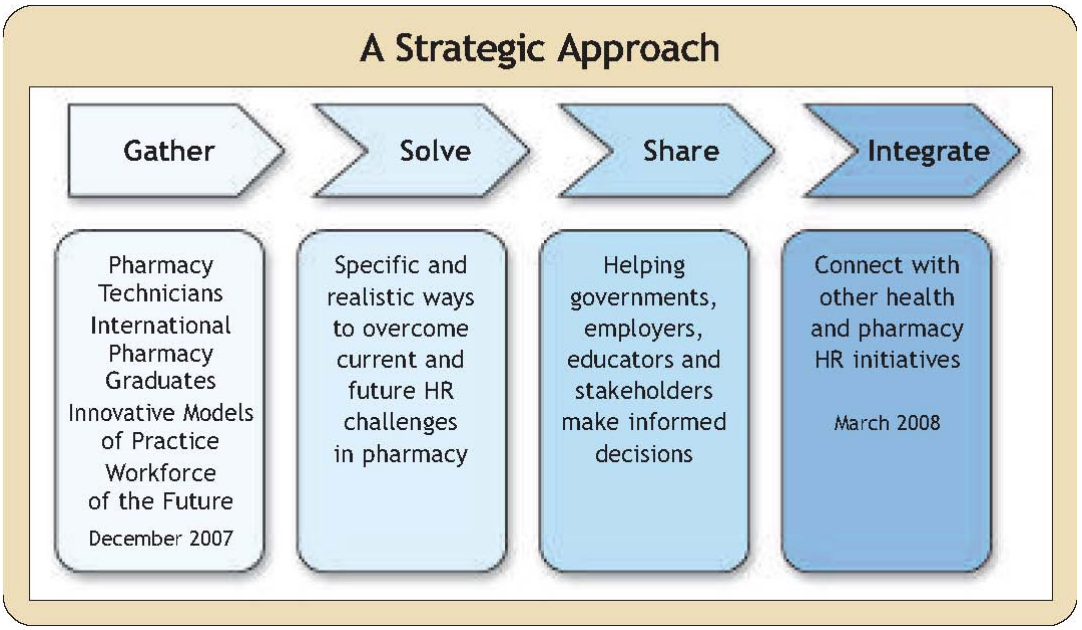
Four Steps Toward a Workforce Fit for Purpose

The *Moving Forward* team of experts and researchers has begun with important studies to gather human resources data and information. The objective is to better understand the current state of Canada's pharmacy workforce, and to identify and analyze the short- and long-term human resource challenges facing the pharmacy sector, including those faced by international pharmacy graduates (IPGs). **This research work will be completed by December 2007.**

Moving Forward will then share the findings and recommendations on a broad scale, to allow pharmacy and health human resources planners make informed and strategic decisions for the future.

Ultimately, *Moving Forward* will contribute to a truly integrated and pan-Canadian human resource plan for all health professions. **This consultation and refinements of our recommendations will be completed by March 2008.**

With the results of this research in hand, *Moving Forward* partners and stakeholders will work collaboratively with the profession, governments, educators, employers and other health care sectors to develop specific and realistic recommendations that will help overcome current pharmacy human resources challenges.



National Study on Pharmacy Technician Workforce:

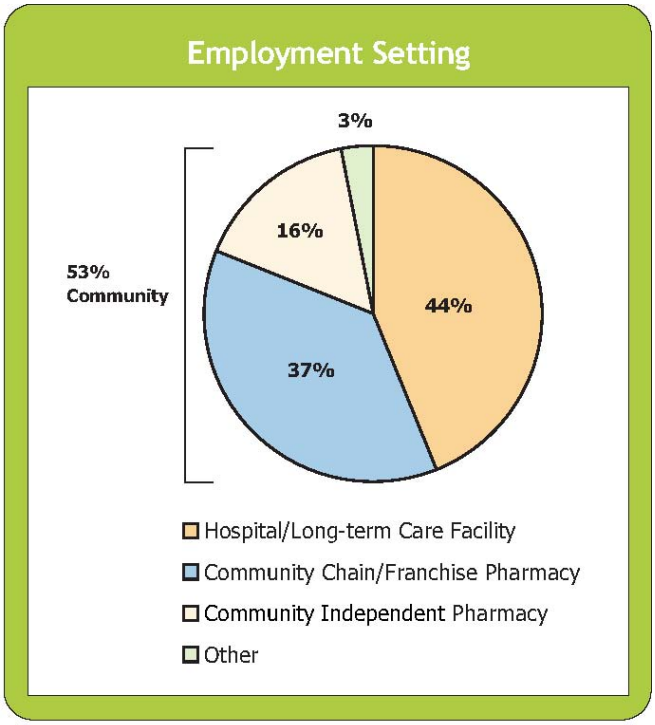
Roles, Demographics and Attitudes

Moving Forward and Vision Research (a division of Delta Media) have now completed and published descriptive reports from the first ever national demographic and attitudinal survey of pharmacy technicians in Canada. The findings from this important study include insights on the size and structure of the pharmacy technician workforce in Canada, and what pharmacists and pharmacy technicians think about the role, responsibilities, and credentialing of pharmacy technicians.

Pharmacists and technicians both cited a lack of job or career growth opportunities for technicians as a key issue.

The study included responses from 2,087 practicing pharmacy technicians and assistants. In addition, a further 973 pharmacists who are managers or owners of their pharmacy (drawn from a sample of 3,000) completed a separate questionnaire. Together, the surveys of pharmacy technicians and of pharmacists generated considerable amounts of data and many important perceptions. Some national highlights of the study include:

- 94% of pharmacy technician respondents are women, with an average age of 38.7 years.



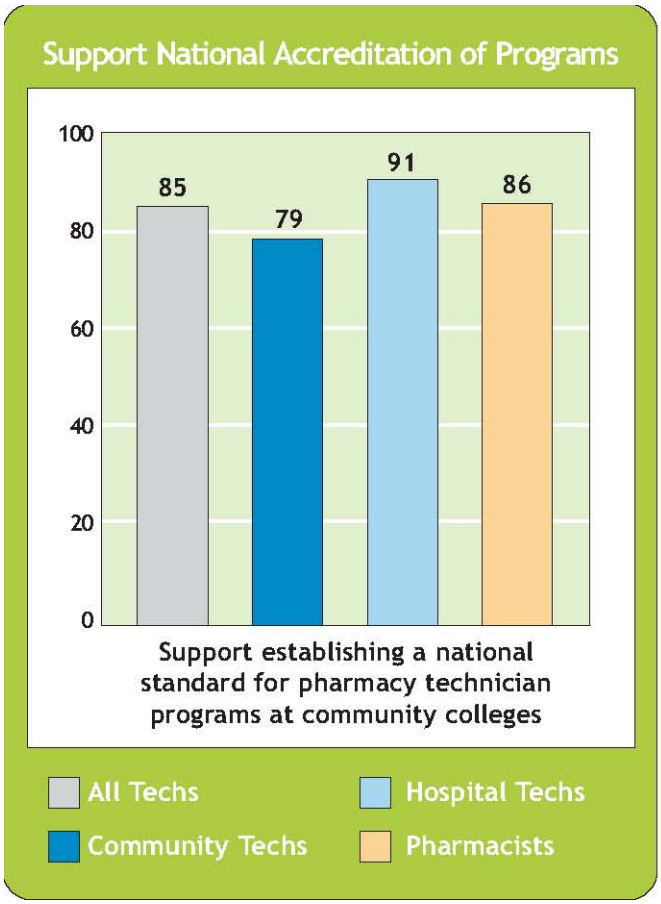
- 47% of pharmacy technician respondents work in hospitals and other related facilities; 37% in chain or franchise community pharmacies and 16% in independent community pharmacies.

