## **PROCEEDINGS**

## **OF THE**

ASSOCIATION OF FACULTIES OF PHARMACY OF CANADA ASSOCIATION DES FACULTÉS DE PHARMACIE DU CANADA

# DURING 2004 INCLUDING THE

## SIXTY-FIRST ANNUAL MEETING

JUNE 10 - 12, 2004

VANCOUVER, BC

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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 2003 - 2004

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

Monique Richer, Doyenne (418) 656-5639

Université de Montréal, Faculté de Pharmacie, Montréal, QC

Jacques Turgeon, Doyen (514) 343-6440

University of Toronto, Leslie Dan Faculty of Pharmacy, Toronto, ON

Wayne Hindmarsh, Dean (416) 978-2880

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 2003 - 2004

#### Executive

President Susan Mansour (Dalhousie)

President Elect Sylvie Marleau (Université de Montréal)

Past President Lavern Vercaigne, (Manitoba)
Deans' Rep. Franco Pasutto (Alberta)

Executive Director Frank Abbott

#### Council

Simon Albon (British Columbia)

Sheila Kelcher (Alberta)

Chantal Pharand (Montréal)

Roy Dobson (Saskatchewan)

Zubin Austin (Toronto)

Jean Lefebvre (Laval)

Mike Namaka (Manitoba)

Lili Wang (Memorial)

Anne Marie Whelan (Dalhousie)

# AFPC REPRESENTATIVES TO AFFILIATE ORGANIZATIONS

Association of Deans of Pharmacy of Canada – Franco Pasutto (Alberta)

Academic Board Member, Canadian Pharmacists Assoc. – Linda Suveges (Saskatchewan) Canadian Council for the Accreditation of Pharmacy Programs

- Sylvie Marleau (Montréal), Jake Thiessen (Toronto)

Canadian Council for Continuing Education in Pharmacy – Marc Desgagné (Laval)

Pharmacy Evamining Roard of Canada

Pharmacy Examining Board of Canada

- Monique Richer /Louise Mallet (Montréal) & Linda Suveges (Sask.) Representative to United States Pharmacopieal Convention – Colin Briggs (Manitoba)

#### **Committee Chairs and Other Positions**

Awards Committee - Lili Wang (Memorial)

Bylaws Committee - Lavern Vercaigne, (Manitoba)

Education Committee – Zubin Austin (Toronto)

Nominations Committee - Lavern Vercaigne, (Manitoba)

Pharmaceutical Research - Mike Namaka (Manitoba)

Conference Planning Committee – Simon Albon (British Columbia)

Communications Committee – Simon Albon (British Columbia)

Editor, AFPC Communications – Rebecca Law, (Memorial)

Representative to CPhA Human Resources Task Force – Lavern Vercaigne (Manitoba)

Task Force on Experiential Education – Fred Rémillard (Saskatchewan)

Task Force on Educational Outcomes for Entry-Level Pharm D degree – Susan Mansour

Strategic and Business Planning – Susan Mansour and Roy Dobson

## 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

# 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

## 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

### 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

# 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

#### 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

## **AFPC HONORED LIFE MEMBERS**

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

<sup>\*</sup> Deceased

#### ANNUAL MEETINGS AND OFFICERS

## C.C.P.F (1944-1969) A.F.P.C. (1970- 2000)

YEAR	PLACE	PAST CHAIRMA	N 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	N 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 PRESIDENT	J.W. Steele VICE PRESIDENT	K.W. Hindmarsh	R.M. Gentles/L. Goodeve
1976(33)	Saskatoon	G.E. Hartnett PAST PRESIDENT	J.W. Steele	W.E. Alexander	K.W. Hindmarsh	C.J.8riggs
1977(34)	Charlottetown	J.W. Steele	W.F. Alexander	K.W. Hindmarsh	F.W. Teare	C.J.8riggs
1978(35)	Victoria	W.E. Alexander	K.W. Hindmarsh	F.W. Teare	W.A. Parker	C.J.8riggs
. ,					EXEC. 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	

<sup>\*</sup> This office ceased to exist after the 1978 meeting.

<sup>-</sup>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, 2003 to June 30, 2004

## **PART 1.0**

## **AFPC ANNUAL CONFERENCE 2004**

Vancouver, British Columbia

June 10 – June 12, 2004

## **Program Sections**

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## **Section 1:**

## Introduction

## Welcome from Simon Albon

## Chair of Conference Planning Committee



Dear Colleagues:

On behalf of the AFPC Conference 2004 Planning Committee, it is my pleasure to welcome you to Vancouver for the AFPC Annual General Meeting. In addition, I would like to welcome colleagues attending the concurrent CSPS meeting.

It is an interesting time to be involved in academic pharmacy. Many changes are taking place on the educational and research fronts, providing many proportunities for growth and new directions. The theme of the AFPC Conference

challenges and opportunities for growth and new directions. The theme of the AFPC Conference 2004, "Connecting Teaching and Research: Moving Beyond Tradition" will attempt to capture some of the issues and challenges facing academic pharmacy today. Our Teacher's Conference will tackle an important emerging issue regarding our valuable teaching and learning work, "The Scholarship of Teaching and Learning", and will continue AFPC's work on program evaluation initiated at our Winnipeg meeting two years ago. Our research day will include a focus on personnel challenges facing academia, a joint session with CSPS, and a closing symposium linking pharmacy practice research with curriculum. The conference opens with a celebration of achievements in Canadian pharmacy and will conclude with a banquet at the Museum of Anthropology on the UBC campus.

I must thank the incredible group of colleagues that made up the local conference planning committee. I feel privileged to have worked with you over the past year for the success of the conference. I would also like to thank our numerous sponsors who have made this conference possible.

Finally, thank you for joining us in Vancouver. I hope you enjoy the conference as well as this opportunity to meet old and new friends from across Canada. I recommend you take some time to explore our beautiful "west coast" city.

We are thrilled to have you here!

Sincerely,

Simon Albon

Chair, AFPC Conference 2004 Planning Committee

Simon allian

## Welcome from Susan Mansour AFPC President



Dear Colleagues:

Welcome to the AFPC Conference 2004. I would also like to welcome delegates to the concurrent CSPS Symposium. On behalf of the executive and council of AFPC, we welcome you to beautiful Vancouver and hope that you enjoy both the meetings and the locale. This conference is exciting as it is clear that the AFPC/CSPC membership have many common areas of interest, including research/scholarship, funding, and education. These are important

issues for us all. I hope that you will be able to join AFPC for most of our sessions, especially our common sessions. The opening dinner provides an opportunity for us to come together to hear presentations from award winning researchers and educators and to celebrate their accomplishments. Our joint session on Saturday morning provides the opportunity to dialogue about the adequacy of current and future supply of pharmaceutical scientists in Canada, an issue that is critical to us all.

I would like to gratefully thank the organizing committee chaired by Simon Albon with members Frank Abbott, Colleen Brady, Suzana Cindric, Lisa Dolovich, Lynda Eccott, David Fielding, Fekhreddin Jamali, Marion Pearson, Ingrid Price, Julie Sureweere, Hilary Watson, and Marguerite Yee. An inordinate amount of time and effort is dedicated to planning such a meeting and we are grateful for their volunteer work. I would also like to thank all our sponsors who make these meetings possible.

Please enjoy the events over the next few days – I look forward to meeting and becoming reacquainted with many of you.

Sincerely, Susan Mansour, BSc(Pharm), MBA President AFPC, 2003-2004

## Welcome from Dr. Martha Piper

President, University of British Columbia

#### THE UNIVERSITY OF BRITISH COLUMBIA



6328 Memorial Road Vancouver, B.C. Canada V6T 1Z2

Telephone (604) 822-2121 Fax (604) 822-5055

Martha C. Piper, Ph.D. President and Vice-Chancellor

May 28, 2004

Dear Conference delegates:

On behalf of the entire community of the University of British Columbia, I would like to welcome you to the 2004 Association of Faculties of Pharmacy of Canada (AFPC) Conference. We are delighted to be hosting this conference. Its dedication to excellence in pharmaceutical education, scholarly activity, and research exemplifies UBC's own pursuit of excellence, and it invites us to reflect on what we are doing and how well we are doing it. Not only that, but innovations in the pharmaceutical field improves life in British Columbia, Canada, and the world, setting new and important guidelines for higher education in this country. By hosting the AFPC, UBC supports new initiatives in the pharmaceutical sciences, and I wish all of you great success at this conference.

I hope you enjoy your visit to our beautiful campus, and that you take full advantage of all that the 2004 AFPC Conference has to offer.

Yours sincerely,

Oharke Pypin

#### Welcome from Dr. Robert Sindelar Dean, Faculty of Pharmaceutical Sciences, University of British Columbia

#### THE UNIVERSITY OF BRITISH COLUMBIA



Office of the Dean Faculty of Pharmaceutical Sciences 2146 East Mall Vancouver, B.C. Canada V6T 1Z3

Tel: (604) 822-2343 Fax: (604) 822-3035

June 2004

Dear Colleagues and Friends: Chers collègues et amis:

On behalf of The University of British Columbia Faculty of Pharmaceutical Sciences, I welcome you to the 2004 Association of Faculties of Pharmacy of Canada (AFPC) Conference in beautiful Vancouver, British Columbia. The conference focus is "Connecting Teaching and Research: Moving Beyond Tradition" which reflects emerging and important issues in pharmacy education, experiential learning, and pharmacy practice research that will make a profound difference for the continuing development of the profession. The meeting also offers you a good opportunity to build and enhance interactions among your academic and professional colleagues.

We hope that while you are here, you reenergize with the excellent and comprehensive educational program as well as get a chance to tour some of the spectacular natural wonders that are a part of Vancouver and her surroundings. We're very excited about this year's speaker line-up, the information-packed education program and an outstanding social agenda. It is truly an exciting time of significant changes to practice and unprecedented technological advances within the profession that will shape the future of pharmacy practice, pharmaceutical care, and pharmaceutical discovery.

I wish to extend thanks to the Conference Organizing Committee, all of the members of the sub-committees, and the many who contributed to assure the success of this conference. We are looking forward to the next few days of learning, networking, playing and growing.

Should you require any assistance during your stay in Vancouver, please do not hesitate to contact any of the UBC contingent. Again, a warm welcome and best wishes for a highly successful conference.

Sincerely,

Robert D. Sindelar, Ph.D.

Professor and Dean

## AFPC Conference 2004 Planning Committee



Simon Albon, Chair University of British Columbia	Subcommittee: Registration Logistics, Conference Budget, Exhibitors, Teacher's Conference I and II
Frank Abbott University of British Columbia	Subcommittee: Registration Logistics, Conference Budget, Exhibitors, AFPC/CSPS Joint Session
Colleen Brady University of British Columbia	Subcommittee: Registration Desk and Packages
Suzana Cindric University of British Columbia	Subcommittee: Conference Program, Signage
Lisa Dolovich McMaster University	Subcommittee: Pharmacy Practice Research Symposium
Lynda Eccott University of British Columbia	Subcommittee: Banquets/Receptions (Opening Dinner, Banquet)
David Fielding University of British Columbia	Subcommittee: Teacher's Conference I and II
Fakhreddin Jamali University of Alberta	Subcommittee: AFPC/CSPS Joint Session
Marion Pearson University of British Columbia	Subcommittee: Teacher's Conference I and II
Ingrid Price University of British Columbia	Subcommittee: AFPC Poster Session, Teacher's Conference I and II
Julie Sureweere University of British Columbia	Subcommittee: Registration logistics, Name tags
Hilary Watson University of British Columbia	Subcommittee: School Poster
Marguerite Yee University of British Columbia	Subcommittee: Banquets/Receptions (Opening Dinner, Banquet)

## Looking Ahead to AFPC Conference 2005

#### **COME TO SASKATOON IN 2005**

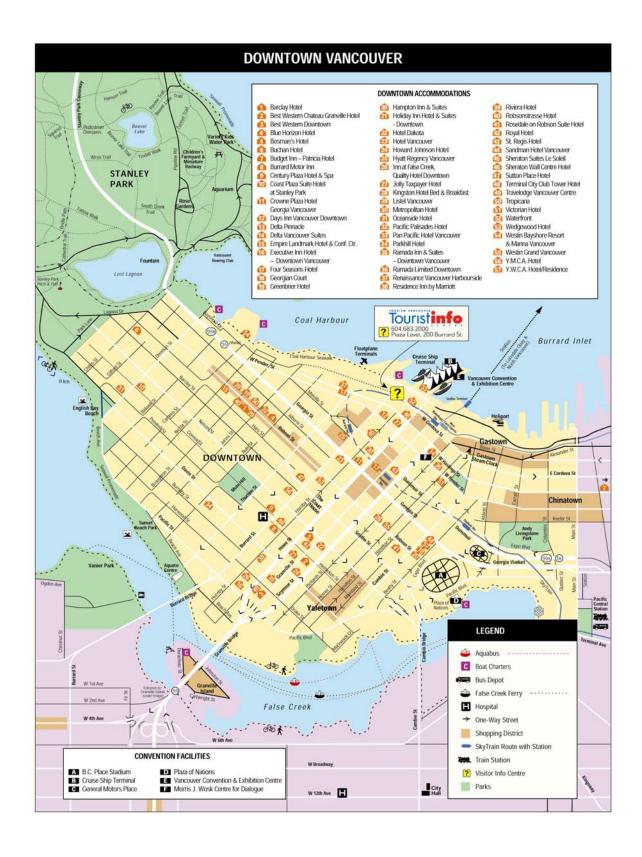
The 2005 AFPC AGM will be held on the banks of the beautiful South Saskatchewan River at the historic Delta Bessborough Hotel in Saskatoon, Saskatchewan from June 25-27. Events include the opening reception on Friday June 25 at the Delta Bessborough and the conference banquet at the Ukrainian Museum of Canada on Saturday evening. Ukrainian choral singers will be part of the Saturday evening festivities. The theme for the research symposium is "Interdisciplinary Collaboration in Teaching and Research." To reflect our association with CCCEP and the Life-long Learning Conference held immediately following the AFPC AGM (June 26-29, 2005), a Sunday morning workshop on life-long learning and academics is also being planned. Hope to see you there!

Planning Committee Chair: Roy Dobson, University of Saskatchewan

## **AFPC Executive & Councillors**

Executive	
Susan Mansour, President College of Pharmacy Dalhousie University	P: (902) 494-3504 F: (902) 494-1396 E: susan.mansour@dal.ca
Lavern Vercaigne, Past President Faculty of Pharmacy University of Manitoba	T: (204) 474-6043 F: (204) 474-7617 E: Lavern_Vercaigne@umanitoba.ca
Sylvie Marleau, President Elect Faculté de pharmacie Université de Montréal	T: (514) 343-7110 (office) T: (514) 343-6110 (ext 3299 - lab) F: (514) 343-2102 E: sylvie.marleau@umontreal.ca
Franco Pasutto, ADPC Representative Faculty of Pharmacy & Pharmaceutical Sciences University of Alberta	T: (780) 492-0204 F: (780) 492-1217 E: fpasutto@pharmacy.ualberta.ca
Frank Abbott, Executive Director Association of Faculties of Pharmacy of Canada	T: (604) 222-0221 F: (604) 222-2574 E: fabbott@telus.net
Councillors (term completion)	
Simon Albon (2004) Faculty of Pharmaceutical Sciences University of British Columbia	T: (604) 822-2497 F: (604) 822-3035 E: trout@unixg.ubc.ca
Sheila Kelcher (2004) Faculty of Pharmacy & Pharmaceutical Sciences University of Alberta	T: (780) 492-4387 F: (780) 492-1217 E: skelcher@pharmacy.ualberta.ca
Roy Dobson (2006) College of Pharmacy & Nutrition University of Saskatchewan	T: (306) 966-6363 F: (306) 966-6377 E: roy.dobson@usask.ca
Mike Namaka (2007) Faculty of Pharmacy University of Manitoba	T: (204) 474-8380 F: (204) 474-7617 E: namakamp@ms.umanitoba.ca
Zubin Austin (2005) Leslie Dan Faculty of Pharmacy University of Toronto	T: (416) 978-0186 F: (416) 978-8511 E: zubin.austin@utoronto.ca
Chantal Pharand (2006) Faculté de pharmacie Université de Montréal	T: (514) 343-2052 F: (514) 343-6120 E: chantal.pharand@umontreal.ca
Jean Lefebvre (2005) Faculté de pharmacie Université Laval	T: (418) 656-4141 (ext. 8118) F: (418) 654-2759 E: Jean.Lefebvre@crchul.ulaval.ca
Anne Marie Whelan (2006) College of Pharmacy Dalhousie University	T: (902) 494-3503 F: (902) 494-1396 E: Anne.Marie.Whelan@dal.ca
Lili Wang (2005) School of Pharmacy Memorial University	T: (709) 777-7053 F: (709) 777-7044 E: lwang@mun.ca

#### Vancouver





## **AFPC Conference 2004**



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Faculty of Pharmaceutical Sciences





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# Section 2: Program at a Glance

## AFPC Conference 2004 Program

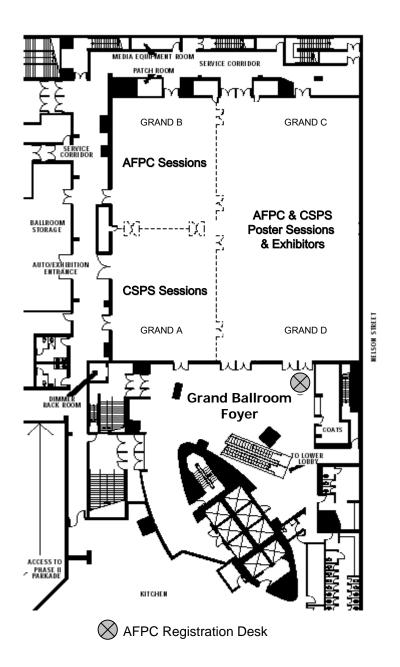
## Connecting Teaching and Research: Moving Beyond Tradition

AFPC Annual Conference June 10-12, 2004 Sheraton Vancouver Wall Centre Hotel Vancouver, BC

WEDNESDAY, JUNE 9	9, 2004				
8:00 am – 5:00 pm	Conference Registration	Grand Ballroom Foyer			
THURSDAY, JUNE 10	THURSDAY, JUNE 10, 2004				
8:00 am – 7:00 pm	Conference Registration	Grand Ballroom Foyer			
6:00 pm – 9:30 pm	Opening Dinner and Presentations by AFPC Award Winners	Grand Ballroom B			
	School Posters	Grand Ballrooms C & D			
7:00 pm	Opening of Conference: Welcome from Dean of Host Faculty, Conference Chair, and Presidents of AFPC and CSPS. AFPC Research Committee Chair – Presentations by AFPC Award Winners in Teaching and Research				
FRIDAY, JUNE 11, 2	004				
7:30 am – 5:00 pm	Conference Registration	Grand Ballroom Foyer			
7:30 am – 5:00 pm	Exhibits and AFPC Posters	Grand Ballrooms C & D			
7:30 am – 8:00 am	Continental Breakfast	Grand Ballroom B			
8:00 am – 12:00 pm	<ul> <li>Teacher's Conference I:         "The Scholarship of University Teaching and Learning"         What is the Scholarship of University Teaching? Speaker: Richard Kennedy, University of Arkansas     </li> <li>Developing Scholarly Approaches to Teaching and Learning: Theory-Practice Implications. Workshop facilitator: Harry Hubball, University of British Columbia</li> <li>Is anyone listening? Implications for recognition, tenure and promotion. Panelists: Neil Guppy, Associate VP Academic, University of British Columbia; Wayne Hindmarsh, Dean, University of Toronto; Jacques Turgeon, Dean, University of Montréal</li> </ul>	Grand Ballroom B			
12:00 pm	Lunch available	Grand Ballroom B			
12:00 pm – 1:30 pm	Meeting exhibitors and viewing of posters (author presentations)	Grand Ballrooms C & D			
1:30 pm – 5:00 pm	<ul> <li>Teacher's Conference II:</li> <li>"Measuring Educational Outcomes"</li> <li>Operationalizing program evaluation. Speaker: David Fielding, University of British Columbia</li> <li>Measurement of educational outcomes: Experiences from the University of Houston Center for Assessment. Speaker: Julianna Szilagyi, University of Houston</li> </ul>	Grand Ballroom B			
Friday Evening	Free				

SATURDAY, JUNE 12,	2004		
7:30 am – 2:00 pm	Conference	e Registration	Grand Ballroom Foyer
7:30 am – 8:00 am	Continenta	al Breakfast	Grand Ballroom B
8:00 am – 10:30 am	Meet the Exhibitors: A closer look at e-portfolios and program evaluation systems  Academic Management Systems, Nuventive		Grand Ballroom B
10:30 am – 11:55 am	Roundtable supply me	ion with CSPS  e discussion: <i>Pharmaceutical scientists and society: Is the</i> eeting the demand?  ank Abbott, AFPC, and <i>Fakhreddin Jamali</i> , CSPS	Grand Ballroom A
12:00 pm – 1:30 pm	AFPC Annu	ual General Meeting (includes lunch)	Port McNeill Room
2:00 pm – 5:00 pm	AFPC Pharmacy Practice Research Symposium 2004 "The arrow goes both ways: Linking pharmacy practice research with curriculum"		Grand Ballroom B
	2:00 pm	Introduction to the Session by the Chair Lisa Dolovich, Department of Family Medicine McMaster University	
	2:15 pm	Experiences with the UBC SPEP program Rosemin Kassam, Faculty of Pharmaceutical Sciences, University of British Columbia	
	2:45 pm	Integrating Family Medicine and Pharmacy to Advance Primary Care Therapeutics: Development of a Training and Mentorship Program Zubin Austin and Lisa Dolovich, Leslie Dan Faculty of Pharmacy, University of Toronto	
	3:15 pm	Innovative Pharmacy Practice: How can Innovation Guide the Training of the Next Generation of Pharmacy Practitioners? Judith Soon, CORXE, Faculty of Pharmaceutical Sciences University of British Columbia	
	3:30 pm	Coffee Break	
	4:00 pm	Submitted Presentations (15 minutes each): Evaluation of Pharmacist Practice in an Interdisciplinary Primary Care Team-based Setting: Implications for Pharmacy Education Jana M. Bajcar, Natalie Kennie, Tom Einarson, Leslie Dan Faculty of Pharmacy, University of Toronto Experiences with Collaborative Practice among Pharmacy and Nutrition Students Assessing a Standardized Patient Roy Dobson, Jeff Taylor, Jane Cassidy, Doreen Walker, College of Pharmacy and Nutrition, University of Saskatchewan.	
	4:30 pm	Panel (Lisa Dolovich, Rosemin Kassam, Zubin Austin, Judith Soon, Jana Bajcar, Roy Dobson) to lead large group discussion and development of recommendations for use at each faculty	
	5:00 pm	Adjourn	
5:30 pm	Bus leaves Awards Ba	s hotel for Museum of Anthropology UBC Campus for AFPC inquet	Outside Hotel Lobby
10:15 pm	Bus leaves	Museum to return to hotel	Outside Museum

## AFPC Conference 2004 Floor Plan



Sheraton Vancouver Wall Centre North Tower Lower Lobby

## **Section 3:**

## **Opening Dinner & Awards Presentations**

Thursday, June 10, 2004 6:00 pm - 9:30 pm Grand Ballroom B

#### AFPC Conference 2004 Award Winners

#### AFPC/GlaxoSmithKline Graduate Student Research Award



#### Thomas Chacko Pulinilkunnil, MS

PhD Candidate, Faculty of Pharmaceutical Sciences, University of British Columbia

Thomas Chacko Pulinilkunnil obtained his Bachelors degree in Pharmaceutical Sciences from Bombay College of Pharmacy, Mumbai, India in 1998. Subsequently, he pursued his MS degree in Pharmacology from NIPER (National Institute of Pharmaceutical Education and Research), an institute of national importance in India. Later on, he was employed at Quest Institute of Life Sciences, of Nicholas Piramal (formerly, Aventis India Limited) as a Junior Research Scientist for two years and was primarily involved in the screening of cardioprotective agents. Subsequently, he applied for and obtained admission as a PhD candidate in the laboratory of Dr. Brian Rodrigues, Faculty of Pharmaceutical Sciences at the University of British Columbia in August 2001, During his tenure at UBC he has been the recipient of a CIHR/Rx&D graduate fellowship and more recently a Doctoral Research Award from the Heart and Stroke Foundation National Scholarship Canada. His publications include two first author manuscripts, three co-authored manuscripts, nine abstracts, and two review articles. Additionally, he has three manuscripts that are currently in review. Furthermore, he was awarded the "Bill Simpson Award 2004" for the "Best Pharmacology Graduate Student" in the Faculty of Pharmaceutical Sciences at UBC. His manuscript, published in Cardiovascular Research, was rated as the best manuscript and selected as winner of the AFPC/GlaxoSmithKline Graduate Student Research Award for 2004.

#### Abstract

The prevalence of diabetes in Canada is between 3-6%, with the number of patients expected to almost double over the next 16 years. In diabetic patients, the risk of heart disease and hypertension is increased 2-4 times with closely associated lipid dysregulation. Under physiological conditions, the heart acquires most of its energy from metabolism of two major fuels, carbohydrates and free fatty acids (FA). One mechanism for FA provision to the heart involves hydrolysis of circulating triglycerides by lipoprotein lipase (LPL) positioned at the coronary artery lumen of the heart. In acute models of diabetes, there is rapid amplification of LPL at the coronary luminal surface. Our research has focused on mechanisms that regulate LPL at this location, given the correlation between LPL and its ability to accelerate heart disease. Since effective blood glucose control is complicated in diabetic patients, it is possible that over time, these patients are predisposed to brief periods of insulin deficiency, increased luminal LPL, abnormal FA supply and utilization by the heart leading to a number of metabolic, morphological, and mechanical damage, and eventually to cardiac disease. Of greater clinical importance is the observation that this augmented LPL can persist even in a setting of normoglycemia, providing excessive FA to the heart with deleterious consequences over the long term. Success of our research should allow the identification of novel targets for therapeutic intervention and prevention of altered metabolic processes that initiate and sustain heart failure during diabetes.

#### AFPC/Bristol-Myers Squibb National Award For Excellence In Education



**Jean-Louis Brazier**, PhD Professor, Faculté de pharmacie, Université de Montréal

A tenured professor at the Faculté de pharmacie of the Université de Montréal, Jean-Louis Brazier has a diploma in pharmaceutical studies and chemistry from the université Claude Bernard in Lyon (France), and a PhD in pharmaceutical studies from the same university. He was engaged as a professor-researcher in the Faculté de pharmacie at université Claude Bernard from 1970 to 1997 and was director of the Institut de Pharmacie Industrielle from 1989 to 1995. In 1997, he joined the Faculté de pharmacie of the Université de Montréal where he is responsible for teaching pharmacokinetics, phytochemistry and phytopharmacology as well as a multidisciplinary course. He is a member of several committees concerned with pedagogy and the evaluation of teaching. He currently serves as president of the committee for computer applications, whose goal among others is greater use of information and communication technologies (ICT) in the faculty and effective integration of those technologies in the teaching process. He sits on the committee responsible for revamping the program in pharmaceutical studies and the transitional program that leads from the undergraduate program to PharmD. Professor Brazier has also undertaken pedagogical innovation projects at the Faculté de l'éducation permanente (the development of an interactive distance course including a book and a CD-Rom). In addition, he has acted as a resource person to CEFES (the center for studies and teacher training in higher education) since the time it was set up, and has himself given a certain number of workshops and training sessions offered by the center. He is particularly interested in the methodology of teaching large groups and in the use of interactive instructional techniques with such groups. A second area of interest concerns reflective teaching and the development of methods for determining student levels at the beginning of a program and for providing upgrading in order to ensure greater homogeneity in large groups. Development in these areas was made possible by CEFES funds, which are awarded to individuals on a competitive basis. CEFES funding was granted a second time for the development of a distance course in biopharmaceutics and pharmacokinetics (PHM6506D) intended as a professional upgrading course for pharmacists. Jean-Louis Brazier has the distinction of having been elected "professor of the year" for the last six years by the students in the pharmacy program at the University of Montreal. In 2000 and 2002, he received the Prix Servier-Canada, an award given for excellence in teaching in pharmacology. In 2002, he was named "Pharmacist de coeur et d'action en enseignement", an honour bestowed on an individual for dynamic teaching performance in the area of pharmacy studies. In 2003, he was awarded the Prix du Ministre de l'Éducation du Québec for his contribution to

#### Abstract

The key to success in interacting with students in large groups is to replace the sensation of being in a large group by one of being in a one-to-one relationship. A student has to feel that the professor is teaching him or her individually and not the whole group. That means that the professor must make sure the course is interactive and that during the course there is perfect synchronization between what is said, what is seen and what is done according to the credo "I hear and I forget; I see and I remember, I do and I understand." It's not enough, though, to stop at technique. The teacher must also attend to the affective dimension. If doing so is relatively easy with small groups, it quickly becomes more difficult as numbers increase.

teaching methodology with his "Notes de cours interactives" (interactive course notes).

The aim of the presentation is to show how to create a climate of confidence in large groups from the first class meeting and how to maintain that confidence throughout the course. Establishing and sustaining confidence is essential to emotional wellbeing in the classroom. First, "Interactive course notes" methods will be explained and, as well, diverse instructional tools: a pharmacopoeia for obtaining results from doses of interactivity, interactive tools and diffusion by Intranet. Next, the notions of interactivity and synchronization will be illustrated. Finally, role playing will be featured, with a focus on how it allows for a pleasing amalgamation of multidisciplinary integration, emotional and affective factors, development of personal talent as well as pleasure in learning, all aspects which make teaching one of the finest and most enjoyable professions in the world.

#### AFPC/AstraZeneca Pharma New Investigator Research Award



**Pierre Moreau**, BPharm, PhD Associate Professor, Faculté de pharmacie, Université de Montréal

Montreal born Dr. Pierre Moreau obtained his BPharm degree from Université de Montréal (UdeM) in 1988, finishing head of the class. Over the next five years, working part time as a pharmacist, he undertook graduate studies in pharmaceutical sciences (pharmacology option) under the supervision of Dr. Nobuharu Yamaguchi from the Faculty of Pharmacy (UdeM) and Dr. Jacques de Champlain from the Department of Physiology (UdeM) in the area of experimental hypertension research. In September 1993, Dr. Moreau started a research postdoctoral fellowship under the guidance of Thomas F. Lüscher, a cardiologist doing fundamental research in Berne, Switzerland, where he learned the complexity of vascular biology, including the paramount influence of the endothelium and its released factors. He finished his training in molecular medicine in the laboratory of Pavel Hamet at Hôtel-Dieu Hospital in Montréal from January 1996 to June 1997. Dr. Moreau was involved mainly in the understanding of cellular turnover (cell proliferation and apoptosis) in the developing hypertensive cardiovascular system.

Dr. Moreau began independent research activities in 1997 at the Faculty of Pharmacy (UdeM) with the central theme of endothelial modulation of vascular remodeling. His research program is funded by the CIHR and the Heart & Stroke Foundation of Canada. He also collaborates with the pharmaceutical industry. During the last 7 years, Dr. Moreau received scholarships from the FRSQ and the CIHR and received young investigator awards from the Société québécoise d'hypertension artérielle and the Canadian Hypertension Society. He also received three teaching awards from the Faculty of Pharmacy. He recognizes the contributions of a senior technician and sixteen graduate students/ post-doctoral fellows that he has supervised or is currently supervising. They have had a major impact on his career, contributing in part to a total of 66 manuscripts, 6 book chapters and 183 abstracts over the course of his research career. Dr. Pierre Moreau is currently Associate Professor in the Faculté de pharmacie, Université de Montréal.

#### Abstract:

Our ultimate objective is to identify therapeutic targets that would allow the regression of hypertension-induced alterations of the vasculature. Indeed, the structure of the arteries is modified in hypertension and this process appears to limit blood supply in periods of enhanced demands, leading to end organ damage. Thus, our goal is not to develop new antihypertensives to lower arterial pressure, but to devise adjunct therapies to reduce morbidity and mortality associated with chronic hypertension. Although we have tackled several experimental paradigms, our latest efforts have been concerned with medial arterial calcification. While we age, calcium accumulates in the vascular wall of large arteries, leading to extracellular matrix disruption and progressive stiffening. Large artery stiffness has a significant impact on hemodynamic parameters, leading to an increase of pulse pressure, a characteristic of isolated systolic hypertension (ISH). This condition is now recognized as a major health problem, especially in the context of the aging population. We have developed an experimental model of ISH to study calcification and found that, in contrast to the general belief that it is an irreversible condition, some pharmacological agents can induce mineral loss in the vascular wall. We are currently studying mechanisms related to this regression in an effort to identify molecular targets that could be of therapeutic benefit for this rapidly growing number of patients.

#### AFPC/Janssen-Ortho Pharmaceutical Research Award



**John H. McNeill**, PhD, Diabetes and Cardiovascular Disease Professor Emeritus, Faculty of Pharmaceutical Sciences, University of British Columbia

Dr. John McNeill received his BSc(Pharm) and MSc from the Faculty of Pharmacy University of Alberta in 1960 and 1962. He taught at the College of Pharmacy, Dalhousie University for one year before entering the PhD program at the Department of Pharmacology University of Michigan where he completed his degree in 1967. He joined the College of Medicine, Michigan State University as an Assistant Professor of pharmacology before returning to Canada in 1971 to the Faculty of Pharmaceutical Sciences at UBC. Subsequently he achieved Full Professorship and served as Associate Dean for 6 years followed by nearly 12 years as Dean before returning to full time teaching and research in 1996. His lab was one of the first to investigate the mechanisms underlying diabetic cardiomyopathy and his observation that vanadate treatment prevented the onset of the diabetic cardiomyopathy set the stage for his subsequent research on vanadium as a treatment for diabetes. His latest interest is in the role of insulin resistance in experimental hypertension. A major focus in Dr. McNeill's career has been the training of graduate students and postdoctoral fellows. He has trained more than 20 postdoctoral fellows, and forty graduate students and has had 10 visiting professors spend time in his lab. His work, more than 900 manuscripts, abstracts and review articles, has been cited more than 6200 times. He was elected to the Royal Society of Canada and the International Academy of Cardiovascular Sciences. Dr. McNeill has received a number of awards for his work including the McNeil Award (AFPC), the Upjohn Award (PSC), the Bowman Award (International Academy of Cardiovascular Sciences) and the Biely Award and Killam Prize from UBC. Dr. McNeill has chaired grant committees for MRC, Heart & Stroke Foundation of Canada, Canadian Diabetes Association and the Rx&D Health Research Foundation and served on numerous editorial boards. He was President of the Pharmacological Society of Canada, the Western Pharmacology Society, the Association of Deans of Pharmacy, the Canadian Council on Animal Care and the Canadian Foundation for Pharmacy. He is also an outstanding teacher, having won the Killam Teaching Prize at UBC.

#### Abstract

In the late 1970s, it became known that most diabetics died from cardiovascular problems and there were indications that, in addition to coronary artery disease and strokes, other factors were involved. We began to investigate diabetes-induced cardiomyopathy, a muscle disease that is now known to contribute to congestive failure and post myocardial infarction morbidity in diabetic patients. Using streptozotocin-induced Type 1 diabetic rats, we investigated the pathophysiology, biochemistry, pharmacology and histology of the disease process. Diabetes caused marked disturbances in Ca<sup>++</sup> handling in the heart, and had effects on contractile proteins accompanied by a shift to lipid metabolism. Several drug treatments were successful in improving function, particularly agents which improved the diabetic state (insulin, metformin). Inorganic vanadyl or vanadate salts and two organic vanadium compounds [bismaltolato-oxovanadium IV (BMOV) and its ethyl maltol derivative (BEOV)] proved to be very successful in preventing the secondary complications of diabetes in both Type 1 and Type 2 models of the disease. Vanadium compounds appear to work by enhancing the effects of insulin on insulin signalling pathways increasing glycogen formation and decreasing gluconeogenesis. We have also used these compounds to study the relationship between insulin resistance and hypertension. Rats are fed a high fructose diet and subsequently become insulin resistant, hyperinsulinemic and hypertensive. The model has similarities to the "Metabolic Syndrome" in humans. We have shown that insulin enhancers prevent the development of this type of hypertension. The increased blood pressure is also prevented by sympathectomy, endothelin-1 blockade, angiotensin blockers and thromboxane synthase inhibitors. Sex hormones are also involved. These data provide an insight into the causes of the hypertension and will be discussed. (Supported by the B.C. and Yukon Heart & Stroke Foundation, MRC, CIHR, CDA and NSERC.)

## Section 4:

# Teacher's Conference I: "The Scholarship of University Teaching and Learning"

Friday, June 11, 2004 8:00 am - 12:00 pm Grand Ballroom B

# Teacher's Conference I: "The Scholarship of University Teaching and Learning"

#### WHAT IS THE SCHOLARSHIP OF UNIVERSITY TEACHING?

Presented by: Richard Kennedy, University of Arkansas

The continual evolution of the practice of pharmacy, which is driven by rapid advances in scientific knowledge as well as changes in health care delivery, require that academicians develop effective new methods of teaching and assessment, which are shared via peer-reviewed communications. This presentation is designed to define the scholarship of teaching and discuss its importance to pharmacy education. It will begin with a brief definition of scholarship in general and a discussion of the academic culture required to develop and sustain a productive scholarly program. The presentation will then focus on defining the scholarship of teaching – what it is and what it is not. The importance of this type of scholarship will be discussed with emphasis on the need for new methods of teaching, learning and curricular/outcomes assessment. Issues related to assessing the scholarship of teaching and its recognition as compared to other types of scholarship will be summarized. Time will be left for active discussion after the presentation.



**Richard H. Kennedy**, PhD Chair of Pharmaceutical Sciences Dean of the Graduate School at the University of Arkansas for Medical Sciences (UAMS)

Richard H. Kennedy, PhD, received a BS in pharmacy from St. Louis College of Pharmacy in 1975, his PhD from the University of Nebraska Medical Center in 1981 and postdoctoral training in the Department of Pharmacology & Toxicology at Michigan State University between 1981 and 1983. Dr. Kennedy rose through the academic ranks at UAMS from Instructor to Full Professor in the Department of Pharmacology & Toxicology between 1983 and 1997. In 1998, he assumed the chairmanship of the Department of Pharmaceutical Sciences at UAMS, and in 2002 he became Dean of the UAMS Graduate School, which administers graduate programs for the Colleges of Pharmacy, Nursing, Medicine, and Health Related Professions. He currently teaches autonomic and cardiovascular pharmacology in the medical course and biochemistry in the pharmacy curriculum. His research in cardiovascular pharmacology and pathophysiology has resulted in more than 90 peer-reviewed manuscripts and has been funded by a variety of agencies including NIH, the American Heart Association, the National Collegiate Athletic Association, the Office of Naval Research, the U.S. Air Force and the Environmental Protection Agency (EPA). Ongoing projects include studies on hyperhomocysteinemia-associated cardiac dysfunction, gender differences in cardiac aging, cardiac actions of cytokines, the role of mast cells in cardiac structure/function and an EPA-EPSCoR program designed to enhance toxicology research in Arkansas. His interest in the scholarship of university teaching stems not from active participation, but rather from a concern that rapidly occurring changes in the pharmacy profession will necessitate the development of effective new methods of teaching and outcomes assessment, which are shared via peer-reviewed communications.

## DEVELOPING SCHOLARLY APPROACHES TO TEACHING AND LEARNING: THEORY-PRACTICE IMPLICATIONS

Workshop facilitator: Harry Hubball, University of British Columbia

There is a growing recognition of the complexity of academic work and the need for university faculty to develop a scholarly approach to teaching and learning. The scholarship of teaching and learning was first introduced by Ernest Boyer, in the early 1990's. At the very heart of this process is an approach to academic work that integrates research, teaching, and student learning. Essentially, a scholarly approach to teaching and learning can engage faculty at all ranks to reflect on and initiate positive changes to curricula and pedagogical practices. Recent attention in the higher education literature has provided greater clarity with respect to the theoretical concepts, principles, research and practice implications related to the scholarship of teaching and learning. This interactive workshop will engage participants in the process of developing scholarly approaches to teaching and learning as well as the theory-practice implications. Data will be presented from experiences with over one hundred cross-disciplinary faculty members from various academic ranks in the *Faculty Certificate Program on Teaching and Learning in Higher Education* at the University of British Columbia.



Harry Hubball, PhD
Assistant Professor, Department of Curriculum Studies
Faculty of Education, University of British Columbia (UBC)

Dr. Harry Hubball has been an Assistant Professor in the UBC Faculty of Education for four years. Dr. Hubball's research interests focus on curriculum development and pedagogy in university and school contexts. He teaches undergraduate and post-graduate students in the areas of Physical, Health and Outdoor Environmental Education. Dr. Hubball has assisted multidisciplinary units across campus with analysis of needs, curriculum re-design, and a wide range of professional development workshops for Faculty members. In 1998, he developed the *UBC Faculty Certificate Program on Teaching and Learning in Higher Education* to enhance the scholarship of teaching and learning at UBC. Dr. Hubball is currently Co-Chair of this program and has been appointed to the National Executive Committees for the Society for Teaching and Learning in Higher Education and the Canadian Association for Health, Physical Education, Recreation and Dance. Dr. Hubball is the recipient of the 2004 UBC Killam Teaching Award for the Faculty of Education. He has published many articles in his field and presented his scholarship extensively at local, national and international conferences.