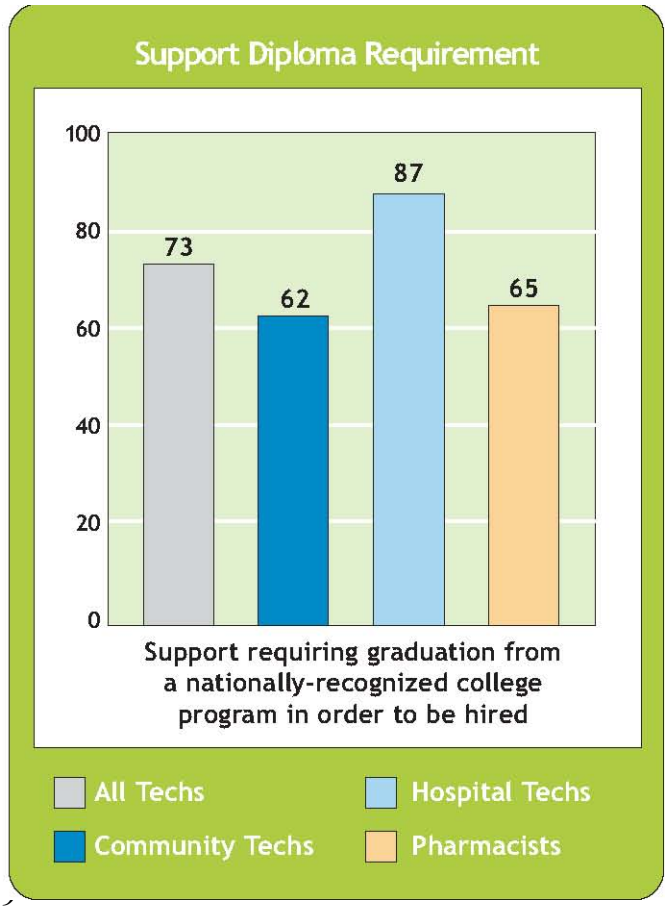
- 64% of technicians indicated a career or community college diploma as their highest level of education, while 20% indicated university and 16% reported high school.

- The ratios of pharmacy technicians to pharmacists reported by respondents were lower than expected. Respondents practicing in community settings reported between 1.00 and 1.13 technicians per pharmacist, while respondents hospital settings reported between

- While most technicians reported they are quite satisfied with their jobs on a number of variables, certain differences emerged between the opinions of hospital-and community-based technicians. For example, 85% of community technicians are satisfied with the way their technical tasks are shared with pharmacists, while only 69% of hospital technicians are similarly satisfied.

- Pharmacists and technicians both cited a lack of job or career growth opportunities for technicians as a key issue. Heavy workloads are also an important factor. 45% of technicians indicated they have "much too much" or "too much" to do, and 55% of pharmacists indicated they are similarly overloaded.





Technicians and pharmacists alike want national educational standards. More than 85% of pharmacists and technicians expressed support for national accreditation of community college programs. More than 65% of pharmacists and technicians expressed support for a community college diploma requirement for pharmacy technicians.

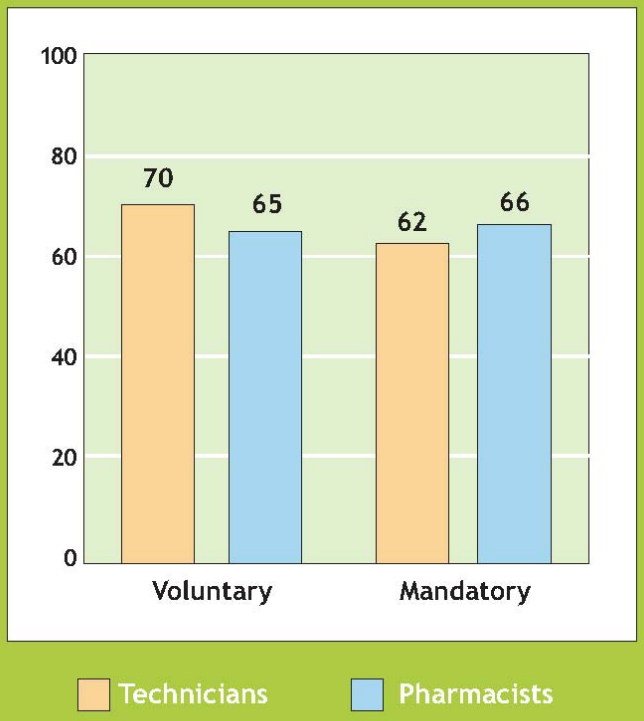
Pharmacy technicians are highly interested in moving towards regulation, even though it may require additional training and expanded duties. More than 8 in 10 (84%) pharmacy technicians expressed interest in becoming a Regulated Pharmacy Technician, of which an impressive 54% stated they would be "very interested".

Pharmacists appear prepared to support their technicians' quest for regulation. 85% of respondents reported they would likely delegate more responsibilities to their regulated pharmacy technicians, and 88% would likely provide mentoring.

Certification of pharmacy technicians, whether voluntary or mandatory, was also positively received by respondents. 70% of pharmacy technicians and 65% of pharmacists supported voluntary certification, while 62% of pharmacy technicians and 66% of pharmacists supported mandatory certification.

The findings generated by this research present many opportunities for more in-depth exploration on pharmacy technicians' attitudes regarding their future.

Support for Voluntary and Mandatory Certification



The findings generated by this research present many opportunities for more in-depth exploration on pharmacy technicians' attitudes regarding their future. *Moving Forward* will be conducting focus groups to investigate some of these areas in the spring and summer of 2007.

To download your copy of the entire report of findings from this study, please visit the *Research and Reports* section of the *Moving Forward* website at **pharmacyhr.ca.**

What's Next?

We are in the midst of our investigation of the challenges surrounding the integration of international pharmacy graduates into Canadian pharmacy practice, and have just launched a series of research initiatives exploring how pharmacy will be practiced in the near future. Visit the website **pharmacyhr.ca** for the most recent updates on this work.

Momentum is published by the *Moving Forward* Secretariat.

For more information on the *Moving Forward* initiative and the results of its research projects, or to provide your thoughts on the topics covered in this newsletter, please go online at pharmacyhr.ca or contact the Office of the *Moving Forward* Secretariat:

Canadian Pharmacists Association
1785 Alta Vista Drive, Ottawa, ON K1G 3Y6
Attention: Heather Mohr, Project Manager
1-800-917-9489, ext. 248
hmohr@pharmacists.ca

Canada Funded by the Government of Canada's Foreign Credential Recognition Program.

AFPC Annual General Meeting
Montreal, Quebec
May 31, 2007

Report on the Blueprint for Pharmacy Task Force
Terri Schindel, University of Alberta

Please accept this report on the Blueprint for Pharmacy Task Force and my regrets for the Annual General Meeting in Montreal.

I am serving as the AFPC representative on the Blueprint for Pharmacy Task Force, led by Dr. David Hill (Chair) and resourced by Ms. Janet Cooper and Marie-Anik Gagne, CPhA. The Task Force has met twice this year - February (Ottawa) and May (Toronto). I attended both meetings and will participate in a panel discussion at the CPhA Townhall meeting on June 2, 2007. The Taskforce has made excellent progress and has produced a Blueprint document ready for dissemination.

The Blueprint document will be officially launched at the CPhA Townhall. CPhA will provide the Blueprint to AFPC and other stakeholders prior to the Townhall meeting in Ottawa. Individual AFPC members will have the opportunity to provide feedback on the Blueprint document via an online survey. In addition, CPhA is also inviting feedback from the stakeholder organizations. I will work with Dr. Abbott to identify a process to gather feedback from the various Faculties through the AFPC representatives.

If you have any questions, please contact me at any time. Thank you again for the opportunity to contribute to this Task Force.

Respectfully submitted,

Terri Schindel
tschindel@pharmacy.ualberta.ca
780-492-6134
May 22, 2007

Pharmacy Practice Research

Report to AFPC AGM
May 31, 2007

There have been no further conference calls of all the participants of the *Working Better…Together: Setting the Direction* Workshop held in Ottawa, Ontario on November 6-8th, 2005.

However, work in the area of pharmacy practice research has continued.