#### IS ANYONE LISTENING? IMPLICATIONS FOR RECOGNITION, TENURE AND PROMOTION.

Panelists: *Neil Guppy*, Associate VP Academic, University of British Columbia; *Wayne Hindmarsh*, Dean, University of Toronto; *Jacques Turgeon*, Dean, University of Montréal

Consistent with the development of educational outcomes-based pharmacy programs in Canadian universities, faculty members are engaged in the re-examination and re-design of undergraduate-level curricula. In order to meet the diverse needs and circumstances of the health care system, current and future pharmacy professionals and a changing society, faculty members have recognized that development and delivery of effective outcomes-based educational programs that positively impact student learning requires a level of study, experimentation and engagement not unlike more traditional forms of scholarly activity. While debate continues regarding the value and importance of teaching and learning work to an academic's career, faculty members are questioning whether the efforts required in the teaching arena are worthwhile or recognized. Is anyone listening? How are universities and pharmacy faculties responding to this emerging form of scholarship? What are the implications of this work in decisions of merit, tenure and promotion? What evidence is being used to evaluate the scholarship of teaching in these decisions? This panel of experienced university administrators and Deans will explore these questions to provide a sense of "where we are" regarding this important issue.



**Neil Guppy**, PhD Associate Vice President (Academic Programs) University of British Columbia (UBC)

Neil Guppy was born in North Bay, Ontario. He attended university in Ontario, both at Queen's University (in Physical and Health Education) and the University of Waterloo, receiving his PhD in Sociology in 1981. His first academic job was at the UBC where he started in the Department of Anthropology and Sociology in 1979. He has served as an Associate Dean (Students) in the Faculty of Arts, and since 1999 has been the Associate Vice President (Academic Programs) at UBC. His research interests are in the areas of social inequality, education, research methodology, and the environment/resources. His most recent books include *Education in Canada: Recent Trends and Future Challenges* (1998, with Scott Davies), a third edition of *Successful Surveys: Research Methods and Practice* (2003, with George Gray), and a fourth edition of *Social Inequality in Canada: Patterns, Problems, and Policies* (2003, edited with Jim Curtis and Ed Grabb). In 1988-89 he won a University Killam Research Award at UBC and in 1992-93 he was awarded a University Killam Teaching Prize. He is the past editor of the Sage Series in International Sociology (London, England) and was a member of the Publication Board of the International Sociological Association from 1994-1999.



**K. Wayne Hindmarsh**, PhD Dean & Professor Leslie Dan Faculty of Pharmacy, University of Toronto

Wayne is currently Dean and Professor of the Leslie Dan Faculty of Pharmacy at the University of Toronto, a position he has held since August 1998. Previously, he was Dean of Pharmacy at the University of Manitoba and Assistant Dean at the College of Pharmacy and Nutrition at the University of Saskatchewan. He obtained his bachelor of science in pharmacy and MSc degree from the University of Saskatchewan and a PhD from the University of Alberta. His research accomplishments include over 80 manuscripts related to drug distribution and forensic toxicology. He is also author to two books dealing with drug related topics: Drugs: What your Kid Should Know and Too Cool for Drugs (a book aimed at primary school age children dealing with peer pressure and the problem of drug use). He recently received the Douglas M. Lucas Award in recognition of excellence in Forensic Science. Dr. Hindmarsh has been a frequent speaker, giving over 200 lectures on research interests related to drug use

and abuse with particular emphasis on their health effects and prevalence statistics. Previous employment included doing 'quincy-type or CSI type' work for the RCM Police Forensic Laboratories.

Wayne is a past president of AFPC and chairman of the Association of Deans of Pharmacy of Canada and served two terms as president of the Canadian Council for Accreditation of Pharmacy Programs.



**Jacques Turgeon**, BPharm, PhD Dean & Professor Faculté de pharmacie, Université de Montréal

Jacques Turgeon was appointed Dean of the Faculté de pharmacie, Université de Montréal on June 1<sup>st</sup>, 2000. He received his Bachelor degree in Pharmacy in 1983 from Laval University in Quebec City followed by an MSc degree in pharmacokinetics and a PhD degree in drug metabolism from the same institution in 1985 and 1988, respectively. He completed post-doctoral studies from 1988 to 1990 in the department of Clinical Pharmacology, Vanderbilt University in Nashville, USA, under the supervision of Dr. Dan M. Roden. He joined the Faculty of Pharmacy of Laval University in 1990 as an assistant professor. He was promoted to the rank of Associate Professor in 1993 and Full Professor in 1998. From March 1999 to May 2000, he was Senior Director of the Pharmacokinetics department at Phoenix International Life Sciences.

Research interests of Dr. Turgeon have always been directed towards the study of factors responsible for intersubject variability in drug response. More specifically, he has developed expertise in the role of pharmacogenetics in cardiovascular drug actions. Among his favorite topics were the study of drug-drug interactions leading to pharmacodynamics modulation of antiarrhythmic drug action. Dr. Turgeon has integrated in his research approaches *in vitro* (patch-clamp technique, *in vitro* metabolism and molecular biology) models as well as designed and performed studies in healthy volunteers and patients. He has published more than 75 referred articles and more than 185 abstracts. Dr. Turgeon has received numerous prizes for his research activities as well as recognition by the students for his teaching skills. He is a member of numerous societies and has been acting on the committees of several granting agencies for several years. He has been the Director of the Quebec Cardiovascular Network of the FRSQ and the Research Director of the Quebec Heart Institute, Laval Hospital.

## Section 5:

#### **AFPC Poster Session**

Friday, June 11, 2004 7:30 am – 5:00 pm Grand Ballrooms C & D

Author presentations: 12:00 pm - 1:30 pm

Please note that the poster abstracts were published in the Journal of Pharmacy and Pharmaceutical Sciences-May to August 2004 issue. To access the Journal Article see

http://www.ualberta.ca/~csps/JPPS7(2)/AFPC%20Abstracts.pdf . The citation address for the abstracts is J Pharm Pharmaceut Sci (http://www.ualberta.ca/~csps/Journals/JPPS.htm) 7(2):284-302, 2004.

The new address for CSPS is <a href="http://www.cspscanada.org/">http://www.cspscanada.org/</a>

#### List of Abstracts and Location

#### **BASIC RESEARCH**

**BasicRes No. 1**: ABC transporters as a key determinant of sex-related differences in drug-induced Long QT syndrome, *Pierre Morissette*, Jacques Turgeon, Faculte de pharmacie, Universite de Montreal

**BasicRes No. 2:** The effect of modulating glucuronidation on VPA-associated 8-iso-prostaglandin  $F_{2\alpha}$  levels in rats, *Vincent Tong*, Xiaowei Teng, Thomas K.H. Chang and Frank S. Abbott, Faculty of Pharmaceutical Sciences, University of British Columbia

**BasicRes No. 3:** Postnatal maturation of cytochrome P450 2E1 and glutathione-S-transferases, pharmacokinetic model validation, *Fawzy A. Elbarbry*, Jane Alcorn, College of Pharmacy and Nutrition, University of Saskatchewan

**BasicRes No. 4**: Heat treated fungizone<sup>®</sup> (HFZ) maintains amphotericin B's (AmB) antifungal activity while decreasing its renal cytotoxicity: role of fungal phospholipases, *Erin Chew*, Stephen D. Lee, Nancy S. Chung and Kishor M. Wasan, Faculty of Pharmaceutical Sciences, University of British Columbia.

**BasicRes No. 5:** Changes in gene expression of natriuretic peptides and myosin heavy chain isoforms in cardiomyopathic hamsters after treatment with growth hormone, *Mukandila Mulumba*, Huy Ong and Sylvie Marleau, Faculty of Pharmacy, Université de Montréal

**BasicRes No.** 6: Mechanisms involved in the modulation of aryl hydrocarbon receptorregulated genes by tumor necrosis factor- $\alpha$  and lipopolysaccharide, **Negar Gharavi** and Ayman O.S. El-Kadi, Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta

**BasicRes No. 7**: Cytokine-mediated regulation of the rat mdr1b promoter in Huh7 hepatoma cells, *Emmanuel Ho* and Micheline Piquette-Miller, Department of Pharmaceutical Sciences, University of Toronto

**BasicRes No. 8**: Effect of warfarin on haloperidol lipoprotein and protein association within normolipidemic and hyperlipidemic human plasma, *Tiffany Ho* <sup>1</sup>, Ric M. Procyshyn<sup>1,2</sup> and Kishor M. Wasan<sup>1</sup>, <sup>1</sup>Faculty of Pharmaceutical Sciences, The University of British Columbia

**BasicRes No. 9**: Electrophysiological characterization of mutations found in the gene *Kv1.5* in patients with different forms of atrial fibrillation, *Isabelle Plante*<sup>1</sup>, Dominique Fournier<sup>1</sup>, Chantal Guillemette<sup>2</sup>, Gilles O'Hara<sup>1</sup>, Jean Champagne<sup>1</sup>, Patrick Mathieu<sup>1</sup>, Richard Baillot<sup>1</sup>, Pascal Daleau<sup>1,2</sup>. <sup>1</sup>Quebec Heart Institute, Laval Hospital, <sup>2</sup>Faculty of Pharmacy, Laval University

**BasicRes No. 10**: Study on the correlation of drug dissolution and polymer swelling from a matrix tablet using texture analyzer, *Hongtao Li*, Xiaochen Gu, Faculty of Pharmacy, University of Manitoba

**BasicRes No. 11:** Pharmacokinetic study of methotrexate loaded poly(L-lactic acid) microspheres following intra-articular injection in rabbits, *Linda Liang*, Wesley Wong, and Helen Burt, Faculty of Pharmaceutical Sciences, University of British Columbia

**BasicRes No. 12:** In vitro and in vivo percutaneous permeation of insect repellent N, N-Diethyl-m-toluamide (DEET) and sunscreen oxybenzone, *Sreeneeranj Kasichayanula*, Xiaochen Gu, Faculty of Pharmacy, University of Manitoba

**BasicRes No. 13:** 3-Hydroxy- 4,9-dihydro-isothiazolo[5,4-*b*]quinoline-4-ones as topo-II inhibitors with antitumor activity, *Zohreh Amoozgar* and Mohsen Daneshtalab, School of Pharmacy, Memorial University of Newfoundland

#### **CLINICAL RESEARCH**

**ClinRes No. 1**: Optimizing care of diabetes patients with Ischemic heart disease at Burnaby Hospital, *Wendy A. Leong*,\*† Lorna S. Leckie,† Marshall Dahl,\*† Burnaby Hospital;† University of British Columbia\*

**ClinRes No. 2:** Validation of logistic regression models for the development of thrombocytopenia in critical care patients. *Arun K. Verma*<sup>1</sup>; Marc Levine<sup>1,2</sup>; Stephen J. Shalansky<sup>1,3</sup>; John J. Spinelli<sup>4</sup> and Peter M. Dodek<sup>5</sup>. <sup>1</sup>Faculty of Pharmaceutical Sciences, University of British Columbia; <sup>2</sup>Children's & Women's Health Centre of B.C.; <sup>3</sup>Pharmacy Department, St. Paul's Hospital; <sup>4</sup>B.C. Cancer Agency; <sup>5</sup>Critical Care Medicine, St. Paul's Hospital and the University of British Columbia

ClinRes No. 3: Phenotypic strategies, a better approach for individualized warfarin therapy Véronique Michaud, Denis Brouillette, Denis Roy, Lucie Verret, Nicolas Noel, Isabelle Taillon, Gilles O'Hara, Denis Gossard, Monique Champagne, Marie-Claude Vanier, Jacques Turgeon. Faculté de pharmacie, Université de Montréal, Institut de cardiologie de Montréal, Institut de cardiologie de Québec, Hôpital Haut-Richelieu, Hôpital Maisonneuve-Rosemont, Xanthus Life Sciences

**ClinRes No. 4**: Evaluation of mitoxantrone in secondary progressive multiple sclerosis (SPMS), *M. Namaka*, M. Melanson, J. Major, MNL. Klassen, S. Slobodian, D Ruhlen. Faculty of Pharmacy, University of Manitoba

**ClinRes No. 5**: A novel genotyping algorithm for the CYP2D6\*10 allele in Asians using real-time rapid-cycle PCR and multiplex PCR, *Evan H. Kwong*<sup>1</sup>, Marc Levine<sup>1</sup>, Carolyne J. Montgomery<sup>2</sup>, and Thomas K.H. Chang<sup>1</sup>, <sup>1</sup>Faculty of Pharmaceutical Sciences, University of British Columbia, <sup>2</sup>Department of Anesthesiology, Children's and Women's Health Centre of British Columbia

#### EDUCATIONAL AND TEACHING RESEARCH

**Edu/Teach No. 1:** Anticoagulation training and certification in Canada. *Wendy A. Leong* and The Anticoagulation Resource Team, Burnaby Research & University of British Columbia

**Edu/Teach No. 2:** Self-care Curriculum Revitalized: The Experience Within University of Toronto's International Pharmacy Graduate Program. *Janet Sio, Diem Cong* & Karen Elaine Edge. International Pharmacy Graduate Program, Faculty of Pharmacy, University of Toronto

**Edu/Teach No. 3**: Electronic portfolios: a novel approach for assessing learning outcomes. **Ingrid V. Price**, Jennifer A. Shabbits, Marion L. Pearson, Lynda M. Eccott. Faculty of Pharmaceutical Sciences, University of British Columbia

**Edu/Teach No. 4:** Investigating the 'Future' of Pharmacy: the professional maturation and training of nascent pharmacists at one Canadian faculty of pharmacy. *Jennifer D. Beales* and Zubin Austin, Leslie Dan Faculty of Pharmacy

**Edu/Teach No. 5**: Investigating socio-cultural awareness in pharmacy curricula: The role of case examples. *Jennifer D. Beales,* Leslie Dan Faculty of Pharmacy, University of Toronto \*\* withdrawn \*\*

**Edu/Teach No. 6:** Evaluating First Year CAPS-I — Cases in Pharmaceutical Sciences: Educational successes and challenges. *Ingrid Price*. Faculty of Pharmaceutical Sciences, University of British Columbia

**Edu/Teach No. 7**: Characterization and analysis of direct observation forms completed by preceptors during final year pharmacy experiential rotations. *Andrea J. Cameron,* Lesley A. Lavack. Leslie Dan Faculty of Pharmacy, University of Toronto

**Edu/Teach No. 8:** Experiences with collaborative practice among pharmacy and nutrition students assessing a standardized patient. *Roy Dobson*; Jeff Taylor; Jane Cassidy; Doreen Walker. College of Pharmacy and Nutrition, University of Saskatchewan

**Edu/Teach No. 9**: Feasibility of a web-based therapeutics course – a pilot evaluation. **Heather R Kertland**,<sup>1,2</sup> Natalie R Kennie,<sup>1,2</sup> Lori A May,<sup>1</sup> Thomas ER Brown <sup>1,3</sup>. Leslie Dan Faculty of Pharmacy, University of Toronto<sup>1</sup>, St Michael's Hospital<sup>2</sup>, Sunnybrook and Women's College Health Science Centre<sup>3</sup>

**Edu/Teach No. 10**: Pilot trial of online training of evidence-based practice within the pharmacy curriculum at the Université de Montréal. *Geneviève Gauthier*,<sup>1</sup> Daniel J. G. Thirion,<sup>2</sup> Marie-France Beauchesne,<sup>2</sup> Lucie Blais,<sup>2</sup> and Claudine Laurier.<sup>2</sup> 1. Department of Educational Psychology, McGill University. 2. Faculté de pharmacie, Université de Montréal

**Edu/Teach No. 11:** Re-structuring of pathophysiology and therapeutics in the Doctor of Pharmacy program. *Thomas ER Brown*<sup>1</sup>, Clarence Chant<sup>2</sup>, Artemis Diamantorous<sup>1</sup>, Linda D Dresser<sup>3</sup>, Heather R Kertland<sup>2</sup>, Debora W Kwan<sup>4</sup>. Leslie Dan Faculty of Pharmacy University of Toronto, Sunnybrook and Women's College Health Science Centre<sup>1</sup>, St Michael's Hospital<sup>2</sup>, Mount Sinai Hospital<sup>3</sup>, University Health Network<sup>4</sup>

**Edu/Teach No. 12**: Development of a first year community practice experiential program. **Debra M. Moy, Michael R. Heffer.** Leslie Dan Faculty of Pharmacy, University of Toronto

**Edu/Teach No. 13**: An objective competency level-based method to assess student performance in experiential training. *Christopher J. Turner*, Ralph Altiere, Larry Clark, Carrie Maffeo and Connie Valdez. University of Colorado Health Sciences Center School of Pharmacy

**Edu/Teach No. 14:** The integrated laboratory network pilot project: a virtual approach to teaching pharmaceutical analysis. *Simon P. Albon*<sup>1</sup>, Devon A. Cancilla<sup>2</sup>, <sup>1</sup>Faculty of Pharmaceutical Sciences, University of British Columbia, <sup>2</sup>Scientific Technical Services, Western Washington University.

**Edu/Teach No. 15**: An interfaculty pain curriculum for health professional students: an evaluation. *Lalitha Raman-Wilms*<sup>1</sup>, Judith Hunter<sup>2</sup>, Judy Watt-Watson<sup>4</sup>, Leila Lax<sup>3</sup>, Glenn Regehr<sup>3</sup>, Larry Librach<sup>3</sup>, Peter Pennefather<sup>1 · 1</sup>Leslie Dan Faculty of Pharmacy, <sup>2</sup>Department of Physical Therapy, <sup>3</sup>Faculty of Medicine, <sup>4</sup>Faculty of Nursing, University of Toronto

#### PHARMACY PRACTICE RESEARCH

**PPR No. 1:** Evaluation of pharmacist practice in an interdisciplinary primary care team-based setting: Implications for pharmacy education. *Jana M. Bajcar*<sup>1,2</sup> Natalie Kennie<sup>1,2</sup>, Tom Einarson<sup>1</sup>. 1. Leslie Dan Faculty of Pharmacy, University of Toronto and 2. Department of Family and Community Medicine, St. Michael's Hospital

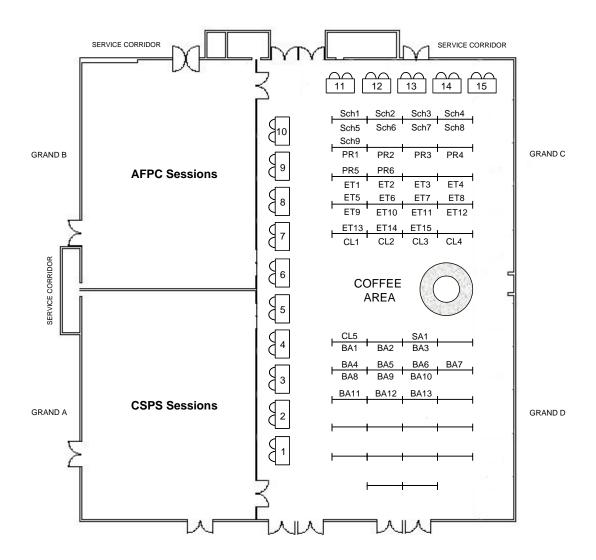
**PPR No. 2:** Involvement of a community pharmacist research network in evaluating outcomes of bisphosphonate therapy. *Judith A. Soon*, Mary H.H. Ensom, D.W. Fielding, Marc Levine, James P. McCormack, Selena M. Santi. Collaboration for Outcomes Research and Evaluation (COR<sub>x</sub>E), Faculty of Pharmaceutical Sciences, University of British Columbia

- **PPR No. 3**: Drug utilization review (DUR) for the treatment of asthma. Joëlle Mimeault, *Diane Blais*. Conseil du médicament, Direction du suivi et de l'utilisation optimale
- **PPR No. 4:** The provision and reimbursement of home care services by community pharmacists in Canada. *Jennifer Alissa Lawrence* <sup>1</sup> and A. Kirsten Woodend <sup>2</sup>. <sup>1</sup>University of Saskatchewan, <sup>2</sup>Director, Research, CPhA
- **PPR No. 5**: Pictographic instructions for medications: Do other cultures interpret them accurately? *Zahra Sadikali*<sup>1</sup>, LCol Régis Vaillancourt<sup>2</sup>, John B. Collins<sup>3</sup>, Rosemin Kassam<sup>1</sup>. 
  <sup>1</sup>Faculty of Pharmaceutical Sciences, University of British Columbia; <sup>2</sup>Directorate of Medical Policy, Pharmacy Policy and Standards, The Canadian Forces; <sup>3</sup>Department of Education Studies, University of British Columbia
- **PPR No. 6:** Community-based warfarin co-prescribing and point of care INR testing. *Wendy A. Leong*,\* and London Drugs Anticoagulation Team<sup>#</sup> {Jenny Chiang, Daniel Choi, Nelson Costa, Sanja Ivankovic, Allen Jang, Cecilia Lee, Winnie Lee, Joyce Tan, Robert Tong, John Tse, Annie Wang, Grace Yeung, }, Burnaby Research\* & University of British Columbia\*

#### SOCIAL AND ADMINISTRATIVE RESEARCH

**Soc Admin No. 1**: Hot on the Net: pharmaceutical policy/PDAs, *Timothy Rees* and Elizabeth Foy, College of Pharmacy, Dalhousie University

## AFPC Conference 2004 Poster Session Floor Plan



School Posters		ol Posters	Research Posters	<b>Exhibitors</b>
	Sch1 Sch2 Sch3	British Columbia Alberta Saskatchewan	Basic Research BA1-BA13	Booths 1-15
	Sch4	Manitoba	Clinical Research	
	Sch5	Toronto	CL1-CL5	
	Sch6	Montreal		
	Sch7	Laval	Education & Teaching Research	
	Sch8	Dalhousie	ET1-ET15	
	Sch9	Memorial	Pharmacy Practice Research PR1-PR6	
			Social & Administrative Research SA1	

#### **BASIC RESEARCH**

#### BasicRes No. 1: ABC transporters as a key determinant of sex-related differences in drug-induced Long QT syndrome

Pierre Morissette, Jacques Turgeon

Faculté de pharmacie, Universite de Montreal

Sex-related differences in drug-induced Long QT syndrome are well recognized. Recently, our laboratory has demonstrated that ATP binding cassette (ABC) membrane transporters play a key role in the regulation of intracellular drug accumulation and cardiac toxicity. Purpose: 1) To determine whether an ABC transporter modulator can alter the effects of I<sub>Kr</sub> blockers on cardiac repolarization, and 2) To determine if these effects are modulated by gender. ABC transporter activity was modulated by pre-treating male and female guinea-pigs (n=96) for 5 days with verapamil (1.5 to 15 mg/kg/day), prior to EP studies. Duration of monophasic action potential duration measured at 90% repolarization (MAPD<sub>90</sub>) was evaluated at baseline and following a 5 minute perfusion period with cisapride (50 nM). Intracellular cisapride concentrations were evaluated in myocytes of pre-treated animals using an HPLC method. At a basic cycle length of 250 msec, MAPD<sub>90</sub> was prolonged by cisapride 17±5 msec in male but 22±6 msec in female hearts from vehicle pre-treated animals. In contrast, a much greater increase in MAPD<sub>90</sub> was noticed in hearts isolated from animals pre-treated with verapamil (11.6 mg/kg/day). Indeed, MAPD<sub>90</sub> was prolonged 28±9 msec in male but 48+9 msec in female hearts (p<0.05). Additional experiments were conducted to demonstrate an increase in intracellular concentrations of cisapride in pre-treated animals. Cisapride concentrations were 12+4 and 14+3 ng/mg protein in control male and female hearts, respectively. Much higher concentrations of cisapride were observed in hearts from animals pre-treated with verapamil (11.6 mg/kg/day): intracellular concentrations were 22±4 and 30±4 ng/mg protein, respectively (p<0.05). This study demonstrates that ABC membrane transporter activity modulates  $I_{Kr}$ block by non-antiarrhythmic agents such as cisapride. We identify for the first time ABC transporters as a key determinant of mechanisms underlying sex-related differences in drug-induced Long QT syndrome.

## BasicRes No. 2: The effect of modulating glucuronidation on VPA-associated 8-iso-prostaglandin $F_{2\alpha}$ levels in rats.

Vincent Tong, Xiaowei Teng, Thomas K.H. Chang and Frank S. Abbott

Faculty of Pharmaceutical Sciences, University of British Columbia

Increased production of reactive oxygen species (ROS) has been associated with valproic acid (VPA) treatment and studies are ongoing to examine the relationship between VPA biotransformation and oxidative stress.

**Objectives**. (A) To biosynthesize VPA-1-*O*-acyl glucuronide (VPA-G) and to develop a quantitative LC/MS assay for VPA-G in rat liver. (B) To investigate the effect of modulating VPA-G formation, the major VPA biotransformation pathway, on ROS production in rats.

**Methods**. Urethane anesthetized male Sprague Dawley rats were administered intraperitoneally with VPA or  $[^2H_6]$ -VPA. VPA-G and  $[^2H_6]$ -VPA-G were extracted and purified from bile by HPLC. A quantitative LC/MS method was developed and validated for the determination of VPA-G from liver homogenates. To modulate VPA-glucuronidation pathway, rats (n=8/group) were pretreated with [(1S)-endo]-(-)-borneol (1mmol/kg, i.p.) at 0.5 hr prior to VPA treatment (500mg/kg, i.p.). VPA-G levels were determined by LC/MS and oxidative stress was measured by 8-iso-prostaglandin  $F_{2\alpha}$  levels using an EIA method.

**Results**. The identities of VPA-G and [ $^2H_6$ ]-VPA-G were confirmed by NMR and mass spectrometry. The LC/MS method using negative electrospray ionization was linear over the range 0.5-50  $\mu$ g/mL. Intra- and inter-assay validation results indicated that the accuracy and precision was < 15 % bias and 15% C.V. (n=5 days). (-)-Borneol pretreatment reduced the levels of VPA-G by  $\approx$  90% compared to animals treated with VPA alone. Furthermore, plasma levels of 8-iso-prostaglandin  $F_{2\alpha}$  were found to be reduced from 93±8 pg/mL to 60±4 pg/mL in (-)-Borneol and VPA treated animals compared to VPA treated animals alone.

**Conclusion**. (-)-Borneol pretreatment significantly inhibited VPA-glucuronidation, and the modulation of this major metabolic pathway was associated with an apparent decrease in levels of 8-iso-prostaglandin  $F_{2\alpha}$ . (Supported by CIHR).

### <u>BasicRes No. 3</u>: Postnatal maturation of cytochrome P450 2E1 and glutathione-S-transferases, pharmacokinetic model validation

Fawzy A. Elbarbry, Jane Alcorn

College of Pharmacy and Nutrition, University of Saskatchewan

Maturation of systemic clearance mechanisms during postnatal development produces dramatic and rapid improvements in a neonate's capacity to eliminate drugs. Our study's objective was to evaluate underlying assumptions of a pharmacokinetic model that describes hepatic Cytochrome P450 (CYP) enzyme activity ontogenesis and to extend the model to Phase II enzymes. We tested the hypothesis that age-dependent changes in intrinsic clearance are attributed only to changes in  $V_{max}$ . CYP2E1 and GST ontogenesis were determined in male Sprague-Dawley rat (n=4) hepatic microsomes and cytosols at day 20 of gestation and at postnatal ages 1, 3, 5, 7, 10, and 14 days, and 3, 4, 6, 9, 12, and 16 weeks. Body and liver weights, hepatic microsomal and cytosol protein content, and total CYP protein content were measured to calculate age-dependent hepatic scaling factors. CYP2E1 activity ontogenesis was monitored with Chlorzoxazone (CZX) and p-nitrophenol (PNP) using HPLC analysis. Spectrophotometric analysis of glutathione conjugation of 2, 4- dinitro-1-chlorobenzene was used to monitor general GST enzyme activity ontogenesis. Metabolite formation velocities were measured at concentrations of 0 to 1000  $\mu$ M to

determine age-dependent  $V_{max}$  and  $K_m$  values. The results showed a similar pattern of postnatal increase in CYP2E1 and GST enzyme activity up to 4 weeks of age. Age-dependent changes in  $V_{max}$  with CZX were significantly different (P < 0.05) between the different age groups and covaried with PNP.  $K_m$  values were similar with adult values at all stages of postnatal maturation except in fetal, and 1 and 3 day old livers. Microsomal protein (MP) contents increased with postnatal age with dramatic increase after day 14 of age. Although the data are not totally consistent with the model assumptions and hypothesis, further work is needed to determine whether the model may allow predictions of *in vivo* hepatic metabolic clearance.

## BasicRes No. 4: Heat treated fungizone® (HFZ) maintains amphotericin B's (AmB) antifungal activity while decreasing its renal cytotoxicity: role of fungal phospholipases

Erin Chew, Stephen D. Lee, Nancy S. Chung and Kishor M. Wasan

Faculty of Pharmaceutical Sciences, University of British Columbia

**Purpose**: The purpose of this investigation was to determine if the addition of fungal phospholipases to pig kidney cells would restore HFZ's cytotoxicity to those observed when these cells were treated with fungizone® (FZ).

**Methods:** LLC-PK<sub>1</sub> cells, a pig kidney cell line, were grown in T75 flasks and seeded in 96 well plates at a density of  $40,000 \text{ cells/cm}^2$ . FZ and HFZ treatment solutions containing a concentration of 10, 20, and 50  $\mu$ g AmB/ml were prepared. HFZ was prepared by heating the drug in a  $70^{\circ}$ C water bath for 20 minutes. A concentration of 0.43 units/ml of Fungal Phospholipases  $A_2$  was added to all treatment groups and incubated for 1 h at  $37^{\circ}$ C before the cells were further incubated for an additional 18 h with different concentrations of FZ and/or HFZ. Following this incubation, an MTS assay was performed to determine the mitochondrial respiration as a function of cell proliferation, thereby indicating the viability of cells post treatment.

Results: HFZ was significantly less toxic than FZ to renal cells. However, the addition of fungal phospholipases to the cell culture increased HFZ cytotoxicity to the levels seen for FZ. FZ treatment resulted in 80% toxicity in LLC-PK $_1$  cells versus control whereas HFZ showed a dose-dependent increase in cytotoxicity from 20% to 50% over AmB concentrations from 10 $\mu$ g/ml to 50 $\mu$ g/ml versus control. In the presence of fungal phospholipases, HFZ renal cytotoxicity was similar to FZ renal cytotoxicity.

**Conclusions**: The addition of fungal phospholipases to pig kidney cells restores HFZ cytotoxicity to those observed when these cells were treated with FZ.

Acknowledgements: Funding provided with a grant from the Canadian Institutes of Health Research.

## <u>BasicRes No. 5</u>: Changes in gene expression of natriuretic peptides and myosin heavy chain isoforms in cardiomyopathic hamsters after treatment with growth hormone.

Mukandila Mulumba, Huy Ong and Sylvie Marleau

Faculty of Pharmacy, Université de Montréal

Idiopathic dilated cardiomyopathy (IDC) is a cardiac disease known to correlate with changes in hypertrophic biomarkers gene expression including natriuretic peptides (NPs) and myosin heavy chain isoforms ( $\alpha$ - and  $\beta$ -MHC), for which a switch from  $\alpha$  to  $\beta$  isoform is associated with a reduced energy spent. The cardiomyopathic hamster (CMH) is a suitable model of the human IDC showing multifocal necrosis, dilatation and severe HF. Clinical observations have shown that the administration of growth hormone (GH) may improve cardiac function in patients with IDC. The aim of the present study is to examine the gene expression of NPs and MHC isoforms by RT-PCR in the left ventricle following GH administration at a daily dose of 1 mg/kg s.c. to female CMH, starting at either 30 days (early phase) or 200 days old (late phase), until they reach 240 days old. Vehicle-treated CMH show elevated ventricular ANP (3- to 4-fold) and BNP (1.3-fold) mRNA levels compared to controls (Golden Syrian hamsters). Following GH treatment, BNP gene expression is further increased by 2.6- and 3.4-fold versus controls when treated from the early or late phase of the disease, respectively. In contrast, ventricular ANP gene expression is reduced to control levels in the late phase of the disease, respectively. In contrast, ventricular ANP gene expression is reduced to control levels in the late phase treatment. As expected,  $\beta$ -MHC expression is increased in vehicle-treated CMH compared to controls (~1.6 fold), and GH administration further increased  $\beta$ -MHC expression (~2.2 fold versus controls) in the late phase of the disease. We conclude that GH therapy is associated with changes in cardiac hypertrophic biomarkers expression and with an increase in the low ATPase myosin isoform.

## <u>BasicRes No. 6</u>: Mechanisms involved in the modulation of aryl hydrocarbon receptor-regulated genes by tumor necrosis factor- $\alpha$ and lipopolysaccharide

Negar Gharavi and Ayman O.S. El-Kadi

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Little is known about the mechanisms involved in the modulation of aryl hydrocarbon receptor (AHR)-regulated genes during pathophysiological conditions such as inflammation. In the present study the effect of tumor necrosis factor (TNF)- $\alpha$  and lipopolysaccharides (LPS) on the constitutive and inducible expression of the AHR-regulated genes: cytochrome P450 1a1 (cyp1a1), glutathione S-transferase Ya (GST Ya), and NAD(P)H:quinone oxidoreductase (QOR) were determined. Murine hepatoma Hepa 1c1c7 (WT), AHR-deficient (C12) and AHR nuclear translocator protein (ARNT)-deficient (C4) cells were incubated with recombinant murine TNF- $\alpha$  (1-10 ng/ml) or LPS (1-5µg/ml) with or without the AHR ligand,  $\beta$ -naphthoflavone ( $\beta$ NF, 10  $\mu$ M). We found that TNF- $\alpha$  and LPS strongly repress the constitutive expression and the  $\beta$ NF-mediated induction of cyp1a1, cyp1a2, GST Ya and QOR in WT but not in C12 and C4 cells dose-dependently. TNF- $\alpha$  and LPS did not significantly alter the mRNA expression of the stress protein, heme oxygenase (HO-1) in WT cells, suggesting that HO-1 is not involved in the modulation of AHR-regulated genes by TNF- $\alpha$  and LPS. In addition, significant increase in reactive oxygen species (ROS) was observed in WT, C12 and C4

cells treated with TNF- $\alpha$  or LPS. The production of ROS was higher in WT cells than in C12 and C4 cells, suggesting the involvement of AHR in the ROS production. In conclusion, the downregulation of AHR-regulated genes by inflammation is dependent on the presence of both heterodimeric transcription factors, AHR and ARNT. Furthermore, ROS may directly or indirectly be involved in the downregulation of AHR-regulated genes.

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#### BasicRes No. 7: Cytokine-mediated regulation of the rat mdr1b promoter in Huh7 hepatoma cells

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**Background.** Decreased efficacy of chemotherapy often occurs due to a mechanism known as multidrug resistance (MDR). Acute inflammation induced by cytokines or lipopolysaccharide (LPS) has been shown to decrease basal expression of the multidrug resistance gene *mdr1b* as well as suppress its induction in rodents. We hypothesize that binding of negative regulatory transcription factors (NF-IL6 or STAT3) may be involved in the cytokine-mediated down regulation of *mdr1b* transcription.

**Methods**. Sprague-Dawley rats were administered 5mg/kg LPS i.p. or saline, livers removed at various times and nuclear proteins isolated. Electrophoretic mobility shift assays (EMSA) were performed with  $^{32}$ P-radiolabelled *mdr1b* promoter fragments (nt -291 to -278). Influence of cytokines on transcriptional activity was examined in chloramphenical acetyltransferase (CAT)-promoter construct fragments (wildtype or deletion construct- Del nt  $^{-291\rightarrow-278}$ ).

Results. EMSA revealed an increased binding of nuclear fractions with the nt  $^{-291 \rightarrow 278}$  promoter region in LPS-treated rats. Competition and supershift experiments indicated that neither NF-IL6, STAT3 nor NF- $\kappa$ B interacted at this region, suggesting binding of a novel transcription factor. CAT assays detected a dramatic decrease in basal *mdr1b* transcriptional activity (P<0.005) in deletion constructs. Reporter assays also revealed dose-dependent induction of transcription in both wild type and deletion constructs in cytokine-treated cells. This site appeared to be involved, in part, in LPS and IL-1 $\beta$  mediated induction of transcription.

**Conclusions.** A novel transcription factor appears to interact at the promoter region nt  $^{-291 \rightarrow 278}$ . Reporter assays also reveal that this region is required for basal transcriptional activity of the rat mdr1b and that cytokines may modulate mdr1b transcription through interaction at this region. These studies significantly increase our basic understanding of cytokine-mediated regulation of the MDR genes in malignant hepatocytes.

## BasicRes No. 8: Effect of warfarin on haloperidol lipoprotein and protein association within normolipidemic and hyperlipidemic human plasma

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**Purpose**: The objective of this study was to determine the protein and lipoprotein association of Haloperidol in the presence of different concentrations of warfarin in normolipidemic and hyperlipidemic human plasma.

Methods: Warfarin sodium was pre-incubated in normolipidemic and hyperlipidemic human plasma at different concentrations (1, 5, 10 μg/mL) for 24 hours at  $37^{\circ}$ C (n=6). Following the pre-incubation with warfarin, [³H]Haloperidol mixed with unlabeled Haloperidol (total concentration = 18 ng/mL) was incubated in this plasma for 1 hour at  $37^{\circ}$ C. Treated plasma samples were separated into four fractions: triglyceride-rich lipoproteins (TRL), low-density lipoproteins (LDL), high-density lipoproteins (HDL), and lipoprotein-deficient plasma (LPDP) by density gradient ultracentrifugation. Each lipoprotein and lipoprotein-deficient fraction was assayed for [³H]Haloperidol by radioactivity. In addition,  $100\mu$ L of the LPDP fraction from each treated plasma samples were pipetted into an ultrafiltration column to distinguish free Haloperidol from protein-bound Haloperidol. The filtrate and filter from the devices as well as  $100\mu$ L of each LPDP sample were assayed for [³H]Haloperidol by radioactivity to determine the amount of free compared to protein-bound Haloperidol.

Results: In normolipidemic plasma, increasing concentrations of warfarin did not significantly alter the lipoprotein distribution of haloperidol. In the presence of warfarin, the percentage of protein-bound Haloperidol increased from  $25.5\% \pm 1.0\%$  ( $0\mu$ g/mL) to  $52.2\% \pm 2.8\%$  ( $10\mu$ g/mL). In hyperlipidemic plasma, increasing concentrations of warfarin correlated with an 11.5% decrease in the amount of haloperidol recovered in the LPDP fraction and a concurrent 4.8% and 5.2% increase in the amount of haloperidol recovered in TRL and LDL fractions, respectively. As warfarin concentration increased, the percentage of protein-bound Haloperidol decreased from  $65.8\% \pm 2.2\%$  ( $0\mu$ g/mL) to  $57.0\% \pm 3.2\%$  ( $10\mu$ g/mL).

**Conclusion:** In hyperlipidemic plasma, increasing concentrations of warfarin correlated with a significant decrease in amount of haloperidol recovered in the LPDP fraction and concurrent increases in the amount of Haloperidol recovered in the TRL and LDL fractions.

Acknowledgements: Funding for this project was provided by CIHR and Riverview Hospital

#### <u>BasicRes No. 9</u>: Electrophysiological characterization of mutations found in the gene *Kv1.5* in patients with different forms of atrial fibrillation

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Atrial fibrillation (AF) is the most prevalent form of cardiac arrythmias. Shortening of the atrial effective refractory period is an important factor contributing to AF, involving functional changes in ion channels. AF could be familial, idiopathic (without identified cause) or consecutive to a cardiac surgery. The gene *Kv1.5* encodes an atrial potassium channel. Considering the important role of Kv1.5 in atrial repolarization, we hypothesized that mutations in *Kv1.5* are implicated in AF. We searched for the presence of mutations in the gene *Kv1.5* of patients with idiopathic (6), familial (10), and post-surgery (26) AF. Healthy patients (20) and others (10) having undergone a coronary artery bypass surgery without developing post-surgery AF were used as controls. Total DNA of patients was extracted from blood. The gene *Kv1.5* (promoter and coding region) was amplified using PCR, and sequenced. Three mutations were identified: R87Q (1 patient with post-surgery AF), A251T (1 patient with familial AF, 1 with post-surgery AF and 1 having undergone the surgery without developing AF) and P307S (2 patients with post-surgery AF). These mutations were reproduced by directed mutagenesis and their effects on channel functions were evaluated using the whole-cell patch-clamp technique on transfected CHO cells. The mutations R87Q and P307S accelerate the channel opening and A251T shifts the I-V curve towards more negative voltages compared to the wild type. The effects of these mutations will tend to enhance the Kv1.5 current and could thus be involved in the pathogenicity of AF.

## BasicRes No. 10: Study on the correlation of drug dissolution and polymer swelling from a matrix tablet using texture analyzer

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**Purpose**: To study the relationship between drug dissolution and polymer swelling from a controlled release matrix tablet of pseudoephedrine using texture analyzer.

**Methods:** A series of controlled release matrix tablets of pseudoephedrine were prepared by direct compression method using identical compression force. Controlled release of pseudoephedrine was achieved by combined use of matrix excipients Comprital<sup>®</sup> 888 ATO (C) and Polyox<sup>®</sup> WSR 301 (P). Dissolution profiles of the tablets were evaluated using USP Method II. Thickness of gel formation and area under the curve (AUC, product of the force of the probe sensed and the distance the probe traveled) during drug dissolution were also recorded using a Texture Analyzer. The relationship between drug dissolution and polymer swelling was correlated and interpreted.