1. The Canadian Pharmacy Practice Research Group (CPPRG) continues its work in this area:
   - They were successful in lobbying the CPhA's Centennial Foundation Committee, to consider allocating Foundation funds for the *Working Better….Together* program.
   - They will be holding "An open forum for community pharmacists about practice research" at the CPhA Conference in Ottawa in June
   - They continue to publish a newsletter which highlights the activities of pharmacy practice researchers

2. CSHP has increased their interest in primary care and is partnering with CPhA to form a joint Primary Care Pharmacists PSN. Membership applications can be made directly to either organization (for CSHP: www.cshp.ca/cshpNetwork/psn/index_e.asp; for CPhA: www.pharmacists.ca/primary care)

Respectfully submitted,

AMWhelan

Anne Marie Whelan
May 16, 2007

N E W S

PEBC UPDATE

L E T T E R

Vol. 11 No. 1 March 2007

2007 Annual Board Meeting Summary

INSIDE

PEBC UPDATE
The Pharmacy Examining Board of Canada

Contributor
J. Pugsley

The Pharmacy Examining Board of Canada held its 2007 Annual Board Meeting on February 24, 2007 in Toronto. Standing committees met over the 3 days preceding this meeting. The following are highlights of issues addressed and recommendations made by the Board. For further information, you may contact Board appointees, President Gary Cavanagh, or Registrar-Treasurer, John Pugsley.

Board Appointments

New appointments to the Board taking effect at the close of the Annual Board Meeting are:

New Brunswick Pharmaceutical Society
Stephen Thompson
Nova Scotia College of Pharmacists
Trevor Simmons
PEI Pharmacy Board
Jeff Jardine
Association of Faculties of Pharmacy -
Lavergne Vercaigne (Effective July 1, 2007)

2007 Executive Committee

President -Gary Cavanagh

Vice-President -Jean-François Guévin

Past-President -Kathy McInnes

Executive Members
Darcy McLurg
Brenda Schuster

2006 PEBC Statistics

PEBC Register:

There were 1175 names added to the Register by examination in 2006 (1026 in 2005).

Qualifying Examination:

A total of 1687 candidates wrote the Qualifying Examination-Part I (MCQ) in 2006, as compared to 1741 in 2005. A total of 1601 candidates took the Qualifying Examination-Part II (OSCE) at thirteen sites across Canada in the Spring, and at seven sites in the Fall, compared to 1549 in 2005.

There were a total of 17 candidates who were assessed for non-certification purposes (11 for the Alberta College of Pharmacists, 4 for the College of Pharmacists of British Columbia, 1 for the Manitoba Pharmaceutical Association and 1 for the Ontario College of Pharmacists).

Evaluating Examination:

There was a decrease in the number of candidates writing this examination – 953 in 2006, compared to 975 in 2006.

Document Evaluation:

A total of 801 applicants in 2006 were ruled acceptable for admission into the Evaluating Examination, compared to 854 in 2005, and 952 in 2004.

Moving Forward - Pharmacy Human Resources for the Future

Dr. Linda Suveges serves as the PEBC representative on the Moving Forward Management Committee. She is also a member of the Research Advisory Panel for the Study. PEBC is pleased that the study is progressing rapidly

Pilot Entry-to-Practice Examination for Pharmacy Technicians

J. Pugsley provided a report on the first meeting of the Steering Committee for the Pilot Entry-to Practice Examination for Pharmacy Technicians. OCP, ACP and CPBC are collaborating in the development of the examination. The Steering Committee consists of representatives from CAPT (3), CPhA, CSHP, CCAPP, NAPRA, the Canadian Pharmacy Technician Educators Association (CPTEA), OCP, PEBC, ACP and CPBC. Garth McCutcheon, representing CPhA, chairs the meeting. The Committee will serve as an advisory committee to guide PEBC in the development and piloting of the examination. Terms of reference for the Committee were approved. The Committee received an overview of the Pilot. Members discussed the OCP survey of pharmacy technicians and the Moving Forward Environmental scan of pharmacy technicians. An orientation to the principles of testing was provided to the Committee to assist in the review of the research for the Pilot. Important issues to consider in test development were also discussed. The process for establishing the examination blueprint was briefly reviewed. NAPRA's Entry-to-Practice Competencies for Pharmacy Technicians will form a foundation for the bluepint. The CPTEA Educational Outcomes for Pharmacy Technician Programs will also be reviewed to consider important information that could enhance the blueprint. It was recommended that PEBC consider the development of an evaluating examination for on-thejob trained technicians, graduates from non-accredited study programs and for international candidates. The Board approved the recommendation to develop an evaluating examination.

Qualifying Examination-Part II (OSCE)

In 2006, additional tracks were added in several examination centres for the OSCE, in order to accommodate the increasing number of international pharmacists seeking licensure in Canada. For the Fall 2006 OSCE, an additional site was established in Ottawa.

PEBC continues to conduct research and make presentations on the OSCE. In 2006, research was presented at the 12th International Ottawa Conference on Clinical Competence, in New York City.

Committee on Examinations

At the February 2007 meeting, the Committee on Examinations reviewed the policy on the number of examination attempts and remediation for the Qualifying Examination. In April 2006, PEBC undertook further consultations with the provincial regulatory authorities and NAPRA. Based on the feedback, a consensus on the number of attempts was not reached. Alberta has recently passed regulations that restrict the number of attempts on a registration examination to four attempts. Due to the continued lack of consensus among PRAs, the Committee on Examinations agreed that that there be no change to the current policy on the number of attempts allowed for the Evaluating Examination or the Qualifying Examination (QE), or in the remediation required before the fourth and final attempt at the QE.

However, the Committee proposes that the PEBC modify its procedures for providing information to unsuccessful candidates, so that more information and useful suggestions about how to prepare for the next examination attempt be provided to candidates. This could be provided as early as completion of the Evaluating Examination, and the feedback and recommendations for remediation and preparation should be provided to candidates after each failed attempt at the Qualifying Examination.

Board Meetings

The next Board meetings are tentatively set for October 26-27, 2007 (Mid-Year and Committee Meetings).

USP Representative
AFPC Report on USP Membership
June 2007

1. Background

The United States Pharmacopeia is a non-government non profit organization.
The United States Pharmacopeia–National Formulary (USP–NF) is a book of public pharmacopeial standards. It contains standards for medicines, dosage forms, drug substances, excipients, medical devices, and dietary supplements.
The major pharmacopeias worldwide are USP, European Pharmacopeia and Japanese Pharmacopeia. Canada has currently no national Pharmacopeia.
AFPC is an invited representative to the USP Convention. The USP Convention is a meeting that takes place every 5 years (the next meeting is in 2010). AFPC will be an invited member in the 2010 convention. At the convention the members of the USP decide by passing resolutions which standards should be developed in the next 5-year cycle.

2. Comment

The USP wants to increase its visibility and communications with its members. This will ensure that members can have input into USP activities between the conventions. USP will come up with a new plan on how to communicate more effectively with its members in the near future.

3. Current USP activities

USP to Host Free Member Webinar on Patient Safety

In an effort to create better opportunities for member awareness of USP activities, USP is planning a series of webinars focused on various USP programs. The first of these, a 60-minute interactive presentation about USP's programs in the area of patient safety, is scheduled for July 18 from 11:00-12:00 EDT. Highlights will include: an overview of USP's Healthcare Quality and Information and Reporting Programs; activities in Patient Safety Standards; Safe Medication Practices and Research; and Practitioner Programs and Services.

USP Proposes Revisions to USP- NF General Notices and Requirements

Members who compound or refer to the *USP-NF* or *Food Chemical Codex (FCC)* in their practice or work will want to pay particular attention to the information that follows. The *General Notices and Requirements (General Notices)* in the *USP-NF* and the *General Provisions and Requirements* in *Food Chemicals Codex* are crucial to understanding the standards presented in these compendia. Yet these texts are often overlooked and can be difficult to navigate.
USP proposes to update the *General Notices* with the goal of increasing their overall clarity and ease of use. USP staff has completed an initial draft of the revision for review and consideration by stakeholders and by USP Expert Committees. The proposed revisions are intended to:

- Provide clearer definitions, navigation, how-to, and when-to information;
- Include new USP initiatives, such as *FCC*, pending standards, and Standards for Articles Legally Marketed Outside the US (SALMOUS);
- Update language (some of which dates from the 1920s), and standardize language among the compendia; and

- Refocus the section on essential information by moving other material to the *Mission and Preface* or to a general chapter.