**Results:** Drug dissolution within the first 90 minutes reduced with the increased proportion of C and P in tablet formulation. However, drug dissolution was complete in 6 hours due to the aqueous solubility of pseudoephedrine. Thickness of gel formation as well as the AUC increased linearly with the dissolution time, indicating first-order kinetics of water penetration into the tablet matrix. Linear correlation was also observed between thickness of gel formation and square of drug release percentage. Various dissolution parameters are tabulated.

Formulation	C/P Content (w/w %)	Diffusional Exponent (n)	Release Rate Constant (k)	Correlation Coefficient (r <sup>2</sup> )	Dissolution Time (50%)
F1	3/10	0.439	0.084	0.995	0.92 hr
F2	3/15	0.470	0.073	0.996	1.00 hr
F3	3/20	0.504	0.061	0.996	1.14 hr
F4	3/25	0.500	0.057	0.995	1.27 hr
F5	3/30	0.526	0.049	0.996	1.38 hr
F6	3/50	0.498	0.052	0.998	1.65 hr

**Conclusions:** There was a linear relationship between drug dissolution and polymer swelling of a controlled release matrix tablet of pseudoephedrine. The study demonstrated a unique application of Texture Analyzer in characterization of tablet quality control and drug dissolution.

## BasicRes No. 11: Pharmacokinetic study of methotrexate loaded poly(L-lactic acid) microspheres following intra-articular injection in rabbits

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**Purpose**: The plasma concentrations and tissue distribution of methotrexate (MTX) were investigated following intraarticular injection of either free MTX or controlled release MTX loaded microspheres in healthy rabbit joints.

**Methods**: MTX loaded poly(L-lactic acid) (2000g/mole) microspheres (30-90 $\mu$ m) were manufactured using the solvent evaporation method. Free MTX or MTX loaded microspheres (10mg MTX) was injected into the right knee joint cavity of rabbits. Blood samples were taken at predetermined times from the jugular vein. Urine samples were also collected over time periods up to 24 hours. The rabbits were sacrificed and the major organs and synovial tissues were removed 6 hours and 24 hours post injection (n=4). MTX concentrations in the plasma and major organs were determined by HPLC.

Results: For rabbits injected with free MTX, the plasma MTX concentration reached a maximum at 15 minutes (Cmax  $2.5\mu g/mL$ ) and declined to undetectable levels 8 hours following the injection. The plasma MTX

concentrations of rabbits injected with MTX microspheres peaked at 15 minutes (Cmax  $0.5\mu g/mL$ ) and declined to undetectable levels 4 hours following the injection. Analysis of urine collected showed that 19 times more MTX was excreted in the urine from rabbits injected with free MTX compared to those injected with MTX loaded microspheres in the period of 0 to 3 hours. The concentration of MTX in the synovial fluid 6 hours following intra-articular injection was 10 times higher in the rabbits injected with microspheres than in the rabbits injected with free MTX.

**Conclusion**: Free MTX was rapidly cleared from the joint cavity while MTX encapsulated microspheres decreased the clearance and retained MTX in the joint cavity.

## BasicRes No. 12: In vitro and in vivo percutaneous permeation of insect repellent N, N-Diethyl-m-toluamide (DEET) and sunscreen oxybenzone

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**Purpose**: The objective of this study was to investigate concurrent skin absorption of DEET and oxybenzone in vitro and in vivo.

**Methods:** In vitro diffusion studies were conducted at 45°C, using Franz-style cells with piglet epidermis (300-500µm) as membrane model. DEET and oxybenzone at 5 mg/mL in 50% ethanol (E), polyethylene glycol 400 (PEG-400) and propylene glycol (PG) were used either separately or in combination. Three commercially available repellent and sunscreen products (Coppertone® Sunblock Lotion, OFF!® Repellent Lotion and OFF!® Repellent Lotion with Sunscreen) were applied to the back of 6 piglets. Tape strippings were collected at 2, 12 and 48 hours after the application. Concentrations of DEET and oxybenzone were analyzed using a validated HPLC assay.

Results: Overall in vitro permeation ranged 0.6-18% for DEET and 0.4-20% for oxybenzone respectively. Enhanced permeation across piglet skin was found for both DEET and oxybenzone when the two compounds present concurrently (DEET: 289% in PG, 243% in E and 112% in PEG-400; oxybenzone: 139% in PEG-400, 120% in PG and 112% in E). E and PG significantly increased the permeation of DEET across the membrane. Recovery of DEET and oxybenzone from in vivo tape stripping varied dependent upon sampling time and formulation applied. Overall recovery amounts at 48 hours were 5.3% for DEET and 22.4% for oxybenzone respectively. Combined formulation showed higher recovery of 81.8% for DEET and 135.0% for oxybenzone respectively compared to single-component counterpart.

**Conclusions**: Permeation of DEET and oxybenzone was synergistically enhanced when they were applied simultaneously. Mechanisms of such absorption synergy as well as approaches to reduce permeation of DEET and oxybenzone need to be systematically identified.

## BasicRes No. 13: 3-Hydroxy-4,9-dihydro-isothiazolo[5,4-b]quinoline-4-ones as topo-II inhibitors with antitumor activity

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**Study Objectives**: Based on the previously reported topo-II inhibitory and anticancer activity of 8-oxo-1,2,4-thiadiazolo[4,5-a]quinoline-9-carboxylic acids (1) and application of structure-based molecular modeling approach, we designed and synthesized novel 3-hydroxy-4,9-dihydro-isothiazolo[5,4-b]quinoline-4-one derivatives (11) in order to investigate the potential of these molecules as selective inhibitors of topoisomerase-II and potential antitumors.

**Methods:** Using Hyperchem program, the optimum geometry of I ( $R_1$ , 5-F;  $R_2$ , Ph) was determined through molecular mechanic optimization. Based on the above data, the linear analogue II ( $R_1$ , 7-F;  $R_3$ ,  $CH_2Ph$ ) was designed, which was perfectly overlapping with the optimized geometry of compound I. Compound II was then synthesized through different 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. The synthesized compounds were

evaluated for their topo-II inhibitory and cytotoxic activity. Based on the successful synthesis of parent  $N_9$ -benzyl analogue, and in order to study the effect of different substituted alkyl, cycolalkyl, aryl, and heteroaryl moieties on the overall Topo-II inhibitory and cytotoxic activities of this class of compounds, several new  $N_9$ -substituted analogues of structure II were synthesized and evaluated for the targeted activities.

**Conclusions**: Through this study, we were able to introduce novel synthetic methodologies for the preparation of linear isothiazolo-quinolone derivatives with potential topo-II inhibitory and cytotoxic activities.

#### **CLINICAL RESEARCH**

#### ClinRes No. 1: Optimizing care of diabetes patients with Ischemic heart disease at Burnaby Hospital

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**OBJECTIVES:** Ischemic heart disease (IHD) is the #1 cause of death in diabetes (DM) patients. The study objectives were: (i) to establish patterns of practice; (ii) to identify key problems; and (iii) to improve care of DM-IHD patients at our busy, 515-bed, university-affiliated, primary and secondary care centre (i.e. 60,000 emergency visits per year).

**METHODS:** This retrospective, open evaluation included all Type 2 DM patients admitted with a primary or secondary diagnosis of IHD, from April 1998 to March 1999.

**RESULTS:** Results for the 130 study patients included: average (avg.) age of 71 years (yrs); avg. age at DM diagnosis 59 years; 45% female; 22% ethnic; 74% overweight; 75% hyperlipidemia; 78% HT; 63% smokers; 54% family history of IHD; and an avg. of 5 cardiovascular risk factors. DM complications included: 18% eye surgery; 2% limb amputation; 36% coronary angiography; 15% PTCA; and 14% CABG.

The most common reasons for admission were: IHD, CHF and AMI. During hospitalization, there was also: (a) more ASA, diuretics, beta-blockers, digoxin, and ACE inhibitors were prescribed compared to medications used prior to admission; (b) hyperglycemia and hypoglycemia in 43% and 36%, respectively; (c) HT in 70% and (d) thrombolysis in 17%. Routine lab monitoring did not include HbA<sub>1C</sub>, lipids or microalbuminuria.

Of the 130 study patients, 75% were discharged alive and 8% died. Referrals to our Diabetic Education Centre, and Healthy Heart Program were low (19%, 9%, respectively). Our recommendations included: (i) more intensive control of blood glucose, IHD, hypertension and diet; and (ii) more DM-IHD patient education and discharge follow-up.

**CONCLUSION:** IHD management in DM patients could be improved by referring more patients to a Diabetic Education Centre and a Healthy Heart (cardiac prevention) Program.

## <u>ClinRes No. 2</u>: Validation of logistic regression models for the development of thrombocytopenia in critical care patients.

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**Objectives**: Thrombocytopenia is common and clinically relevant in critically ill patients. The objectives of this study were to identify explanatory variables for thrombocytopenia at and after admission, and to evaluate the generalizability of these statistical models by internal and external validation procedures.

**Methods:** Logistic regression was used to identify predictors for thrombocytopenia ( $< 100 \times 10^9$ /L) using data from 792 intensive and coronary care unit (ICU/CCU) patients at a community hospital. Admission and post-admission models were developed and validated internally using bootstrap re-sampling techniques. Subsequently, the admission model was validated externally using data from 572 patients admitted to a tertiary care ICU.

Results: Predictors were identified for the admission (admission diagnoses, APACHE II score, age, surgery within 24 hours of admission, and admission platelet count) and post-admission (admission diagnoses, APACHE II score, admission platelet count, fresh frozen plasma transfusion, packed red blood cell transfusion, Swan-Ganz catheters, imipenem, and heparin) models, respectively. The area under the receiver operating characteristic (ROC) curve (95% confidence interval) of the admission and post-admission models were 0.925 (0.897–0.957) and 0.942 (0.920–0.963), respectively. Based on the bootstrap method, the optimism in these estimates was shown to be 0.008 (0.006–0.010) and 0.021 (0.019–0.023), respectively. For the external validation set, the area under the ROC of the admission model was 0.808 (0.757-0.860).

**Conclusions:** Both models demonstrated excellent discriminating ability and low bias. The admission model demonstrated very good predictive performance in the external validation dataset. Clinicians should consider the identified predictors in diagnostic and treatment decisions involving critically ill patients who may be at risk of thrombocytopenia.

#### ClinRes No. 3: Phenotypic strategies, a better approach for individualized warfarin therapy

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CYP2C9 metabolizes drugs such as losartan and (S)-warfarin. CYP2C9 is polymorphic and correlation between warfarin clearance and CYP2C9 genotype had been demonstrated in healthy volunteers but not in patients undergoing treatment with various drugs under usual clinical conditions. The overall objective of our study was to determine, in patients with a multiple drug regimen, correlations between required doses of warfarin and 1) CYP2C9 genotypes, 2) CYP2C9 phenotypes losartan metabolic ratio or S- and R-warfarin ratio. Losartan and its main metabolite EXP 3174 were analysed by HPLC in 6-hour urine samples collected from 77 subjects after a single 12.5 mg oral dose of losartan before initiating warfarin therapy. S- and R-warfarin concentrations were analyzed by HPLC in blood samples collected from 96 subjects at 3, 14 and 24 hours following initiation of warfarin treatment. The three most common CYP2C9 allelic variants were analysed by PCR-RFLP using genomic DNA of 121 patients. Two multiple

linear regression analysis models were developed using phenotype, age, weight, gender, amiodarone treatment (only for phenotype based on losartan metabolic ratio) and genotype (only for phenotype using warfarin as probe drug) as cofactors. These models explain 40% of variability in warfarin dose. In contrast, a genotype analysis correlated with phenotype values only in patients carrying two copies of variant alleles. Our results indicate that in more than 90% of patients, a genotypic approach does not predict required doses of warfarin. CYP2C9 phenotype could represent a more favorable strategy to explain intersubject variability in warfarin disposition.

#### ClinRes No. 4: Evaluation of mitoxantrone in secondary progressive multiple sclerosis (SPMS)

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Purpose: To evaluate the efficacy and safety of Mitoxantrone (Novantrone) in patients diagnosed with SPMS.

**Methods:** An open-label study was conducted in 42 patients that were diagnosed with SPMS. Eligibility of all screened patients was determined in accordance with previously established criteria. All eligible patients were separated into treatment (n=31) or control groups (n=11) based on their informed decision to receive or not receive mitoxantrone treatment. Both treatment and control groups received baseline assessments that included: urinalysis, serum pregnancy test, blood work, cardiac monitoring (MUGA scans) and expanded disability status scale (EDSS) scoring. All treated patients were scheduled to receive an intravenous infusion of 12 mg/m² of mitoxantrone every 3 months up to a maximum of 10 treatments or a cumulative dose of 120 mg/m² over a 27-month period. Urinalysis, serum pregnancy test, blood work, drug related adverse effects (nausea, hair loss) and EDSS scoring were conducted prior to each successive treatment and 10 days post treatment. MUGA scans were scheduled every 6 months up to 8 treatments or 100mg/m² after which were conducted following each successive treatment until study completion. All control patients received standard blood work, urinalysis and EDSS scoring with each regularly scheduled clinic visit.

**Results:** Interim analysis revealed that 17 out of 31 patients ( $\sim$ 55%) in the active treatment group had withdrawn from the study after receiving an average of approximately 3 treatments or 36 mg/m². Reasons for premature study termination included: cardiac complications ( $\sim$ 47%), patient concerns ( $\sim$ 29%), quality of life concerns ( $\sim$ 29%), urinary tract complications ( $\sim$ 6%) and other ( $\sim$ 12%). In addition, patients receiving active treatment did not display a statistical significant improvement in the average EDSS scoring.

**Conclusions**: Preliminary results obtained from the interim analysis suggest insufficient evidence to validate the use of mitoxantrone in the treatment of SPMS. Although target recruitment numbers have been reached, final conclusions will be determined once all remaining participants in the active treatment group complete or withdraw from the study.

## <u>ClinRes No. 5</u>: A novel genotyping algorithm for the CYP2D6\*10 allele in Asians using real-time rapid-cycle PCR and multiplex PCR

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**Objectives:** The CYP2D6\*10 allele is common among Asians and associated with decreased metabolism of some CYP2D6 substrates. To study the effect of this allele on drug metabolism, it is necessary to accurately genotype patients for CYP2D6\*10 (C188T). Based on reported allele frequencies among Asians, it is necessary to rule out CYP2D6\*4 (C188T, G1934A) and CYP2D6\*5 (gene deletion) before inferring the presence of CYP2D6\*1 or CYP2D6\*2 (C188). The project objectives are to devise a genotyping algorithm and to develop and validate genotyping methods for detecting the C188T and G1934A single nucleotide polymorphisms (SNPs) and CYP2D6\*5.

**Methods:** Long PCR was used to amplify the CYP2D6 gene. Nested real-time PCR methods to detect the C188T and G1934A SNPs were developed and validated by restriction fragment length polymorphism (RFLP) and sequencing analyses of previously genotyped reference samples (CYP2D6\*1/\*1, CYP2D6\*1/\*4, CYP2D6\*4/\*4). A multiplex PCR method to detect CYP2D6\*5 using published primer sequences was developed and validated using reference samples (CYP2D6\*1/\*1, CYP2D6\*1/\*5, CYP2D6\*5/\*5).

**Results:** C188T and G1934A genotyping results using real-time PCR were consistent with RFLP analyses, sequencing analyses, and the genotypes of the reference samples. CYP2D6\*5 genotyping results were also in agreement with the genotypes of the reference samples.

**Conclusions**: The combination of real-time PCR to detect the C188T and G1934A SNPs and multiplex PCR to detect CYP2D6\*5 provides an efficient approach for CYP2D6 genotyping in Asian patients. These methods can be applied to a novel genotyping algorithm for future clinical trials studying the effect of CYP2D6\*10 on drug metabolism in Asians.

#### **EDUCATIONAL & TEACHING RESEARCH**

#### Edu/Teach No. 1: Anticoagulation training and certification in Canada

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**Background:** No standard warfarin certification exists in Canada. Specialized training and education are highly recommended in consensus guidelines and by expert groups such as the Anticoagulation Forum. In 2002, an intensive anticoagulation training program was created for clinical pharmacists who had a strong interest in teaching and supporting outpatient anticoagulation (warfarin) management. With the support of Roche Diagnostics Canada, a 3.5-day anticoagulation workshop was developed.

**Methods:** The format included didactic lectures, case studies, hands-on training and a written exam. The material was based on the U.S. Certified Anticoagulation Provider Program and other references. The 6 interactive modules included: pathophysiology of thromboembolic disease; pharmacology of antithrombotic drugs; warfarin pharmacology; point of care INR testing (POCT); patient assessment/monitoring; and patient education. Certification was granted upon successful completion.

Results: Two anticoagulation workshops in Montreal (July 2002) and Halifax (September 2002) have yielded 20 and 11 certified anticoagulation pharmacists, respectively. Twenty-four of the 31 certified anticoagulation pharmacists have joined the Anticoagulation Resource Team (ART). ART was a network of clinical pharmacists who promoted optimal oral anticoagulation management through education and knowledge-sharing in Canada. ART members would provide assistance and local support to patients and community pharmacists across Canada. Community pharmacists would be encouraged to develop their practice, from POCT INR training to full anticoagulation dosing and management.

**Conclusion:** The anticoagulation workshops and ART were successful in increasing the confidence and skills of clinical pharmacists in warfarin management and POCT. As of December 2003, there were over 60 certified anticoagulation pharmacists in Canada, in community & hospital practice.

## Edu/Teach No. 2: Self-care Curriculum Revitalized: The Experience Within University of Toronto's International Pharmacy Graduate Program

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**Purpose**: To redesign and implement a self-care course for the International Pharmacy Graduate (IPG) program, a bridge program for foreign-trained pharmacists housed within the Faculty of Pharmacy at the University of Toronto. **Methods**: In 2003, interview and focus group feedback data about IPG student and faculty perceptions of IPG instruction and curriculum was collected. Based on this data and literature detailing adult education methods, the self-care course was revised, employing a triad of pedagogical strategies including: collaborative learning projects, facilitated case study seminars, and role-playing over a 7 week period covering 9 self-care topics. On completion of the course, self-care participants filled out a quantitative survey, gauging perceived impact of their participation on their content knowledge, communication skills and understanding of the therapeutic thought process. Participants were not required to self-identify on the questionnaire and the Statistical Package for the Social Sciences (SPSS) was used to analyze the surveys completed for this paper.

Results: Preliminary findings demonstrated significant learning via all methods employed within the course. Students also felt that the self-care course created significant links between other program curriculums and enriched their overall learning experience. Additional preliminary observations indicated high levels of satisfaction with interactive methods applied during the course; perceived improvement within peripheral skills such as research, computer, collaboration, and communication skills. Participants also noted significant challenges with the course including intense workload and challenges in keeping up with the quantity of assignments.

**Conclusions**: This paper suggests that a three dimensional approach to self-care instruction is the most effective means of information acquisition for adult learners. These findings have implications for undergraduate and bridge program instruction within Pharmacy and other professional adult training programs.

#### $\underline{Edu/Teach\ No.\ 3} \hbox{: Electronic portfolios: a novel approach for assessing learning outcomes}.$

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**Background:** An electronic portfolio (e-portfolio) is an electronic repository of critical reflections and artifacts (documentation) that allows students to demonstrate evidence of learning and competency in a number of areas.

**Objective**: To pilot test the use of e-portfolios as a learning and assessment tool for first year Pharmacy students in the new outcomes-based curriculum.

**Methods:** From the Faculty's list of ability based outcomes, four general ability outcomes were selected as the focus for the first year. Students were introduced to e-portfolios during orientation week and developed their collection of artifacts over the year. A multi-course, year-end assignment will require students to submit a reflective statement and supporting artifacts to demonstrate their achievement of the selected outcomes. A grading rubric was developed for use by e-portfolio evaluators. A year-end survey will be used to gather information from students and assessors related to aspects such as ease of use of marking rubric and software, technical difficulties, and the perceived value of the e-portfolio for individual learning and skill development.

**Results:** The project has been implemented in four of the five required first year courses and is currently ongoing. Results of the year-end survey will be available in May 2004.

Conclusions: Results of the survey will be used to inform future use of e-portfolios by Pharmacy students.

## Edu/Teach No. 4: Investigating the 'Future' of Pharmacy: the professional maturation and training of nascent pharmacists at one Canadian faculty of pharmacy

Jennifer D. Beales and Zubin Austin

Leslie Dan Faculty of Pharmacy, University of Toronto

To investigate how 4<sup>th</sup> year pharmacy students understand their professional training, future practice, and the profession, a survey and follow-up group interviews were conducted with a small sample of students (n=82) attending a prominent Canadian university. Students reflect on four years of schooling and data illustrate their perceptions of how they *see* their professional education and socialization. Findings suggest that there are significant gender and cultural differences among pharmacy students that influence interpretations of their professional training and future career aspirations. Gender is an important social variable that influences why students choose pharmacy and what they seek from the profession. Students' perceptions of their professional training suggest that they are satisfied that they have acquired the necessary skills to practice pharmacy, yet doubt their competence within a practice setting. Moreover, students question their professional training, as their program emphasizes theoretical over practical courses. Thus, professional education instills competence yet may not adequately prepare students for the working world. Implications of the research are discussed in relation to the graduating students, pharmacy practice and other professions.