USP seeks and welcomes comments. The first draft of the proposed revised and consolidated *General Notices* will be published on USP's website www.usp.org for public comment beginning **May 21 through August 31, 2007**. Throughout the summer, USP Expert Committees also will review the draft, comment on the proposal, and consider related changes that may be necessary. For detailed information on specific proposed changes, for timelines, and to comment, please visit USP's website starting May 21.

USP Revises Rules and Procedures for Council of Experts

As members may know, the Council of Experts (CoE) is the volunteer body that makes scientific and standard-setting decisions for USP. The Rules and Procedures of the CoE (Rules) govern the activities of the CoE and related bodies and sets forth USP's standard setting processes. In an effort to better facilitate these activities and processes, the CoE preliminarily approved a series of changes to its Rules during its meeting at the 2007 Spring Governance Meeting held in Scottsdale, Arizona in April.

The proposed changes include the addition of provisions relating to the *Food Chemicals Codex* that include a web based public notice and a comment period, and revised stakeholder project team provisions giving project teams more autonomy and decreasing the involvement of USP staff and volunteers. In addition, the revisions help clarify and more fully explain various aspects of USP processes and procedures. The proposed revised Rules are now available for review and comment by the Convention Membership. The comment period will remain open through **Thursday, June 21, 2007**.

To review the Rules, Members should visit the Member Page of the USP website at www.usp.org. To access the Member Page, select *Governance* under *About USP* on the left navigation bar, and click on the *Member log in* link. The User Name is ***"convention"*** and the password is ***"publichealth"***. Send your comments using our Member email: Membership@usp.org.

USP Board of Trustees Meeting Summaries Available on Member Page

USP's Board of Trustees (BoT) meets four times per year to consider and ultimately make business and fiduciary decisions for the organization. Following these meetings, a summary is released in order to keep Members apprised of the Board's work and the decisions Trustees have made to guide USP policies, finances, and strategic direction. See the Member Page of the USP website at www.usp.org (log in instructions above).

USP Annual Scientific Meeting 2007

Quality of Manufactured Medicines, Quality of Care and International Health

The USP Annual Scientific Meeting (ASM) 2007 will be held on September 24-28, 2007, at the Hyatt Regency Tampa in Tampa, Florida. The ASM is an excellent opportunity for Members to interact with USP scientific staff and members of the Council of Experts. Participants will learn about USP's approaches to the Quality of Manufactured Medicines, Quality of Care, and International Health. Engage in discussions that will help establish standards, set priorities, and shape USP quality requirements for the future. Learn how these standards could impact your organization and your profession. In addition to the variety of tracks noted above, pharmacopeial and other educational offerings will be available. Online registration can be completed by visiting http://ems.intellor.com/?p=201124&do=register&t=12.

Details regarding the agenda, track and session descriptions, and registration information may be obtained by visiting http://www.usp.org/eventsEducation/asMeeting/?h.

AFPC Representative to USP
"Loebenberg, Raimar" rloebenberg@pharmacy.ualberta.ca
June 30, 2007.

ASSOCIATION OF FACULTIES OF PHARMACY OF CANADA
Annual General Meeting, May 31, 2007
Fairmont Queen Elizabeth Hotel, Montréal

EXECUTIVE DIRECTOR'S REPORT:

AFPC seeks to advance the interests of academic pharmacy in Canada by supporting promoting and recognizing innovation, excellence and leadership in pharmacy education, research and scholarly activity. Since 2004 when AFPC Council developed their strategic plan, the organization has been realistically faithful in committing to the goals of that plan, reviewing the progress of ongoing initiatives and setting new goals and objectives appropriate to budget and available resources.

As a result, AFPC can take comfort in the fact that several recent activities have contributed significantly to fulfilling many of the recent goals of the strategic plan. For example, the definition and approval of the educational outcomes appropriate to setting accreditation standards for the entry-level Pharm D program is a timely activity for the 2007 initiation of this degree program at the Université de Montréal. Work of the task force to develop a guide for the evaluation of pharmacy programs is intended to support Deans and Faculties in assuring that the knowledge, skills and expertise of pharmacy graduates in Canada is maintained at the highest level. The creation of databases for research and teaching faculty in our ten Faculties of Pharmacy will provide AFPC members and external groups with the ability to easily identify and access faculty members with the required expertise and skills in teaching and research.

These activities confirm that AFPC seeks to be recognized as the prime association and true representative of pharmacy academic affairs in Canada. Of course, the achieved recognition would not be possible were it not for the hard work and devotion of AFPC council and many committed faculty members who share the vision of pharmacy and volunteer to advance the quality and scope of academic pharmacy in this Country. It is my pleasure to recognize these individuals at every opportunity and in particular within this annual report.

Finances:

The Association remains financially secure and has reserve funds available to support the traditional programs of the organization for one year without having any tangible income. The unfortunate reality is there is very little money for the Association to take on new initiatives without dipping into that reserve. Last year (2006) the Association experienced a small deficit and a similar outcome is predicted for the proposed budget of 2007. This means a fairly conservative approach is required for the yearly operation of the organization. There has been some growth in income through Faculty fees as enrollments increase in many of the Faculties. We now see a leveling off of enrollment increases and once the University of Waterloo comes on stream in 2008, Faculty fee revenue can be anticipated to be fairly constant.

A major disappointment is a recent drop in affiliate membership from the industry. There are many possible reasons for this but one that clearly stands out is the loss of contact with individuals in industry who clearly identified with AFPC. This provides an opportunity for the new fund raising committee to begin activities by establishing new contacts in the Canadian Pharmaceutical Industry and to cement relationships with those that we presently have. Last year there was a glimmer of hope that the major chains would begin to support affiliate membership in AFPC but this has failed to materialize in 2007. There is certainly work to be done by stewarding the chains to recognize the values of supporting pharmacy academia at the national level.

The ideal financial security for AFPC would be to achieve consistent long term funding for the ongoing operations of AFPC and then fund raise for special projects. Consistent long term funding might also provide for a permanent office for AFPC in Ottawa with ready access to government and other national pharmacy and health professional organizations. With pharmacists in Canada striving and in fact gaining ground in becoming primary healthcare service providers, the politics of educating pharmacy professionals for this role may necessitate a future strong presence of AFPC in the nation's capital.

Conference revenue is becoming a source of income that could be effectively used to support special projects. Thankfully, sponsorship of the conference in the last three years has been reasonably generous in spite of some downturns in the brand name industry. By keeping conference costs contained without sacrificing the content and quality of the event, AFPC has the opportunity to develop the conference as a major source of funding.

Conference Activities:

The **2006 AFPC Conference** (June 2-4) in Edmonton with Sharon Mitchell as chair proved to be a highly successful and well-attended event. The theme of the conference was "Preparing Pharmacists for the Future" an appropriate theme given that the Alberta Government had just announced that pharmacists were to be given prescribing rights. Dean Dick Gourley of the University of Tennessee was the keynote speaker in the Teacher's Conference providing an excellent background to the conference theme with his talk on "The Future of Pharmacy – Where are we going. How do we get there?"

A unique feature of the AFPC Conference in 2006 was the research day held jointly with the Canadian Pharmacists Association Conference on June 4. The morning session was devoted to ten speakers on pharmacy practice research topics consistent with preparing pharmacists for the future. This session proved to be highly popular with attendance overflowing. This result was most gratifying to AFPC because our attempts to showcase pharmacy practice research at our annual conference were now being recognized. Future joint meetings with CPhA will undoubtedly explore a similar format for the PPR session.

Another first for the Edmonton Conference was the showcasing of research activities of the host Faculty. Ross Tsuyuki chaired the afternoon session highlighting the research activities of the Centre for Community Pharmacy Research and Interdisciplinary Strategies (COMPRIS). Again the session was well attended and was an excellent conclusion to the joint research day.

As anticipated, poster presentations in Edmonton were up with 41 posters in 4 research categories. This was the first year for the **AFPC-Whit Matthews Graduate Student Poster Award** and this may have had some influence on the number of submitted abstracts from graduate students, most of who were from the University of Alberta.