## Edu/Teach No. 5: Investigating socio-cultural awareness in pharmacy curricula: The role of case examples

Jennifer D. Beales

Leslie Dan Faculty of Pharmacy, University of Toronto

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## <u>Edu/Teach No. 6</u>: Evaluating First Year CAPS-I – Cases in Pharmaceutical Sciences: Educational successes and challenges

Ingrid Price

Faculty of Pharmaceutical Sciences, University of British Columbia

In 2003/04, UBC implemented a new outcomes-based curriculum. One of the cornerstones of this curriculum is the four-year Cases in Pharmaceutical Sciences (CAPS) course stream. The goal of CAPS is to support students towards achieving the curriculum outcomes through the use of real-life cases. While CAPS promises the opportunity for rich and experiential learning, it remains an untested approach that warrants evaluation to corroborate its effectiveness in meeting its curriculum goals.

**Objectives:** 1) To evaluate the initial offering of CAPS-I to determine its success in achieving set objectives; 2) To gain both formative and summative insights into course improvements.

**Method:** Ongoing narrative evaluations were collecting from students throughout the year. Detailed November midterm and April year-end evaluations assembled student self-reports on two views of 30 specific objectives; *progress already achieved*, and *skills yet-to-be-acquired*. Data were analyzed for both formative and summative course improvements.

**Results:** Student self-reports showed improvements in all 30 objectives; 20 of the 'progress already achieved' improvements were statistically significant (p<.05), as were eight of the 'skills-yet-to-be-acquired' objectives. Summed over all objectives, these pre-to-post changes represent a better than one-half sigma improvement ( $\eta$  =.567) for the 'already achieved' objectives ( $\alpha$  =.93) and a quarter sigma improvement ( $\eta$  =.262) for the 'yet-to-be-acquired' skills ( $\alpha$  =.95).

**Conclusion:** Evaluation of this first round of CAPS-I has achieved multiple goals for both student outcomes and course delivery strategies. Selected improvements were implemented into the routine course delivery methods as quickly as they were recognized, others will await integration over the summer by the CAPS-II course design team and in time for the second iteration of CAPS-I. Meanwhile, students report significant progress toward curriculum outcomes.

## <u>Edu/Teach No. 7</u>: Characterization and analysis of direct observation forms completed by preceptors during final year experiential rotations

Andrea J. Cameron, Lesley A. Lavack

Leslie Dan Faculty of Pharmacy, University of Toronto

Objectives: To characterize types and relative frequency of comments and summarize average ratings.

**Methods**: Using mid rotation (week 4) evaluations from the first rotation of 2003 (January-February), a random sample of 24 evaluation sets was selected: 12 community (C) and 12 institutional (I). OBS forms (10 per set) were analyzed to characterize the type of comments written by preceptors, and relative frequency, using a coding system adapted from Salerno et al in J Gen Intern Med 2003. The types of feedback in the C and I settings were compared, as was the number of feedback phrases written on each OBS. Other data included the overall rating (1 to 7) and correlation with the biweekly pharmaceutical care evaluation.

**Results**: Most of the 742 phrases were specific (84% in C, and 86% in I) versus (vs) general, and positive (64% in both C and I) vs corrective. Formative feedback related to skills (67% C, 60% I), knowledge (25% C, 30% I), and attitudes (6% C, 10% I). Summative phrases occurred only in 2% of C. The average OBS rating was  $5.1 \pm 0.5$  for C and  $5.3 \pm 0.4$  for I rotations. An average of  $10.5 \pm 1.1$  forms were completed for C and  $9.8 \pm 1.3$  for I rotations. Each form had an average of  $3.0 \pm 1.2$  phrases (C), and  $3.1 \pm 1.4$  (I). Correlation coefficient of OBS with biweekly ratings was 0.60.

**Conclusions**: The types and frequency of feedback inform and guide development of specific educational interventions for students and preceptors. The data also provide a baseline for further analysis, including comparison to other rotations or final week-8 feedback.

## Edu/Teach No. 8: Experiences with collaborative practice among pharmacy and nutrition students assessing a standardized patient

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College of Pharmacy and Nutrition, University of Saskatchewan

**Study Objective**: To determine student perceptions of participating in an interdisciplinary team-based patient assessment lab.

**Methods:** Participants consisted of 21 third year Nutrition students (100%) and 54 fourth year pharmacy students (73%). Groups consisted primarily of pharmacy-nutrition (PN) or pharmacy-pharmacy pairings (PP). Due to scheduling constraints, there were also two groups of three pharmacy students (PPP). Students completed a questionnaire relating to their experience at the end of the assessment lab. Analysis included frequency and comparative statistics. Comments arising from open-ended questions were collected into themes.

Results: Most students agreed or strongly agreed: the objectives of the lab were clear (74.3%); the lab objectives had been met (79.7%); they were able to obtain a sufficient range of information from the patient (75.7%); their partner's knowledge and skills increased their ability to gather information (76.4%); it was easy to work together (90.5%); and working together was beneficial (89.2%). No significant differences were seen between PN and PP groups. Themes emerging from written comments included: the quality of the simulated practice setting; the scope of the patient interview; awareness of the role of another health professional; enhanced clinical knowledge; and interdisciplinary teamwork.

**Discussion:** The assessment lab's collaborative approach was well received by the students, with most reporting a real benefit from working with another person. Comments indicated enthusiasm for the scenario and the opportunity to work with "real" patients, and a greater awareness of the benefits of working together. Conclusions: Working with another health discipline did not appear to affect the assessment lab experience. However, comments suggest students working with another discipline may gain in their appreciation for the contributions made by another health profession.

#### Edu/Teach No. 9: Feasibility of a web-based therapeutics course - a pilot evaluation

Heather R Kertland, 1,2 Natalie R Kennie, 1,2 Lori A May, 1 Thomas ER Brown 1,3

Leslie Dan Faculty of Pharmacy, University of Toronto<sup>1</sup>, St Michael's Hospital<sup>2</sup>, Sunnybrook and Women's College Health Science Centre<sup>3</sup>

**Introduction:** The strategic plan for the Doctor of Pharmacy program included the development of a part-time distance program. This program is intended to have the same academic rigor as the current full-time program. Currently small group tutorials are used to teach therapeutics. A pilot tutorial was developed and delivered using WebCT as the course management software.

**Objectives:** To evaluate the feasibility of conducting small group tutorials via WebCT. To determine the limitations and benefits of providing tutorials on-line

**Methods:** A tutorial from the full-time program was selected. Educational materials were developed using WebCT. The on-line tutorial was designed to mimic a current tutorial. Two groups participated in the pilot. Group 1 consisted of current full-time students. This group would be able to give feedback on how web-based learning compared to face-to-face. Group 2 consisted of graduates of the program. These individuals would comment on the feasibility of completing a tutorial on a part-time basis.

**Results:** Group 1 adapted well to the new format. Student's learning was assessed via written assignment, documented comprehension and application of materials. Group 1 had minimal difficulties with WebCT. Group 2 encountered greater difficulties, mainly due to older computers and lack of orientation to WebCT. Group 2 also identified the need to have specific times set aside for coursework.

**Conclusions**: WebCT is suitable for delivering small group tutorials on-line. However, students of the distance parttime program will have to have reasonable expectations of time requirements. It will also be necessary to orient students to the use of course management software and to provide support to address technology problems.

## Edu/Teach No. 10: Pilot trial of online training of evidence-based practice within the pharmacy curriculum at the Université de Montréal

Geneviève Gauthier, <sup>1</sup> Daniel J. G. Thirion, <sup>2</sup> Marie-France Beauchesne, <sup>2</sup> Lucie Blais, <sup>2</sup> and Claudine Laurier <sup>2</sup>

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**Background and purpose:** Knowledge and thinking abilities as well as providing drug information and recommendations are among the education outcomes identified by the Canadian Council for Accreditation of Pharmacy Programs. A committee was formed in 1999 to identify methods on implementing teaching of evidence-based practice (EBP) within the bachelor of pharmacy program. According to committee recommendations an online complementary training on EBP was to be developed and integrated longitudinally.

**Methods:** Eleven faculty members collaborated in developing content for self-learning of EBP on a WebCT platform. Corroboration of content in lectures and cases during classroom time was also included. Five modules were revised by a panel of students and pharmacists and implemented within the  $1^{st}$  and  $2^{nd}$  years of the curriculum. Baseline knowledge on EBP was assessed prior to accessing the content by an online anonymous survey. After completing the survey, students had a sequential access to the different modules and interactive activities. Knowledge and competency performance following completion of modules was evaluated through traditional examination.

Results: From the 340 students having access to the course, ninety percent of them (305/340) accessed the online content. Eighty-five percent of students (228/268) who completed the survey mention having heard of EBP, and believe it is important for their practice. However, only 8% (21/268) mention being at ease to retrieve clinical information on the web.

**Conclusion:** Several methods are currently used to implement EBP teaching within pharmacy curriculum. A longitudinal implementation of a web-based approach can be used to facilitate learning of EBP.

## Edu/Teach No. 11: Re-structuring of pathophysiology and therapeutics in the Doctor of Pharmacy program

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**Introduction:** The two largest courses in the first year of the PharmD program were Pathophysiology and Therapeutics. These courses were coordinated and delivered separately. However the courses were fundamentally interrelated. Lectures from the pathophysiology course were used to provide a knowledge basis for the case-based tutorial sessions in therapeutics.

**Objective**: To integrate the pathophysiology and therapeutics courses to provide a coordinated approach for the problem-based learning process. To address workload issues in providing 432 hours of educational instruction.

**Methods:** Faculty met to determine how to integrate the courses. Content was reviewed for each course. Subject matter was clustered into disease-state themes. These themes were used as the basis to create Advanced Pharmacotherapy courses. Workload issues were evaluated.

Results: There were 36 pathophysiology lectures (108 hours) and 36 therapeutic tutorial cases (324 hours). The pathophysiology lectures were matched to each therapeutic case and grouped into the following themes; cardiology, infectious diseases (ID), neurology/psychiatry and general medicine. Each became a new course. Cardiology, ID and neurology/psychiatry each had 7 pathophysiology lectures and 7 corresponding therapeutic cases. General medicine had 15 different subjects; therefore it was divided into General Medicine I (8 lectures and cases) and General Medicine 2 (7 lectures and cases). A clinical faculty member with a specialty practice in the content area coordinated each course, which allowed for a better focus on course content.

**Conclusion**: Combining Pathophysiology and Therapeutics established integration of course content. The courses are now coordinated by 5 faculty members rather than two, therefore, redistributing workload.

#### <u>Edu/Teach No. 12</u>: Development of a first year community practice experiential program.

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In 2001, the Canadian Council for Accreditation of Pharmacy Programs (CCAPP) recommended that the Faculty implement an "early exposure to practice" program. At the time of accreditation, the curriculum provided students with exposure to community and hospital practice during fourth year.

In response to the CCAP recommendation, the first year professional practice laboratory course was restructured from five practice laboratories to an integrated course involving six seminars, four practice labs and four site visits to community pharmacies. The course was designed to facilitate the transition of didactic student learning to the application of knowledge and learned skills in a community practice experience.

The site visits occurred on alternate weeks to the practice labs and seminars. The practice labs focused on developing the technical dispensing skills required in a community pharmacy. The seminars were designed to integrate the knowledge acquired by students in several first year courses with the skills practiced in the lab in preparation for their application during the experiential site visits. The seminars also functioned as debriefing sessions to review students' experiences and to challenge students to reconcile their course learning with what was observed in practice. Students were matched with a community pharmacist mentor on a 1:1 ratio. The site visit objectives were developed to allow application of learned skills and to gradually introduce the student to direct patient care activities. Students began with observation during patient interactions and progressed to conducting patient interactions under the mentor's supervision. Mentors were surveyed to solicit feedback on this initiative. Overall mentors strongly supported the program and indicated that they enjoyed working with students. Recommendations were made on ways to improve for subsequent years.

## Edu/Teach No. 13: An objective competency level-based method to assess student performance in experiential training.

Christopher J. Turner, Ralph Altiere, Larry Clark, Carrie Maffeo and Connie Valdez

University of Colorado Health Sciences Center School of Pharmacy

**Objective**: To implement a competency-based assessment system in a sequence of three introductory pharmacy practice experience (IPPE) courses in a new entry-level Pharm.D. program.

**Method:** The University of Colorado Health Sciences Center School of Pharmacy implemented a sequence of three 2<sup>nd</sup> and 3<sup>rd</sup> year IPPE courses in its new entry-level Pharm.D. program. The primary component of each course is eight community pharmacy visits to conduct "OTC" counseling and health-promotion and disease prevention activities. Students are required to write statements that described their counseling activities, link each statement to an AACP Center for the Advancement of Pharmaceutical Education (CAPE) outcome-competency, and self-assess their level of competency. Each student, for selected CAPE competencies, must reach a pre-set number of competency statements graded as "exceeds" or "meets expectations" by the course directors to pass each course. Students with competency statements graded "below expectations" are asked to revise and re-submit their work or submit replacement statements. The work submitted by students in the first iterations of these courses was used by the course directors to establish required levels of performance for each competency in each course.

**Results:** For each course, multiple examples of competency statements graded "exceeds", "meets" and "below expectations" were selected by the course directors to create rubrics that define levels of performance for the CAPE competencies Thinking, Communication, Valuing and Ethical Decision Making, Social Interaction, and Provide Pharmaceutical Care.

**Conclusions**: a competency-based assessment system has been successfully introduced for a series of three IPPE courses in a new entry-level Pharm.D. program.

## Edu/Teach No. 14: The integrated laboratory network pilot project: a virtual approach to teaching pharmaceutical analysis

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**Background:** The B.Sc.Pharm program at UBC includes a compulsory lecture-laboratory course in pharmaceutical analysis (enrollment: 137). One lecture topic, gas-liquid mass spectrometry (GCMS), has no corresponding laboratory as there is no GCMS instrument available for teaching purposes. Through a collaboration with WWU's Integrated Laboratory Network (ILN), which connects laboratory, computer and instructional technology (two-way audio and video) through high-speed networks, pharmacy students at UBC used a GCMS instrument at WWU to gather data to solve an in-class case-study.

Objective: To pilot test the WWU ILN as a teaching tool in the pharmaceutical analysis course at UBC.

**Methods**: The pilot project took place during the last two lecture-blocks of the term (four hours). A case-study, involving drug profiling of a neurosurgery team, was developed focusing on qualitative and quantitative GCMS analysis. The WWU ILN was demonstrated in-class to generate additional data to complement the chromatographic and mass spectral data provided to students along with the case. A survey was used to gather impact data on the activity.

**Results**: The ILN pilot project was successfully completed. While students (response rate 85%) gave the activity an overall rating of "fair", 70% of students felt it helped their learning about chromatography and mass spectrometry. Students commented that the pilot project helped them to learn general concepts, to integrate and visualize theory and practical applications of GCMS, and provided a good review. Approximately 10-15% of students felt the pilot project was not helpful preferring "hands-on" access to instrumentation to virtual access through the ILN.

**Conclusions**: The WWU ILN was pilot tested in a compulsory pharmaceutical analysis course providing access to scientific instrumentation not available to students at UBC. Impact data suggest that the ILN has the potential to support student learning.

#### Edu/Teach No. 15: An interfaculty pain curriculum for health professional students: an evaluation

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<sup>1</sup>Leslie Dan Faculty of Pharmacy, <sup>2</sup>Department of Physical Therapy, <sup>3</sup>Faculty of Medicine, <sup>4</sup>Faculty of Nursing, University of Toronto

**Background:** Effective pain management requires health professionals to understand pain assessment and management and to have a commitment to work together. No models of an interfaculty pain curriculum for six health professions were found at the undergraduate level.

**Objective:** The University of Toronto Centre for the Study of Pain organized an Interfaculty Pain Curriculum Committee to develop, implement and evaluate an integrated pain curriculum for students from six Faculties. The evolving model has been implemented over two years.

**Methods:** Students from six disciplines participated in an integrated 20-hour pain curriculum in March 2002 (N=540) and 2003 (N=565). Learning occurred through presentations, patient panel, small group work and use of standardized patients or cases. Group work was facilitated by clinicians (N=63 2002, N=78 2003). Students were assessed in a pre- post-test design on knowledge and beliefs about pain and their understanding of interdisciplinary roles. A paired t-test was used to compare pre- & post-test student scores. Daily surveys were also completed.

Results: For 2002 and 2003, the change in correct scores from the pretest to the post-test was 17% and 16% respectively. The difference in the mean was 6.5 for 2002 and 6.7 for 2003 (p < 0.05 for both). Most responders (85%-95%) agreed or strongly agreed that the interfaculty pain curriculum was relevant and informative.

**Conclusion:** The interfaculty pain curriculum was effective in increasing students' knowledge of pain assessment and management and their awareness of related health professional roles in both 2002 and 2003. This program is scheduled to be offered again in March 2004.

#### PHARMACY PRACTICE RESEARCH

## <u>PPR No. 1</u>: Evaluation of pharmacist practice in an interdisciplinary primary care team-based setting: Implications for pharmacy education

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**Purpose:** To evaluate an innovative, functional prototype of pharmacist best-practice in an interdisciplinary primary care team. The goals were to conduct a process evaluation to characterize activities and functions that were needed to meet the needs of the team and explore processes and structures used by the pharmacist to contribute to collaborative medication management (CMM).

**Methods**: This study used mixed (quantitative and qualitative) methods: (a) a retrospective chart review of 105 patients to study the type of drug-related problems and their relationship to pharmacist's role and pharmacist-physician collaboration; and (b) a grounded theory method to data collection and analysis of case scenarios of pharmacist's involvement in patient cases to identify key categories, their properties, and relationships to the pharmacist's role in CMM.

**Results:** The findings revealed that in addition to the philosophy of pharmaceutical care, there are six more principles that need to guide pharmacist practice in CMM. To contribute to CMM pharmacists will need to become competent to perform multiple functions that form a foundation for a repertoire of core expertise. A key finding was the characterization of a reflective approach that defines the nature of involvement and level of pharmacist responsibility in different patient situations which is an essential reflective competency that will need to be acquired by pharmacists if they are to integrate effectively into primary care teams.

**Conclusions**: There is large variability in the functions and the nature of involvement potentially required of a pharmacist in primary care, thus pharmacy students will need to become highly reflective practitioners competent to perform a wide repertoire of specific expanded patient care functions.

Parts of the results were previously presented: CSHP Professional Practice Conference, January 2004. Also parts of the study have been submitted for presentations as poster or oral presentation at the following conferences but results of the reviews are still pending: Qualitative Health Research Conference, April 2004; CPhA Annual Meeting, May 2004; Canadian College of Clinical Pharmacy Conference, June 2004.

## <u>PPR No. 2</u>: Involvement of a community pharmacist research network in evaluating outcomes of bisphosphonate therapy

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Collaboration for Outcomes Research and Evaluation ( $COR_xE$ ), Faculty of Pharmaceutical Sciences, University of British Columbia

**Objective:** This research is part of a Health Canada study to develop innovative methods for evaluating outcomes of drug therapy in the clinical setting.  $COR_xE$  UBC has established a community pharmacist research network to facilitate the collection of real-time, patient-specific data. The objective is to demonstrate an approach to post-marketing surveillance to evaluate tolerability, compliance and persistence of use among new bisphosphonate users under routine conditions.

**Methods:** Through contacts from previous clinical studies and pharmacy groups, BC community pharmacies were invited to enroll in the research network. Pharmacists recruited new bisphosphonate users into the study, and obtained informed consent, administered the baseline questionnaire and prepared a 14-month patient medication history. Pharmacists could choose to conduct the 1-, 3-, 6- and 12-month follow-up assessments or have them conducted by CORXE UBC personnel.

**Results**: Of the 188 research network pharmacies, 74 enrolled 202 patients who have completed baseline and 1-month assessments. Pharmacists chose to conduct follow-up assessments for 59.5% of patients. Each enrolling pharmacy recruited a mean ( $\pm$ SD) of 2.7 ( $\pm$ 2.5) patients (range 1–14). Baseline demographic data: 87.5% female; mean ( $\pm$ SD) age 64.8 ( $\pm$ 10.9) years; 92.6% Caucasian; 79.7% high school graduation or higher; 61.4% retired; 59.4% married; and 66.3% had a third party drug insurance plan. Prescribed bisphosphonates were 47.0% Didrocal®, 37.6% Fosamax®, 11.9% Actonel® and 3.5% Didronel®. Baseline and follow-up assessment findings will be provided at presentation.

**Conclusion:** This innovative community pharmacist research network demonstrates the feasibility of utilizing urban and rural pharmacies to collect patient-specific clinical data necessary for the conduct of outcomes research.