AFPC Conferences do not lack for variety. For this year's event in Montreal (May 30-June 2, 2007) AFPC is meeting jointly with the Canadian Society for Pharmaceutical Sciences (CSPS) and the International Pharmaceutical and Biomedical Analysis (PBA) group. This is the third time that AFPC has met in the same location as CSPS, however, this is the first year of a truly joint conference. A common plenary session opens the first full day and registrants are then free to attend any session of the three conference organizations. AFPC poster abstract numbers total a new high of 56 and there will be two full days of a joint poster session. Dan Thirion, AFPC Conference Chair and Sylvie Marleau of the Université de Montréal are to be congratulated for what appears to be an excellent conference program.

Looking forward to 2008, AFPC will be meeting jointly with the American Association of Colleges of Pharmacy (**AACP**) in Chicago on July 19-23. The last time that AFPC met with AACP was in 1986 in Portland Oregon. Lalitha Raman-Wilms, Andrea Cameron and Zubin Austin (University of Toronto) and Nancy Waite (University of Waterloo) are representing the host Faculties that are planning the AFPC sessions of the AACP Conference. Further planning will take place during the AACP meeting in Orlando this July. AFPC is looking forward to this unique opportunity to demonstrate some of the current initiatives occurring in Canadian pharmacy faculties.

In 2009 our expectations were that AFPC would hold a joint conference with CPhA in Halifax. This would fulfill a commitment of AFPC to meet with CPhA every 3 years. Confirmation of the joint meeting has yet to occur.

AACP Meetings in San Diego, July 7-11, 2006: President Anne Marie Whelan brought greetings from AFPC to the House of Delegates meeting of AACP. Past president Zubin Austin (Toronto) along with Wendy Duncan-Hewitt (Auburn) received the Rufus J. Lyman Award for the best publication in 2005 in the American Journal of Pharmacy Education. Several attendees from Canada along with representatives from Japan, Thailand and Lebanon met with Executive Vice President Lucinda Maine, President Marilyn Speedie and President Elect Cindy Raehl. AACP is interested in strengthening international communications and outreach. Anne Marie Whelan and Frank Abbott also met with Lucinda Maine to begin planning for the joint meeting of AFPC and AACP in Chicago in 2008.

Awards:

AFPC is still smarting a bit from the loss in 2005 of two major awards that had quite a significant impact on the budget. The former Canadian Foundation for Pharmacy Research Poster Awards were taken over by AFPC to maintain the rich experience of having nine (soon to be ten) excellent students from our Faculties attend, present their research, and compete for a best poster award. AFPC Council was unanimous that this award be retained.

On the good news side Awards Committee chair, Roy Dobson reports that Wal-Mart Canada has recently agreed to fund the AFPC/Wal-Mart Canada Conference Scholarship Award that will provide $ 10,000 each year to help fund 10 students, one from each of the member Faculties, to attend the annual AFPC Conference. The purpose of the proposed award reads "AFPC and Wal-Mart Canada recognize the challenges that Faculties have in recruiting outstanding new faculty to fill positions as enrollments expand and curricular changes demand expertise in the teaching of primary health care to pharmacy students at all levels. The goal of the scholarship program is to strengthen the skills and commitment of each of the scholarship winners to a career in academic pharmacy through their participation at the AFPC Annual Meetings and Conference."

The Wal-Mart Canada Conference Scholarship Award is patterned very closely to that of the AACP – Wal-Mart Annual Conference Scholarship Program in the USA. We are most appreciative to AACP Executive Vice President, Lucinda Maine who was very supportive in helping AFPC craft the wording of this new award. In the United States, this will be the third year of the AACP – Wal-Mart Annual Conference Scholarship Program and by all accounts the award has been highly successful.

It is anticipated that final approval of the content and wording of the Wal-Mart Canada Conference Scholarship Award will take place at this year's annual council meeting. Wal-Mart Canada representatives have been invited to attend. The inauguration of the Canadian award is expected to

occur in 2008 at the joint meeting of AFPC and AACP in Chicago. Does it not seem appropriate for such a joint meeting that students from the USA and Canada will be able to attend this conference by sharing a common award from a generous international sponsor?

Regarding awards, this year is the 100th anniversary of the Canadian Pharmacists Association. To celebrate the centennial, CPhA called for nominations for the **CPhA Centennial Pharmacists Award**. This award is intended to recognize individuals living and dead who were leaders and builders of the profession and who have made significant contributions to pharmacy during the past 100 years. This spring, AFPC took a proactive role by nominating a number of individuals and providing information on former academics that CPhA regarded highly for the award. I am pleased to report that a sizable number of present and former academics will be awarded the CPhA Centennial Pharmacists Award at this year's CPhA Conference, June 2-5, 2007 in Ottawa. I would like to thank all of the AFPC council members and other faculty members who have so generously helped in the nominations.

Communications and Web Site:
Last year I reported on significant positive changes to the AFPC web site that included the addition of the French language mirror site and web pages for the Association of Deans of Pharmacy of Canada. Projects in 2006 –2007 consisted of working at finishing the research and teaching databases for eventual posting on the site and an attempt was made to create web pages that would showcase PEP Canada activities and allow information sharing among their members. The latter project stalled because of a lack of sponsorship. PEP Canada co-chair Annie Lee is now attempting to have the web pages created in the Leslie Dan Faculty of Pharmacy in Toronto with the intent of eventual transfer to the AFPC web site.

The research database is now essentially complete and ready for posting on the web site. Once the search routines are finalized the research database information should go live. Communications chair, Simon Albon was hoping to announce this development at the Annual Meeting in Montreal. Again, I would like to recognize the hard work and dedication of Sylvie Marleau of the Université de Montréal who has been so instrumental in creating both the research and teaching databases.

While there have been significant additions of valuable information to the web site there are nagging problems of website administration that have yet to be fixed. The updating of information is not as good as it should be and someone dedicated to monitoring and reporting the gaps and deficiencies of the web site information would be highly desirable. Translation of newly added web site information into French is just not happening and it is not obvious how this problem can be rectified. Other organizations such as CPhA who report in both languages spend on average 24 cents per word for translation. AFPC cannot afford this type of expense yet some alternative to having the translations done on a timely basis should be found. The communications committee and the executive should see this as a priority for the coming year.

Educational Outcomes for an Entry-level Doctorate of Pharmacy Graduate in Canada: This document was approved in 2006 with the proviso that minor changes be reviewed, editing be finalized, and the document be supplemented with levels and ranges. The final review and editing are now complete and the document should be made available on the AFPC web site following the 2007 AGM. Susan Mansour of Dalhousie University was chair of the committee and we owe her a great deal of thanks for staying the course on this task. Drafting of the levels and ranges for the educational outcomes for the entry-level Pharm D degree is still an uncertainty. Finding a suitable writer and cost considerations were major factors in not being able to complete this exercise during

the current year. As of this moment, a suitable budget for this task needs to be created. It was made clear at the midyear that while the levels and ranges are valuable to educators, their absence should not stop progress on implementing the entry level Pharm D degree.

PEP Canada:

Pharmacy Experiential Programs Canada or PEP Canada is the outcome of recommendations contained in the Structured Practice Experiential Programs (SPEP) Task Force report of 2004. PEP Canada is comprised of experiential practice coordinators from each of the ten Faculties. Harriet Davies of Dalhousie University and Annie Lee of the University of Toronto are the co-chairs. Last year in Edmonton, the group worked at completing their strategic plan and to begin setting action items and priorities. Stakeholder groups CACDS, CAPSI, CSHP, CCAPP, CPhA and NAPRA were invited for an information session at the Edmonton meeting. AFPC is intent on having PEP Canada as a special interest group within the Association. The group would meet formally during the AFPC Annual Conference and the Deans agreed at their annual meeting in 2006 to fund their representatives to attend. Annie Lee (Toronto) and Cheryl Cox (Alberta) will be making a formal presentation on Pharmacy Preceptor Development Strategy as part of the 2007 Conference program. The group was also requested to participate in the AFPC portion of the AACP meetings next year in Chicago.

Program Evaluation Guide Task Force:
Last year at our meeting in Edmonton, the Deans approved a proposal from AFPC to produce a program evaluation guide for use by the Faculties to meet accreditation standards. A budget has been provided and Ingrid Price, chair of the education committee together with David Fielding at the University of British Columbia began work on the project. David Hill, executive director of CCAPP, the accrediting body, was consulted on what the key elements of a program evaluation guide might look like. The project has had a bit of a slow start but work throughout this summer and a meeting with the working group representatives from the Faculties is planned for this fall. It is anticipated that a report to the Deans will be available for their annual meeting in October.

Blueprint for Pharmacy Initiative:
A blueprint for action for the pharmacy profession in Canada is an initiative being led by the Canadian Pharmacists Association along with full support from major pharmacy organizations in this Country. A meeting of stakeholder groups was held in Ottawa in June of 2006 at which AFPC President Anne Marie Whelan, ADPC President Bob Sindelar and myself attended. Following that meeting, a Task Force was formed to be responsible for the overall development of the blueprint. David Hill is the chair of the Task Force. AFPC and ADPC are represented on the Task Force by Terri Schindel (Alberta) and Dean Dennis Gorecki (Saskatchewan), respectively. Not surprisingly, education is a major component of the blueprint. A forum on the Blueprint initiative is scheduled for the CPhA meeting in Ottawa on June 2, 2007 at which AFPC representative Terri Schindel will make a short presentation. The blueprint document is to be revealed at this time and will then be sent out for consultation. AFPC members will have ample opportunity to comment on the education section as well as other parts of the document.

ADPC Meetings:

The **Annual Meeting of ADPC** was held in Niagara on the Lake, Ontario, October 13-17, 2006. A significant part of the meeting was devoted to strategic planning and advocating for academic pharmacy. Priorities were considered to be where was the profession headed, what financial support do we have for academia and the profession to pursue this track and the National Pharmaceutical Strategy. Emphasis was placed on having a clear but strong position statement from the Deans that could be shared with key stakeholders. The theme of moving the profession forward was timely given the blueprint for pharmacy initiative on which ADPC has representation. On the business side academic program evaluation and developments in experiential education were topics of business that were pertinent to AFPC. Distribution of the USP Pharmacist's Pharmacopoeia was discussed. Faculty reports and benchmark data were shared among the ten Faculties. New buildings and the promise of new facilities were often described. Class sizes continue to grow.

The Deans met with CCAPP new executive director, David Hill, who outlined major CCAPP projects and what changes to accreditation procedures were being considered. PEBC Registrar-Treasurer John Pugsley provided statistics on registrations and attempts at the qualifying exam. The OSCE is being used more frequently for reentry of pharmacists to practice.

The ADPC midyear meeting was held in Toronto, February 1-2, 2007. The meeting was held in the striking new Leslie Dan Faculty of Pharmacy building on the University of Toronto campus. Stakeholder meetings included Rav Kumar of GlaxoSmithKline who is president elect of the Canadian Society for Pharmaceutical Sciences (CSPS). Rav spoke to new developments for CSPS as well as issues and opportunities related to Rx & D. Nadine Saby, the new president and CEO of CACDS and Alan Malek, VP Pharmacy for CACDS met to discuss common issues to ADPC and CACDS.

New Deans: Pierre Moreau has recently been confirmed as Dean of the Faculté de pharmacie, Université de Montréal. Jean-Pierre Gregoire assumes duties in June 2007 as Dean of the Faculté de pharmacie, Université Laval.

Enrollment:

There have been several requests for enrollment information during the past year and I thought it might be appropriate to include enrollment data for general information.

Enrollment data for professional programs in Faculties of Pharmacy of Canada

	Total Four Year Undergraduate enrollment				Graduates	2006-2007 First	2006-2007 First
Faculty	2000/2001	2004/05	2005/06	2006/07	2006	Year Enrollment	Year Applicants
UBC	551	563	568	576	136	153	594
Alberta	420	463	490	505	102	131	756
Saskatchewan	307	329	338	349	73	91	713
Manitoba	192	196	200	191	49	50	298
Toronto	473	723	801	863	170	240	1903
Montreal	478	636	659	684	151	200	1657
Laval	378	567	560	559	131	159	1212
Dalhousie	257	353	352	359	83	90	622
Memorial	114	111	115	118	36	40	343
Waterloo							
Total	3170	3941	4083	4204	931	1154	8098

International Pharmacy Graduate Program Enrollment

	2004	2005	2006
Toronto	53	68	103
UBC		12	14

Post baccalaureate Pharm D Enrollment

	2005/2006	2006/2007
UBC	17	17
Toronto	29*	31*

* some of these are part time

Briefly, the four-year baccalaureate enrollments have increased about one-third since the year 2000. Most of the increase has come about in Toronto, Montreal, and Laval with Dalhousie, Alberta, and Saskatchewan making smaller but significant contributions to enrollment growth. The University of British Columbia had the largest pharmacy undergraduate enrollment in 2000 but limitations of space have prevented any further substantial increases. The University of Waterloo will make a significant difference with 120 incoming students for the inaugural class in January of 2008. The attraction of prospective students to pharmacy remains high with approximately 8100 applicants in 2006 for 1200 available positions, a 15% acceptance rate. Montreal will introduce the entry-level Pharm D program in the fall of 2007 and Laval in 2008.

Finally, may I express my sincere thank you and appreciation to the Council and Executive of AFPC and the Executive of ADPC for their generous support and help during a particularly busy year. It has been my sincere pleasure to serve in 2006-2007 with President Anne Marie Whelan of AFPC and President Bob Sindelar of ADPC. Both individuals are dedicated to moving our organizations forward with our current projects and to undertake challenging new assignments that will ultimately enhance the education of our graduates and influence the way pharmacy is practiced in the future.

Respectfully submitted,
Frank S. Abbott, PhD
May 24, 2007

PART 4.0

AFPC FINANCIAL STATEMENTS 2006

AND

BUDGET 2007

ASSOCIATION OF FACULTIES OF PHARMACY OF CANADA

Vancouver, B.C.

FINANCIAL STATEMENTS

December 31, 2006

WOLRIGE MAHON *LLP*

WOLRIGE MAHON *LLP*
Chartered Accountants

AUDITORS' REPORT

To the Members of the Association of Faculties of Pharmacy of Canada:

We have audited the balance sheet of the Association of Faculties of Pharmacy of Canada as at December 31, 2006 and the statement of revenue, expenditures and net assets for the year then ended. These financial statements are the responsibility of the Association's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the financial position of the Association as at December 31, 2006 and the results of its operations for the year then ended in accordance with Canadian generally accepted accounting principles.

"Wolrige Mahon LLP"

CHARTERED ACCOUNTANTS

Vancouver, B.C.
April 12, 2007

Ninth Floor Commerce Place 400 Burrard Street Vancouver British Columbia V6C 3B7
Telephone: 604 684 6212 Fax: 604 688 3497
www.wolrigemahon.com

ASSOCIATION OF FACULTIES OF PHARMACY OF CANADA

STATEMENT OF REVENUE, EXPENDITURES AND NET ASSETS

For the year ended December 31, 2006

	2006 **$**	2005 $
Revenue, Schedule 1	**138,722**	207,957
Expenditures, Schedule 2	**142,976**	198,725
Expenditures (deficiency) of revenue over expenditures	**(4,254)**	9,232
Net assets, beginning	**196,504**	187,272
Net assets, ending	**192,250**	196,504

ASSOCIATION OF FACULTIES OF PHARMACY OF CANADA

BALANCE SHEET

December 31, 2006

	2006 $	2005 $
Assets		
Current		
Cash	**41,582**	58,640
Receivables	**8,950**	38,481
Prepaids	**-**	3,124
	50,532	100,245
Investments (Note 4)	**141,718**	97,591
	192,250	197,836
Liabilities		
Current		
Payables and accruals	**-**	1,332
Net Assets	**192,250**	196,504
	192,250	197,836

Approved by Council:

ASSOCIATION OF FACULTIES OF PHARMACY OF CANADA

NOTES

For the year ended December 31, 2006

Note 1 General

The Association of Faculties of Pharmacy of Canada is an association of faculties of pharmacy whose members are committed to the promotion and recognition of excellence in pharmacy education and scholarly activities.

Note 2 Significant Accounting Policies

Use of Estimates

The preparation of financial statements in conformity with Canadian generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Investments

The Association's investments are recorded at cost.