#### PPR No. 3: Drug utilization review (DUR) for the treatment of asthma

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Conseil du médicament, Direction du suivi et de l'utilisation optimale

**Background:** The appropriateness of inhaled  $\beta_2$  agonists and leukotriene receptor antagonists (LRA) for the treatment of asthma in Québec was assessed and compared with the results of a first DUR. The initial use of a combined product, containing a long acting inhaled  $\beta_2$  agonist (LA) [salmeterol] and an inhaled corticosteroid (IC) [fluticasone], in treating asthma was also documented.

Methods: This retrospective study using provincial database included subjects, aged 5 to 45, enrolled in the public drug insurance plan who received, in 2001, at least one prescription of short acting inhaled  $\beta_2$  agonists (SA) or LA or LRA. Appropriateness of use was assessed according to criteria developed in consultation with a group of experts and based on the 2001 update of recommendations by the 1999 Canadian Consensus Conference on Asthma.

**Results**: Although there was a significant improvement in the percentages of appropriate frequency of use for SA in 2001 compared to 1997-1998 (41% vs 8%; p<0.01) and in the continued use of corticosteroids with LA (35% vs 15%; p<0.01), SA are still overused and IC are still underused. Use of LA and LRA was not optimal. Furthermore, the combined product was often used improperly: In the subjects who received this product for the first time, 68% had not received an IC and 42% had received neither an IC or SA for a period of at least 7 months prior to the first prescription.

**Conclusion**: Although an improvement was noted in some respects, utilization of main drugs for treating asthma is not optimal. The *Conseil du médicament*, in collaboration with many healthcare stakeholders, will suggest various strategies to promote better use of asthma therapy.

#### <u>PPR No. 4</u>: The provision and reimbursement of home care services by community pharmacists in Canada

Jennifer Alissa Lawrence 1 and A. Kirsten Woodend 2

**Objectives**: A survey was done to determine the proportion of Canadian community pharmacists providing home care services; roles of community pharmacists in home care; types of patients currently reached; and barriers to providing these services.

**Methods:** The survey was mailed to a random sample of 406 Canadian community pharmacists, stratified by province. Follow-up contacts were made at two weeks and one month in order to maximize returns.

**Results:** The response rate was 49%. Most pharmacies (96%) sold one or more home care products (i.e. monitors, aids, parenterals) and 93% of these pharmacies provided patient training for these products. Only one-quarter (23%) of pharmacists were reimbursed for providing training. Most frequent services provided were compliance packaging, medication reviews, and providing therapeutic alternatives. Prevention/monitoring services were offered by three-quarters of pharmacists, with 34% in patients' homes. Eighteen percent of the pharmacists were reimbursed for providing the above services and most often this was by 3<sup>rd</sup> party or patient payers. Eighty-one percent of these pharmacists said they spent at least 0.5% of their time each week providing home care services. Most of the respondents (90%) felt that pharmacists must be part of home-care teams in order to ensure optimal drug use in the population receiving home care.

**Conclusions**: While the majority of Canadian community pharmacists said they provide some sort of home care service, a much smaller proportion made home visits. Barriers to providing home care services included lack of reimbursement, time, lack of specialized training, shortages of pharmacists, legal issues, and paperwork. Ways of reducing these barriers need to be identified and implemented.

#### PPR No. 5: Pictographic instructions for medications: Do other cultures interpret them accurately?

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**Background:** Dispensing medication is a major service provided by the Canadian Forces' humanitarian relief missions around the world, often taking place in developing countries. This study tested a set of sixteen predeveloped pictograms to determine whether they accurately communicated the written directions found on medication labels to ethnic respondents who neither speak nor read English, French or Spanish.

**Objective:** (1) To determine whether ethnically diverse individuals could understand the pictogram meanings without additional aids such as verbal instructions or explanations, and (2) to identify appropriate modifications to the pictograms to reduce interpretation errors.

**Method:** Both qualitative and quantitative methods evaluated the pictograms' interpretability among three ethnic groups, Cantonese, Somali and Punjabi. Standard ANOVAs tested for differences due to ethnicity and other demographics.

**Key Findings**: Only four of the 16 initial pictograms tested were interpreted correctly by 80% of participants. Relaxing the criterion from 80% to 50% included eight more. Modifications to problem icon elements further improved interpretation accuracy levels by 22% for a 'best-of-three' tally of 67.15%. Quantity errors were twice as common as timing, administration route or auxiliary instruction errors.

**Conclusions:** Participants could identify particular pictographic symbols they found confusing or ambiguous. Basic education and time since immigration predicted interpretation accuracy better than ethnicity or any other demographic characteristic.

<sup>&</sup>lt;sup>1</sup> University of Saskatchewan, <sup>2</sup>Director, Research, CPhA

#### PPR No. 6: Community-based warfarin co-prescribing and point of care INR testing

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Burnaby Research\* & University of British Columbia\*

**BACKGROUND:** Traditionally, hospital and community pharmacists have avoided warfarin management. The major problems are lack of warfarin expertise, subtherapeutic dosing, inconsistent lab monitoring, etc. For over 20 years, outpatient anticoagulation services have provided safe, effective care in the USA.

**METHODS:** In November 2001, a community anticoagulation management program was implemented in BC at 2 London Drugs locations (Brentwood & Kerrisdale). The outpatient service was created to assist physicians with warfarin management. The program met the 12 Anticoagulation Forum Consensus Guidelines and the College of Pharmacists of BC's approval.

**RESULTS:** The service included training and certification of 10 anticoagulation pharmacists, warfarin co-prescribing, protocols, point-of-care INR testing (POCT), counseling rooms, physician referrals, etc. We created a mobile anticoagulation cart; patient chart (i.e. monitoring forms, warfarin dosing grid, progress notes, etc); a reference binder; cheat sheets; POCT INR log book; patient education materials, etc.

At each brief visit, the patient's INR and daily warfarin dosage were determined. The finger stick method required only 1 drop of blood with the result ready in 2 minutes. The pharmacist co-prescribed and scheduled the patient's next INR.

Audits for safety and efficacy were completed in May 2002, September 2002 and December 2003. Satisfaction surveys were completed for patients, physicians and pharmacy staff with excellent feedback.

**CONCLUSION:** The London Drugs Anticoagulation Service with warfarin co-prescribing and point of care INR testing was safe, reliable, faster and more convenient for physicians and patients.

#### SOCIAL & ADMINISTRATIVE RESEARCH

Soc Admin No. 1: Hot on the Net: pharmaceutical policy/PDAs

Timothy Rees, BSc and Elizabeth Foy

College of Pharmacy, Dalhousie University

**Purpose**: Our goal was to make information on pharmaceutical policy, as well as personal digital assistants (PDAs), more accessible to those who need it. The objectives of this project were to: 1) identify journals and institutions publishing a significant number of articles on pharmaceutical policy as well as relevant websites; 2) identify PDA software websites with programs relevant to pharmacy practice; 3) create two new categories for Drug Information Resources: A Guide for Pharmacists (DIR) and; 4) present a talk to Dalhousie IMPART Drug Use Management and Policy Residents on the topic of pharmaceutical policy on the Internet.

**Methods:** To identify "hot journals" and "hot institutions", six pharmaceutical policy areas were chosen and ideal names of pharmaceutical policy departments were devised. PubMed was searched using these names, limiting citations to English-language and those published in the past five years. Both journals and departments having less than 10 occurrences were rejected. Pharmaceutical policy websites were identified using Google® and by scanning relevant print publications. Articles on PDA drug- and pharmacy-related applications were reviewed to identify software programs, commercial and educational mega-websites and useful "how to do it" references.

Results: Thirteen "hot journals" and fourteen "hot institutions" in the area of pharmaceutical policy were identified. The new DIR pharmaceutical policy and PDA categories were uploaded to the Internet in June and September 2003, respectively. The new DIR pharmaceutical policy category was presented to the IMPART Residents on June 24, 2003. Conclusion: Pharmaceutical policy websites and journals and institutions publishing in this area were identified. PDA websites and useful journal articles relevant to pharmacy practice also were identified. As a result, two new categories were added to DIR.

## Section 6:

# Teacher's Conference II: "Measuring Educational Outcomes"

Friday, June 11, 2004 1:30 pm – 5:00 pm Grand Ballroom B

# Teacher's Conference II: "Measuring Educational Outcomes"

#### **OPERATIONALIZING PROGRAM EVALUATION**

Speaker: David Fielding, University of British Columbia

During the AFPC Conference in 2002, a workshop was held to discuss and commence developing a blueprint for evaluating the educational programs provided by Faculties of Pharmacy in Canada. At the Conference the next year, a detailed template constructed from that blueprint was presented and generally accepted as having "potential" as a guide for program evaluation. Today's presentation will briefly review the concept of "program evaluation", present an overview of the recommended evaluation template and outline the progress by UBC's Faculty of Pharmaceutical Sciences operationalizing the template in the evaluation of its undergraduate program. As well, others are invited to report on their progress developing and implementing program evaluation mechanisms at their Faculties.



David Fielding, EdD

Professor of Pharmacy Practice and Associate Dean, Academic Affairs Faculty of Pharmaceutical Sciences, University of British Columbia (UBC)

Dr. David Fielding received his BSc(Pharm) and his MSc (Biopharmaceutics) from Dalhousie University and his EdD (Adult Education) from UBC. He joined the Faculty of Pharmaceutical Sciences in 1977. During his academic career he has taught courses focusing on Pharmacy Management and Administration, Pharmacoeconomics, the Canadian Health Care System, Communication Skills Development, Pharmacy Practice, Law and Ethics. He is the recipient of three teaching awards, including a UBC Killam Teaching Award and the AFPC/Bristol-Myers Squibb National Award for Excellence in Education.

Dr Fielding has held a number of administrative positions within the Faculty including Director, Continuing Pharmacy Education; Chair, of the Divisions of Clinical Pharmacy, Pharmacy Administration and Pharmacy Practice. Currently, he is a Professor of Pharmacy Practice and Associate Dean, Academic Affairs.

The principal focus of Dr. Fielding's research since joining UBC has been "evaluation". Initially, his research activity evaluated the design and implementation of pharmacy continuing education programs and their impact on practice behaviours. Later, he developed an international reputation for his work in the development and evaluation of strategies to assess and assure the continuing competence of pharmacists. Most recently, he joined a group focusing on the evaluation of outcomes related to pharmaceuticals and pharmacy services. He is the author or co-author of 77 articles, chapters, abstracts and reports.

## MEASUREMENT OF EDUCATIONAL OUTCOMES: EXPERIENCES FROM THE UNIVERSITY OF HOUSTON CENTER FOR ASSESSMENT

Speaker: Julianna Szilagyi, University of Houston

It is becoming increasingly important to evaluate the success of colleges and teachers in achieving course/program educational objectives. Not only are accreditation agencies requiring proof of assessment and evaluation processes but students and their families insist on knowing that their tuition is money well spent. This session will address issues related to assessment development, processes and use of data for evaluation purposes. An overview of the Center for Assessment at the University of Houston College of Pharmacy will include how it was established, its function and membership. Related to the Center for Assessment will be discussions and descriptions of the various assessment tools that have been developed and how they are used. Examples of the assessment tools will be provided as well as the data collected. Tools have been developed to assess and evaluate student achievement, individual courses, the overall program, alumni and employers. Furthermore, a comparison of collected qualitative and quantitative data and how the data are combined will be presented. Students are also expected to master certain general abilities that should be expected of any graduate regardless of the discipline. Examples of these abilities and how they may be assessed will be provided. Finally, how the data are used and shared will be described. Ample time will be available for guestions, discussions and small group work.



Julianna E. Szilagyi, PhD Associate Professor, Director of Assessment University of Houston, College of Pharmacy

Dr. Szilagyi received her BS and MS in Biology from Cleveland State University. She then earned her PhD in Physiology from The Ohio State University. Upon graduation, she pursued postdoctoral training in the Research Division of The Cleveland Clinic Foundation. Dr. Szilagyi was an assistant professor in the Department of Medicine of Baylor College of Medicine before joining the faculty at the University of Houston College of Pharmacy. Her basic science research area concentrated on cardiovascular neurobiology with special interests in hypertension, central nervous system control mechanisms, opioids, stress and aging. She has been funded by the American Heart Association, NASA and the National Institutes of Health. Dr. Szilagyi was also elected a Fellow of the Council for High Blood Pressure Research of the American Heart Association. Dr. Szilagyi's College of Pharmacy teaching contributions include Organ System Life Sciences (CNS physiology) and Toxicology (household products, naturally occurring, pesticides). Her interests have shifted from basic science research to educational issues including learning, curricular development, the scholarship of teaching and assessment. Dr. Szilagyi served as Director of Institutional Effectiveness for the University of Houston for more than two years before returning to College of Pharmacy full-time. Dr. Szilagyi is founder of the Center for Assessment at the University of Houston and is the current director of the center, which is housed in the College of Pharmacy. Dr. Szilagyi is now collaborating on a project to develop a standardized assessment tool for use by the colleges of pharmacy in Texas.

## Section 7:

# Meet the AFPC Exhibitors: A closer look at e-portfolios and program evaluation systems

Saturday, June 12, 2004 8:00 am - 10:30 am Grand Ballroom B

# AFPC/CSPS Joint Session Pharmaceutical scientists and society: Is the supply meeting the demand?





Saturday, June 12, 2004 10:30 am - 11:55 am Grand Ballroom A

# Meet the Exhibitors: A closer look at e-portfolios and program evaluation systems

The AFPC exhibitors are an important aspect of the 2004 conference providing expertise and tools that not only support the conference themes, but have the potential to support broader AFPC educational initiatives. As a continuation of the AFPC Teacher's Conference, exhibitors have been asked to provide delegates with a closer look at their technology-based e-portfolio and program evaluation software products, and their application to pharmacy education. Representatives from Academic Management Systems and Nuventive will provide short presentations on their products followed by an audience Q & A session.





## AFPC/CSPS Joint Session Pharmaceutical scientists and society: Is the supply meeting the demand?

#### Chairs:

Frank Abbott, AFPC, Vancouver, BC and Fakhreddin Jamali, CSPS, Edmonton, Alberta

#### Panelists:

Rav Kumar, Vice President, Regulatory Affairs & Pharmaceutical R&D, GlaxoSmithKline Canada Inc. Brian Foster, Senior Science Officer, Therapeutic Products Directorate, Health Canada Bob Sindelar, Dean, Faculty of Pharmaceutical Sciences, University of British Columbia Jacques Turgeon, Dean, Faculty of Pharmacy, University of Montreal

**Doctoral Shortages in Academic Pharmacy in Canada:** Is there a problem and if so what do we do about it? It has been estimated that pharmacy faculty shortages will continue to grow over the next 10-15 years. These shortages will have an impact on the ability of Faculties to increase enrolments and to provide the quality and breadth of science and training that we are expecting tomorrow's pharmacy graduates to possess. Recruitment of quality faculty in Pharmacy is already a challenge and with pharmacy student graduates declining careers in academia, this will add further to the dilemma of acquiring competent academic personnel. Panel members Frank Abbott, Bob Sindelar, and Jacques Turgeon will speak to the nature and extent of the problem, the initiative of Pharmacy organizations with Human Resources Development Canada (HRDC), and solutions to increasing the numbers of our graduate students who choose a career in academic Pharmacy.



Frank Abbott, PhD Executive Director Association of Faculties of Pharmacy of Canada



Bob Sindelar, PhD Dean, Faculty of Pharmaceutical Sciences University of British Columbia



Jacques Turgeon, PhD Doyen, Faculte de pharmacie Université de Montréal

## **Section 8:**

## **Pharmacy Practice Research Symposium**

Saturday, June 12, 2004 2:00 pm - 5:00 pm Grand Ballroom B



## AFPC Pharmacy Practice Research Symposium 2004 "The arrow goes both ways: Linking pharmacy practice research with curriculum"

Sponsored by:



#### 2:00 pm Introduction to the Session by the Chair

Lisa Dolovich, Department of Family Medicine, McMaster University

Pharmacy education aims to produce pharmacists who can meet the drug related needs of society. Pharmacy practice research is research that attempts to inform and understand pharmacy and the way in which it is practiced. The objectives of this symposium are to describe some initiatives that link pharmacy practice and pharmacy education, to discuss how pharmacy practice research can inform pharmacy education and to discuss actions that can be taken within institutions to strengthen the link between pharmacy education and pharmacy practice.

#### 2:15 pm EXPERIENCES WITH THE UBC SPEP PROGRAM

Rosemin Kassam, Faculty of Pharmaceutical Sciences, University of British Columbia

**Background:** In response to changing health care needs, pharmacy schools across North America are challenged to provide students with opportunities to hone the full range of competencies necessary to practice pharmaceutical care (PC). As faculties adopt PC practice into their experiential curricula, they are obligated to generate and share research that will help the profession understand how experiential education helps meet educational outcomes and address societal needs.

**Objective:** This presentation highlights several program evaluation initiatives currently underway at UBC to assess (1) the impact of the senior year community pharmacy-based PC clerkship program on students' skills, knowledge and attitude related to PC, (2) how students' skills translate into practice, (3) how in-store pharmacists acquire information and skills to become preceptors and clinical instructors, and (4) how patient satisfaction with pharmacy services excels in stores supporting the enhanced PC clerkship program.

**Methods**: A prospective, comparison-group design was used to implement and evaluate the enhanced PC clerkship course.

**Results**: Data from on-going SPEP program evaluation suggest that students in the enhanced program experienced greater improvement in their PC skills than did students in the traditional program (M=72 vs 58, F=9.31, p<0.004); they voiced stronger endorsements of the principles of PC (M=124 vs 115, F=33.63, p<0.000); and they provided comprehensive PC to a significantly larger number of patients (M=13 vs 1 vs 1, F=210.52, p<0.000). These results were affirmed by their clerkship preceptors whose own training produced 27% gains in their preceptor skills (t=7.81, df=19, p<.000). Furthermore, patients who reported experiencing a consultation with an in-store pharmacist or pharmacy student showed higher overall satisfaction scores than those reporting no such consultation (4.12 vs 3.26; F=37.92, p<0.000).

**Conclusion**: Our experience demonstrates that the SPEP provided students with a richer experience to develop their PC-related competencies, and that this experience resulted in positive outcomes for patients who came to recognize and expect such improved care.

## 2:45 pm INTEGRATING FAMILY MEDICINE AND PHARMACY TO ADVANCE PRIMARY CARE THERAPEUTICS: DEVELOPMENT OF A TRAINING AND MENTORSHIP PROGRAM *Zubin Austin* and *Lisa Dolovich*, Leslie Dan Faculty of Pharmacy, University of Toronto

IMPACT is a multi-site demonstration project that involves 7 pharmacists, approximately 70 physicians and covers approximately 150,000 patients. The goal of IMPACT is to improve patient outcomes by optimizing drug therapy through a community practice model that integrates pharmacists into family practices. Within each practice site, a pharmacist with special clinical training works 2.5 days per week (for 1 year) and coordinates a multifaceted intervention aimed at optimizing drug therapy to improve patient outcomes (blood pressure, cholesterol, diabetes, pain control, constipation, etc.) One of the supports put in place for IMPACT pharmacists was a weekend training workshop and ongoing support from a mentorship program. The Family Health Simulator (FHS) formed the centrepiece of the IMPACT Training workshop. The FHS was conceived as a simulation of primary care practice for pharmacists; while patient simulations are now commonplace in pharmacy education, practice-based simulations have not been previously reported. Needs assessment research identified knowledge and skills gaps related to interprofessional communication, shared decision making, and complex patient management. Findings suggest the Family Health Simulator provides a unique and effective vehicle for teaching and assessing of competencies required of pharmacists in primary care settings. Though logistically challenging to develop and implement, the FHS was an important component of transitional training for pharmacists entering primary care settings.

## 3:15 pm Innovative Pharmacy Practice: How can Innovation Guide the Training of the Next Generation of Pharmacy Practitioners?

*Judith Soon*, Collaboration for Outcomes Research and Evaluation (COR<sub>x</sub>E), Faculty of Pharmaceutical Sciences, University of British Columbia

**Objective**: Emergency contraception (EC) is a well established, but underutilized, method of reducing the risk of unwanted pregnancies. In December 1999, BC pharmacists were the first in Canada to be granted independent prescriptive authority for EC. To train practitioners in this innovative new role, the BC Pharmacy Association, the College of Pharmacists of BC and COR<sub>x</sub>E UBC developed a coordinated approach to EC training, certification and outcomes evaluation.

**Methods**: Community practitioners were invited to be trained to provide standardized three-hour EC workshop-format educational sessions to interested pharmacists in geographically-diverse communities. Using role-playing and small group discussions, training sessions educated pharmacists to: understand the role of EC in pregnancy prevention; be aware of the mechanisms of action of EC; be able to identify candidates for EC; be familiar with patient counseling techniques and community referral sources. In addition, undergraduate students were encouraged to receive EC training, had the opportunity to be research assistants with the EC research program, and received updated EC research findings as a component of their curriculum.