Revenue Recognition

The Association follows the deferral method of accounting for contributions. Restricted contributions are recognized as revenue in the year in which the related expenses are incurred. Unrestricted contributions are recognized as revenue when received or receivable if the amount to be received can be reasonably estimated and collection is reasonably assured.

Note 3 Financial Instruments

The fair value of all items that meet the definition of a financial instrument approximate their carrying values. These items include cash, investments, receivables, and payables and accruals. Unless otherwise stated, it is management's opinion that the Association is not exposed to significant credit, currency or interest rate risk arising from these financial instruments.

NOTES

For the year ended December 31, 2006

Note 4 Investments

	2006	2005
	$	$
CIBC GIC - Jan 2/08 4.3%	**14,224**	14,224
CIBC GIC - Jun 27/06 3.75%	**-**	20,229
CIBC GIC - Jun 27/07 4.25%	**20,229**	20,229
CIBC GIC - Oct 28/08 3.0%	**-**	21,855
CIBC GIC - Oct 30/06 2.15%	**-**	21,054
CIBC GIC - Jan 11/07 2.4%	**40,000**	-
CIBC GIC - Oct28/08 2.35%	**21,855**	-
CIBC GIC - Oct 30/08 3.1%	**21,971**	-
CIBC GIC - Jun 28/10 3.45%	**23,439**	-
	141,718	97,591

Note 5 Statement of Cash Flows

A statement of cash flows has not been prepared as it would not provide any additional information.

ASSOCIATION OF FACULTIES OF PHARMACY OF CANADA **Schedule 1**

SCHEDULE OF REVENUE

For the year ended December 31, 2006

	2006 $	2005 $
Memberships		
Faculty	**83,568**	77,150
Affiliate	**19,200**	16,800
Associate	**600**	600
Awards		
Apotex	**-**	35,000
AstraZeneca	**3,000**	3,000
Bristol-Meyers Squibb	**2,068**	1,225
C.F.P. student travel	**-**	10,000
C.F.P. best poster	**-**	1,000
GlaxoSmithKline	**2,330**	2,500
Pfizer	**2,553**	1,166
Other		
Annual conference	**10,707**	27,271
Interest income	**3,467**	4,045
Web Site Advertising	**4,800**	200
Task Force SPEP	**-**	18,000
PEOLC funding - Health Canada	**-**	10,000
Saskatoon conference	**1,429**	-
LLLP conference	**5,000**	-
	138,722	207,957

ASSOCIATION OF FACULTIES OF PHARMACY OF CANADA **Schedule 2**

SCHEDULE OF EXPENDITURES

For the year ended December 31, 2006

	2006 $	2005 $
Meetings		
AGM council	**22,851**	18,449
Mid-Year council	**14,508**	14,559
AACP AGM	**2,299**	1,005
Mid-Year AACP	**2,129**	-
CCCEP	**1,338**	1,338
CPhA	**75**	378
President Travel to ADPC	**-**	1,121
President Travel to CSHP	**1,232**	409
ADPC Workshop	**805**	625
ADPC travel, Executive director	**3,779**	2,936
AACP Summit Chicago	**-**	1,085
CPHA PPR Workshop	**-**	5,000
HRSDC Project	**1,579**	-
PharmCare	**894**	-
Operating		
Audit services	**2,194**	2,140
Bank charges	**181**	93
Computer expenses	**95**	87
Executive director-honorarium	**42,600**	42,800
Executive director-travel grant	**2,376**	4,343
Office supplies	**445**	649
Printing	**557**	538
Postage	**267**	372
Courier	**-**	255
Telephone and fax	**608**	607
Teleconferencing	**514**	349
Internet services	**1,143**	1,148
Website maintenance	**5,265**	2,939
French website development	**-**	4,959
Canada Revenue Agency	**30**	30
Miscellaneous	**143**	1,417
Other		
CCAPP	**6,955**	6,955
Task force SPEP	**7,617**	18,893
PEOLC Project	**-**	10,700
Miscellaneous	**10**	207

ASSOCIATION OF FACULTIES OF PHARMACY OF CANADA

Schedule 2

SCHEDULE OF EXPENDITURES

(continued)

For the year ended December 31, 2006

	2006 $	2005 $
Awards		
Apotex scholarships	-	35,000
AstraZeneca	**2,289**	2,259
Bristol-Meyer Squibb	**2,136**	2,451
CFP travel grants	**9,929**	8,895
CFP poster awards	**1,000**	1,000
Pfizer	**2,553**	1,063
GSK Grad student	**2,080**	1,671
AFPC Whit Matthews	**500**	-
	142,976	198,725

2006 AFPC Financial Statement with 2005 Actual - AGM Montreal 2007

		2005 ACTUAL	2006 BUDGET	2006 ACTUAL
INCOME				
Memberships				
FACULTY		$ 77,150.00	$83,568.00	$83,568.00
AFFILIATE		$ 16,800.00	$19,200.00	$19,200.00
ASSOCIATE		$ 600.00	$600.00	$600.00
TOTAL MEMBERSHIPS		**$ 94,550.00**	**$103,368.00**	**$103,368.00**
OTHER INCOME				
ANNUAL CONF		$ 27,330.94	$15,000.00	$10,706.89
INTEREST	Note 1.	$4,044.68	$4,200.00	$3,465.18
Rx & D GRANT		$0.00	$0.00	$0.00
Web Site Advertising		$200.00	$1,000.00	$4,800.00
TOTAL OTHER INCOME		**$ 31,575.62**	**$20,200.00**	**$18,972.07**
Awards				
Apotex		$35,000.00	$0.00	$0.00
AstraZeneca		$3,000.00	$3,000.00	$3,000.00
Bristol-Myers Sq.		$1,225.27	$1,500.00	$2,068.00
CFP Student travel		$10,000.00	$0.00	$0.00
CFP Best Poster		$1,000.00	$0.00	$0.00
GlaxoSmithKline		$2,500.00	$2,500.00	$2,330.00
Pfizer		$1,166.00	$2,000.00	$2,553.01
TOTAL AWARDS		**$53,891.27**	**$9,000.00**	**$9,951.01**
Miscellaneous				
Task Force SPEP		$18,000.00	$9,000.00	$0.00
New Grants		$10,000.00	$10,000.00	$0.00
Saskatoon Conference 2005			Note 2.	$1,429.16
Donation from LLLP Conference				$5,000.00
Total Miscellaneous Income		**$28,000.00**	**$19,000.00**	**$6,429.16**
TOTAL INCOME		**$208,016.89**	**$151,568.00**	**$138,720.24**

Note 1. There is interest receivable of $661.83 for the year 2006 on a GIC.
Note 2: Final income from the Saskatoon Conference was $6,548.16 but was adjusted for accounts receivable of $5,119 reported in the 2005 Audit.

EXPENSES		2005 ACTUAL	2006 BUDGET	2006 ACTUAL
Meeting Expenses				
AGM Council		$18,448.91	$22,000.00	$22,850.50
Mid-year Coun.		$14,558.55	$15,000.00	$14,508.23
AACP AGM		$1,004.65	$2,000.00	$2,299.24
AACP midyear-meeting planning			$1,500.00	$2,129.23
CCCEP		$1,337.50	$1,337.50	$1,337.50
CFP/CACDS Global Innov			$500.00	$0.00
CPhA National Forum		$378.00	$500.00	$74.50
President travel to ADPC AM		$1,121.43	$1,200.00	$0.00
President travel to CSHP		$409.11	$500.00	$1,231.65
President travel to ADPC Wkshp		$625.49		
President travel to Blueprint in Pharmacy Mtg.				$805.47
ADPC Travel, Ex Dir		$2,935.68	$4,000.00	$3,779.47
AACP Summit Chicago, June05		$1,084.59		
CPhA PPR Workshop Nov 6-8		$5,000.00		
HRSDC Project-meetings			$2,000.00	$1,578.51
PresElect Travel PharmCare Washington DC				$894.04
Total Meeting Expenses		**$46,903.91**	**$50,537.50**	**$51,488.34**
Operating Expenses				
Audit services		$2,140.00	$2,200.00	$2,193.50
Bank charges		$92.79	$150.00	$181.39
Computer expenses		$86.95	$200.00	$94.84
Exec. Dir. Honor.		$42,800.00	$42,800.00	$42,600.00
E.D. travel grant		$4,343.23	$3,500.00	$2,376.32
Office Supplies		$648.83	$550.00	$444.70
Photocopies			$50.00	
Printing		$537.96	$500.00	$556.55
Postage		$372.03	$400.00	$267.43
Courier		$255.38	$100.00	
Telephone/fax		$607.02	$1,000.00	$608.12
Teleconferencing		$348.89	$500.00	$514.26
Internet Services		$1,147.68	$1,200.00	$1,142.64
Web site maint.& develop		$2,939.34	$7,000.00	$5,264.91
French Website Development		$4,959.30		
Corporations Directorate		$30.00	$30.00	$30.00
Secretarial and certificates		$1,360.24	$1,400.00	$95.76
Receiver General-Gazette Costs		$56.71		
Miscellaneous Accounts payable				$47.37
Total - operating		**$62,726.35**	**$61,580.00**	**$56,417.79**
Other Expenses				
CCAPP		$6,955.00	$6,955.00	$6,955.00
Rx&D grant			$0.00	$0.00
Task Force SPEP		$18,893.17	$9,000.00	$7,616.98
Conference	Hotel Deposit	$2,000.00	$5,000.00	

	PEOLC Project	$10,700.00		
	Funeral-flower expenses	$157.58		
	Lunch for Special Award Winner, Walter Masanic	$48.74		
	Parking CPSI			$10.00
	Total Other Expenses	**$38,754.49**	**$20,955.00**	**$14,581.98**
Awards				
	Apotex	$35,000.00	$0.00	$0.00
	AstraZeneca	$2,259.21	$3,000.00	$2,288.69
	Bristol-Myers Sq.	$2,450.53	$2,000.00	$2,136.42
	CFP travel grants	$8,895.00	$10,000.00	$9,929.00
	CFP best poster	$1,000.00	$1,000.00	$1,000.00
	AFPC Whit Matthews		$500.00	$500.00
	Pfizer (previously Janssen-Ortho)	$1,063.40	$2,000.00	$2,553.01
	GSK grad student	$1,670.67	$2,500.00	$2,080.00
	New Grants		$9,000.00	$0.00
	Total Awards Expenses	**$52,338.81**	**$30,000.00**	**$20,487.12**
TOTAL EXPENSES		**$200,723.56**	**$163,072.50**	**$142,975.23**
Surplus(Deficit)		$7,293.33	($11,504.50)	($4,254.99)

AFPC Budget 2007 with 2006 Actual - Annual General Meeting Montreal 2007

		2006 BUDGET	2006 ACTUAL	2007 BUDGET
INCOME				
Memberships				
	FACULTY	$83,568.00	$83,568.00	$84,526.00
	AFFILIATE	$19,200.00	$19,200.00	$16,800.00
	ASSOCIATE	$600.00	$600.00	$600.00
	TOTAL MEMBERSHIPS	**$103,368.00**	**$103,368.00**	**$101,926.00**
OTHER INCOME				
	ANNUAL CONF	$15,000.00	$10,706.89	$12,000.00
	INTEREST	$4,200.00	$3,465.18	$4,200.00
	Rx & D GRANT	$0.00	$0.00	$4,000.00
	Web Site Advertising	$1,000.00	$4,800.00	$1,000.00
	TOTAL OTHER INCOME	**$20,200.00**	**$18,972.07**	**$21,200.00**
Awards				
	AstraZeneca	$3,000.00	$3,000.00	$3,000.00
	Bristol-Myers Squibb	$1,500.00	$2,068.00	$2,000.00
	GlaxoSmithKline	$2,500.00	$2,330.00	$2,500.00
	Merck Frosst			$15,000.00
	Pfizer	$2,000.00	$2,553.01	$2,500.00
	TOTAL AWARDS	**$9,000.00**	**$9,951.01**	**$25,000.00**
Miscellaneous				
	Task Force SPEP (PEPCanada)	$9,000.00	$0.00	$0.00
	Program Evaluation - year one			$25,000.00
	New Grants or awards	$10,000.00	$0.00	
	Saskatoon Conference 2005		$1,429.16	$0.00
	Donation from LLLP Conference		$5,000.00	$0.00
		$19,000.00	**$6,429.16**	**$25,000.00**
TOTAL INCOME		**$151,568.00**	**$138,720.24**	**$173,126.00**

EXPENSES		2006 BUDGET	2006 ACTUAL	2007 BUDGET
Meeting Expenses				
	AGM Council	$22,000.00	$22,850.50	$23,000.00
	Mid-year Coun.	$15,000.00	$14,508.23	$12,000.00
	AACP AGM	$2,000.00	$2,299.24	$2,500.00
	AACP midyear-meeting planning	$1,500.00	$2,129.23	$2,000.00

CCCEP	$1,337.50	$1,337.50	$1,338.00
CFP/CACDS Global Innov	$500.00		
CPhA National Forum	$500.00	$74.50	$400.00
President travel to ADPC AM	$1,200.00	$0.00	$1,000.00
President travel to CSHP	$500.00	$1,231.65	$1,200.00
Travel to Blueprint in Pharmacy Mtg.		$805.47	$2,000.00
ADPC Travel, Ex Dir	$4,000.00	$3,779.47	$4,000.00
HRSDC Project-meetings	$2,000.00	$1,578.51	$2,000.00
Pharmaceutical Care in North America Conf		$894.04	$1,000.00
Total Meeting Expenses	**$50,537.50**	**$51,488.34**	**$52,438.00**
Operating Expenses			
Audit services	$2,200.00	$2,193.50	$2,250.00
Bank charges	$150.00	$181.39	$160.00
Computer expenses	$200.00	$94.84	$200.00
Exec. Dir. Honor.	$42,800.00	$42,600.00	$42,400.00
E.D. travel grant	$3,500.00	$2,376.32	$3,500.00
Office Supplies	$550.00	$444.70	$500.00
Photocopies	$50.00		$50.00
Printing	$500.00	$556.55	$600.00
Postage	$400.00	$267.43	$300.00
Courier	$100.00		$100.00
Telephone/fax	$1,000.00	$608.12	$600.00
Teleconferencing	$500.00	$514.26	$550.00
Internet Services	$1,200.00	$1,142.64	$720.00
Web site maint.& develop	$7,000.00	$5,264.91	$5,000.00
Database and PEP Canada			$2,000.00
Corporations Directorate	$30.00	$30.00	$30.00
Secretarial and certificates	$1,400.00	$95.76	$500.00
Receiver General-Gazette Costs			$100.00
Misc. Exp, Ex Dir		$47.37	$100.00
Total - operating	**$61,580.00**	**$56,417.79**	**$59,660.00**
Other Expenses			
CCAPP	$6,955.00	$6,955.00	$7,950.00
Rx&D grant	$0.00	$0.00	$4,000.00
Task Force SPEP	$9,000.00	$7,616.98	$700.00
Conference Hotel Deposit	$5,000.00		
Parking CPSI		$10.00	
Program Evaluation Costs			$15,000.00
Editing of Outcomes Document			$200.00
Total Other Expenses	**$20,955.00**	**$14,581.98**	**$27,850.00**
Awards			
AstraZeneca	$3,000.00	$2,288.69	$3,000.00
Bristol-Myers Sq.	$2,000.00	$2,136.42	$2,400.00
AFPC student travel grants	$10,000.00	$9,929.00	$10,000.00

AFPC Best Poster Awards	$1,000.00	$1,000.00	$1,000.00
AFPC Whit Matthews	$500.00	$500.00	$500.00
Merck Frosst Fellowship			$15,000.00
Pfizer	$2,000.00	$2,553.01	$2,500.00
GSK grad student	$2,500.00	$2,080.00	$2,500.00
New Grants	$9,000.00		
Total Awards Expenses	**$30,000.00**	**$20,487.12**	**$36,900.00**
TOTAL EXPENSES	**$163,072.50**	**$142,975.23**	**$176,848.00**
Surplus(Deficit)	($11,504.50)	($4,254.99)	($3,722)