**Results**: Ninety volunteer trainers provided 186 training sessions at 55 different locations throughout BC in the first two years of the EC program. During this time, 1456/2500 (58%) community pharmacists and 76 undergraduate students completed requirements for certification. Feedback from the 62% of certified pharmacists who completed a satisfaction survey was positive and constructive; follow-up training in counseling techniques for difficult situations was subsequently provided.

**Conclusion:** A training program provided to BC community pharmacists and undergraduate students enabled expansion of their role in pharmacy practice to incorporate timely provision of EC.

#### 3:30 pm Coffee Break

#### **4:00 pm Submitted Presentations** (15 MINUTES EACH):

## **Evaluation of Pharmacist Practice in an Interdisciplinary Primary Care Team-based Setting: Implications for Pharmacy Education**

Jana M. Bajcar<sup>1,2</sup>, Natalie Kennie<sup>1,2</sup>, Tom Einarson<sup>1</sup>. <sup>1</sup>Leslie Dan Faculty of Pharmacy, University of Toronto and <sup>2</sup>Department of Family and Community Medicine, St. Michael's Hospital, Toronto

**Purpose**. To evaluate an innovative, functional prototype of pharmacist best-practice in an interdisciplinary primary care team. The goals were to conduct a process evaluation to characterize activities and functions that were needed to meet the needs of the team and explore processes and structures used by the pharmacist to contribute to collaborative medication management (CMM).

**Methods**: This study used mixed (quantitative and qualitative) methods: (a) a retrospective chart review of 105 patients to study the type of drug-related problems and their relationship to pharmacist's role and pharmacist-physician collaboration; and (b) a grounded theory method to data collection and analysis of case scenarios of pharmacist's involvement in patient cases to identify key categories, their properties, and relationships to the pharmacist's role in CMM.

Results: The findings revealed that in addition to the philosophy of pharmaceutical care, there are six more principles that need to guide pharmacist practice in CMM. To contribute to CMM pharmacists will need to become competent to perform multiple functions that form a foundation for a repertoire of core expertise. A key finding was the characterization of a reflective approach that defines the nature of involvement and level of pharmacist responsibility in different patient situations which is an essential reflective competency that will need to be acquired by pharmacists if they are to integrate effectively into primary care teams.

**Conclusions:** There is large variability in the functions and the nature of involvement potentially required of a pharmacist in primary care, thus pharmacy students will need to become highly reflective practitioners competent to perform a wide repertoire of specific expanded patient care functions.

Parts of the results were previously presented: CSHP Professional Practice Conference, January 2004. Also parts of the study have been submitted for presentations as poster or oral presentation at the following conferences but results of the reviews are still pending: Qualitative Health Research Conference, April 2004; CPhA Annual Meeting, May 2004; Canadian College of Clinical Pharmacy Conference, June 2004.

## **Experiences with Collaborative Practice among Pharmacy and Nutrition Students Assessing a Standardized Patient**

Roy Dobson, Jeff Taylor, Jane Cassidy, Doreen Walker. College of Pharmacy and Nutrition, University of Saskatchewan

**Study Objective**: To determine student perceptions of participating in an interdisciplinary team-based patient assessment lab.

**Methods**: Participants consisted of 21 third year Nutrition students (100%) and 54 fourth year pharmacy students (73%). Groups consisted primarily of pharmacy-nutrition (PN) or pharmacy-pharmacy pairings (PP). Due to scheduling constraints, there were also two groups of three pharmacy students (PPP). Students completed a questionnaire relating to their experience at the end of the assessment lab. Analysis included frequency and comparative statistics. Comments arising from open-ended questions were collected into themes.

**Results**: Most students agreed: the objectives of the lab were clear; the lab objectives had been met; they were able to obtain a sufficient range of information from the patient; their partner's knowledge and skills increased their ability to gather information; it was easy to work together; and working together was beneficial. Themes emerging from written

comments included: the quality of the simulated practice setting; the scope of the patient interview; awareness of the role of another health professional; enhanced clinical knowledge; and interdisciplinary teamwork.

**Discussion**: The assessment lab's collaborative approach was well received by the students, with most students reporting a real benefit from working with another person. Comments indicated enthusiasm for the scenario and the opportunity to work with "real" patients. Comments also suggested students working with another discipline had gained in their appreciation for the contributions made by another health profession. The findings illustrate the need to develop opportunities for interdisciplinary practice and shared learning. Future interdisciplinary labs and activities are being planned with expansion to other disciplines outside the College of Pharmacy and Nutrition.

4:30 pm Panel to lead large group discussion and development of recommendations for use at each faculty

Panelists: Lisa Dolovich, Rosemin Kassam, Zubin Austin, Judith Soon, Jana Bajcar, Roy Dobson

5:00 pm ADJOURN



**Lisa Dolovich**, BScPhm, PharmD, MSc Associate Professor, Department of Family Medicine, McMaster University Ambulatory Care Pharmacotherapy Specialist, St. Josephs Healthcare Associate Director, Centre for Evaluation of Medicines

Dr. Lisa Dolovich is a pharmacist who obtained her Bachelor of Science in Pharmacy and Doctor of Pharmacy degrees from the Faculty of Pharmacy, University of Toronto. She completed a Canadian Society of Clinical Pharmacology Fellowship at the Centre for Evaluation of Medicines in 1998 and completed her Master of Science degree in Health Research Methodology at McMaster University.

Lisa currently divides her time between the Centre for Evaluation of Medicines and the Pharmacy Department at St. Joseph's Healthcare, Hamilton Lisa leads the Team for Individualizing Pharmacotherapy in Primary Care for Seniors (TIPPS) research program and runs a Medication Assessment Clinic at St. Joseph's Healthcare Hamilton together with Dr. Mitchell Levine.



**Rosemin Kassam**, BScPharm, PharmD Assistant Professor; Director, Structured Practice Education Programs (SPEP) Faculty of Pharmaceutical Sciences, University of British Columbia

Dr. Rosemin Kassam obtained her Bachelor of Science in Pharmacy from the University of Alberta. She completed a hospital residency at the Royal Alexandra Hospital in Alberta and obtained her Doctor of Pharmacy degree from the University of Toronto. Rosemin is currently an Assistant Professor and Director of the Structured Practice Education Program at the University of British Columbia, and a Pharmacotherapeutic Specialist with the Vancouver Coastal Health Authority Geriatric Diabetes Program. She brings extensive practice experience to her current position. She has worked in both community and hospital pharmacy, and was the project manager and clinical coordinator of the Pharmaceutical Care Research and Education Project in Alberta prior moving to BC. Rosemin is currently involved in educational and pharmacy practice research, and as Director of SPEP, her primary interest is to assess how experiential education helps meet educational outcomes and address societal needs.



**Zubin Austin**, MSc, MBA, MEd, PhD Assistant Professor, Leslie Dan Faculty of Pharmacy, University of Toronto

Zubin Austin is Assistant Professor at the Leslie Dan Faculty of Pharmacy, University of Toronto, and the inaugural chair-holder of the OCP Professorship in Pharmacy. A graduate of the University of Toronto, Zubin has completed Masters degrees in Business Administration, Information Science and Education, as well as a PhD in Cognitive Science. Currently, he coordinates undergraduate courses in pharmacy practice and applied pharmaceutical sciences, and teaches in graduate courses in health professions education. He has an active research program and supervisors several MSc, MEd, and PhD students. He has published extensively in the area of health professions and pharmacy education, and has been an invited speaker at numerous national and international conferences. As Principal Investigator, he was instrumental in development of the International Pharmacy Graduate program at the University of Toronto, a bridging education program designed to assist foreign-trained pharmacists in acquiring the knowledge and skills necessary to meet Canadian standards of practice. This program has been recognized as a "best-practices" model for immigrantintegration in Ontario. Zubin is also an award-winning educator, having received teaching recognition from both the Association of Faculties of Pharmacy of Canada and the American Association of Colleges of Pharmacy.



**Judith Soon**, BSc, MSc, Diploma (*Epidemiology & Biostatistics*), PhD, FCSHP Assistant Professor, Faculty of Pharmaceutical Sciences, University of British Columbia

Dr. Soon is currently an Assistant Professor at the UBC Faculty of Pharmaceutical Sciences and Research Associate of the Collaboration for Outcomes Research and Evaluation (CORXE UBC) initiative. She is also a Clinical Assistant Professor at the University of Washington with the School of Pharmacy. From 1978 to 1991, Dr. Soon developed and managed a province-wide consultant clinical pharmacy program for long-term care facilities and was a consultant to the Continuing Care Division of the BC Ministry of Health. In 1991, she began graduate studies at UBC and McGill University, with a focus on pharmacoepidemiology, pharmaceutical outcomes research using health care databases, and the effectiveness of geriatric pharmacotherapy. In 1999, Dr. Soon began teaching in the Geriatric Pharmacy Practice Program at the University of Washington and in 2000 joined the Faculty at UBC. The primary focus of Dr. Soon's research is on the use of provincial linked databases in combination with field studies to study drug utilization and clinical outcomes to inform clinical decision-making and health policy. Clinical areas of interest include geriatric depression, osteoporosis and women's health issues. In 1999, Dr. Soon began developing a research network to facilitate the outcomes evaluation of pharmacistinitiated emergency contraception in BC. The evaluation currently encompasses 14 different studies, including linked database analyses with PharmaNet, MSP and Hospital Separations data, a field study using informed consents for treatment, multiple surveys of non-prescription provision, a pharmacoeconomic evaluation, and qualitative surveys of barriers to access to emergency contraception. Dr. Soon coordinates the COR<sub>x</sub>E UBC province-wide community pharmacist research network used to collect data for two other COR<sub>x</sub>E UBC projects "Effectiveness of Bupropion for Smoking Cessation" and "Outcomes of Bisphosphonate Therapy in the Treatment of Osteoporosis". Dr. Soon has received numerous research awards from CSHP, CPhA, CFP, UBC, and ISPE, has published articles and abstracts on adverse drug reaction monitoring and depression in the long-term care setting, and more recently in the area of emergency contraception.



Jana M. Bajcar, BScPhm, MScPhm, EdD, FCSHP Associate Professor, Leslie Dan Faculty of Pharmacy and Faculty of Medicine, University of Toronto

Jana Bajcar is an Associate Professor in the Leslie Dan Faculty of Pharmacy and Faculty of Medicine (Department of Family and Community Medicine) at the University of Toronto and also is a Primary Care Pharmacist in the Department of Family and Community Medicine, St. Micheal's Hospital, Toronto. She received her undergraduate and graduate pharmacy degrees from the University of Toronto and her Doctor of Education degree (Health Care Specialization) from Nova Southeastern University, USA. She has held clinical and administrative positions in teaching and non-teaching hospitals and has been involved in developing and studying the implementation of pharmaceutical care models of practice in the critical care and in the family physician office practices. She has been involved in pharmacy education for the last 14 years in the Undergraduate and PharmD programs and for eight years she was the Director of the Doctor of Pharmacy Program at the University of Toronto.

Dr. Bajcar's current research focus is on the reduction of preventable medication-related problems from multiple perspectives (different health care professionals and patients) and in diverse patient populations (across illnesses, practice settings, ages, socioeconomic and mental status). One research focus is on the development of targeted pharmacist practice models and practice tools. A current research project is focusing on defining potential pharmacist practice models within a team-based primary care setting. Within pharmacy practice, education has been isolated as an evolving focal point for inquiry, specifically the study of strategic education models for medication-related instruction for various audiences. Within this area she is currently involved in several studies that focus on educating and supporting patients and their families to develop and maintain an effective medication-taking practice (e.g. psychiatric adolescent patients and their parents, socially disadvantaged diabetic

patients, elderly patients on chronic medications) and through these studies she is investigating patient-centered approaches to patient mediation-taking education. The second research focus is on pedagogical methods and is correlative to the pharmacy practice research and how each one informs the other.



**Roy Dobson**, PhD Assistant Professor, College of Pharmacy and Nutrition, University of Saskatchewan

Dr. Dobson is an Assistant Professor of Pharmacy Administration in the College of Pharmacy and Nutrition, University of Saskatchewan. Dr. Dobson holds a Bachelor of Science in Pharmacy from Dalhousie University, and a Master of Business Administration and a Doctor of Philosophy in Interdisciplinary Studies from the University of Saskatchewan. Dr. Dobson's research interests include health care human resource management and development, drug and health care policy, and drug utilization. Current research projects include two CIHRfunded National studies: "Interdisciplinary collaboration in community practice" and "The role of profession equity in the work of physicians". In addition to his teaching and scholarly activities, Dr. Dobson also serves as a member of the Formulary Committee of Saskatchewan Health and is a Member of the Board of Saskatchewan Blue Cross. Dr. Dobson is also a Member of the Council for the Association of Faculties of Pharmacy of Canada. As a consultant, Dr. Dobson has served as a strategic planning facilitator with various organizations.

## **Section 9:**

## **Conference Exhibitors**

#### **Academic Management Systems**



Academic Management Systems provides management software for health professions schools, colleges, and universities. Our focus is on admissions management, curriculum analysis, course assessment, and CV management. We are located in Amherst, New York and we are a subsidiary of Liaison International, Inc.

#### **Contact Information:**

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#### Nuventive



Nuventive is an education-focused technology and consulting company with a mission to provide individuals, educators, parents, and institutions with the tools and services they need to effectively examine, improve, and manage the learning process.

TracDat automates the institutional planning and assessment process by providing a structured framework for continuous quality improvement. TracDat also helps colleges and universities with external accreditation.

iWebfolio provides an individual with the ability to store, organize, and display personal "learning" evidence to "third parties" (faculty, admissions offices, employers, etc.) through the creation of any number of views of their work (individual portfolios). Each portfolio has its own user controlled security profile thus allowing the user to decide who has access to a specific portfolio (view). These portfolios can contain learning goals, personal reflections, educational accomplishments, skills, activities, competencies, and work samples, among other items, in a broad variety of formats including text and multimedia. iWebfolio also provides the ability to interact with institutional improvement and assessment processes, as well as with faculty, mentors, and supervisors.

Nuventive offers consulting services in a variety of areas focused on institutional planning and assessment, and the uses of electronic portfolios.

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## **PART 2.0**

## MINUTES OF AFPC MEETINGS

2004

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

## MINUTES and Notes from the STRATEGIC PLANNING SESSION

February 8-9, 2004
Maple Room
Hilton Suites Toronto/Markham

#### Conference Centre and Spa

#### Sunday, February 8, 2004:

Members attending:

Simon Albon, Sheila Kelcher, Roy Dobson, Zubin Austin, Sylvie Marleau, Chantal Pharand, Jean Lefebvre, Ann Marie Whelan, Susan Mansour, Lili Wang, Franco Pasutto, Mike Namaka, and Frank Abbott. Regrets, Lavern Vercaigne.

8:30 AM Opening Remarks President Susan
President Susan Mansour welcomed everyone and made note of newcomers, Dean Franco
Pasutto representing ADPC and Dr. Chantal Pharand as the new representative from the
Université de Montréal. Susan expressed to Roy Dobson our sincere thanks for
volunteering to facilitate the strategic planning process and for his work in preparing for the
planning session.

#### STRATEGIC PLANNING SESSION

ROY DOBSON, FACILITATOR

The session consumed all of the activities of Sunday, February 8 and more than one hour of Monday morning, February 9 to finalize the priorities.

Roy provided a handout of the slides and spoke to the need for strategic planning and the process by which the group was to accomplish this goal. Frank took rough notes of the session and these were provided to everyone at the completion of the planning exercise. Roy took the information and provided a polished version of notes from the strategic planning session. These notes are copied here for reference.

#### REPORT ON AFPC STRATEGIC PLAN

#### Roy Dobson - Facilitator

On Sunday February 8<sup>th</sup> and Monday February 9<sup>th</sup>, 2004, the AFPC Council met to develop a strategic plan for the organization. As the facilitator of the process, Frank has asked me to review the minutes on the process we carried out and to summarize the decisions made by the group. To provide a context, I have also included some of the information provided

to the group in the form of overheads at the start of each activity. Please review the following and provide your comments to either Frank or myself as to the accuracy of the content and whether you agree with the proposed action plans.

#### Overview

Sunday, February 8<sup>th</sup> consisted of four sessions of approximately 1.5 hours each. We began with a discussion of the purpose, mission and goals of AFPC (Who are we?). The second session was dedicated to an examination of the external environment faced by AFPC and to identifying the opportunities and threats associated with that environment (Where are we headed?). Councilors were also asked to identify the strengths and weaknesses of AFPC relative to the external environment (Where are we now?). After lunch, councilors were asked to identify the most important opportunities, threats, strengths and weaknesses and to place these into a decision matrix for the purpose of identifying appropriate strategies for the organization. The remainder of the afternoon was dedicated with the identification and formulation of strategy (What direction should we a set?). On Monday, an hour of time was set aside to prioritize strategies for the purpose of developing action plans (How do we get there?). Once more fully developed, it is hoped that these action plans can be presented at the AFPC 2004 AGM in Vancouver in June.

#### Session 1 (Who are we?)

Strategic planning is a process that allows a group or organization to choose how to relate to their environment and changing circumstances. It allows the group to position itself today to take advantage of future developments and to protect itself from negative factors in the environment. Strategic planning does not eliminate risk; it only allows the risk associated with different choices to be quantified.

Strategic planning allows the group to develop strategies and action plans that are consistent with the mission of the organization, its goals and objectives, the realities of the external environment, and the ability of the organization to carry out these strategies and action plans. In turn, these requisites must reflect the values of the organization and its purpose or reason for being.

We began by discussing the <u>purpose</u> of AFPC (Why do we exist?). From the group the following were identified:

- AFPC supports the ability of each faculty to keep in touch with one another to enhance communication and to act as a pool of expertise to address common problems and issues. The AFPC was also seen to facilitate the sharing ideas and resources of information;
- 2. To jointly further the goals of the faculties;
- 3. To represent the faculties to external groups on issues of pharmacy education and research. To act as marketing tool for the faculties; and
- 4. To communicate research opportunities back to the faculties.

Values were also identified by the group, including: competence, creating grad students, learning, community, promotion of health, promoting ethical practice, promoting skillful communication, innovation as academics individuality, scholarship and professionalism, leadership, intellectual freedom, excellence, dedication, people matter, teamwork.

The mission statement of an organization must reflect the purpose and values of the organization. It must state clearly, why we exist, who we serve and how we will act. The current 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." It was agreed the current statement does not fully meet these criteria.

The councilors were divided into two asked to respond to each of these three questions and to come up with a mission statement.

Group 1: Saw AFPC as a HUB Point of interest (Why) for teachers, researchers and other external organizations (Who) by facilitating communication, promoting excellence in pharmacy education and scholarly activity (How).

Group 2: Saw AFPC as a unifying voice for academic pharmacy, promoting and recognizing innovation and leadership, excellence in pharmacy education and scholarly activities (Why) for academia and other members (Who) through collaboration, communication, representation, awards, and an advisory role (How).

Note: At this point it was agreed that Susan, Frank and Roy would take the ideas put forward by the two groups and develop a mission statement. This mission statement would be brought back to the council for further clarification and ultimate approval.

In terms of the goals of the organization, those already identified in AFPC documents were seen to be appropriate. Specifically:

- 1. To foster excellence in pharmaceutical education
- 2. To foster excellence in scholarly activities
- 3. To establish and maintain liaison with external organizations for the development, support and improvement of pharmaceutical education and research.

#### Session 2 (Where are we headed? And where are we now?)

In a very productive brainstorming session a number of opportunities and threats, strengths and weaknesses were identified:

#### **Strengths**

Clear structure and bylaws of the organization

The National perspective afforded the organization

The AFPC consists of a unique group of individuals capable of bringing a diverse range of skills and experience when addressing an issue

The annual conference provides a forum for discussion and dialogue

The organization is able to "tap" into lots of expertise

The councilors are motivated and interested (united, engaged)

The small number of schools (9) makes the organization agile.

#### Weaknesses

No students on Council Very little power Lack of secure funding Not enough awareness and involvement by members Limited participation by members
We do not know enough about needs/desires of suppliers
Capacity to get things done is limited
Efficiency is compromised by the geographic dispersion of the organization
Lack of focus

#### **Opportunities:**

Create a portfolio
Need for a HUB
Demand for our expertise
Role in recruiting future academics
Government is open to national based programs
Higher profile for Pharmacy Practice Research
Changing role of pharmacy
Advertise our successes

#### Threats:

Needs of other organizations are changing Changing practice on how industry funds Industry expectation for payback Workload- volunteers Fragmentation of faculties (CSPS, CCCP, CPhA) Limited participation within faculties Public unaware of pharmacy role Disconnect between education and practice Pharmacist salaries

#### Sessions 3 and 4 (What course should we set?)

#### Priorities identified from SWOT

Strengths	Weaknesses
National perspective	Lack of secure funding
Motivated interested members	Lack of focus
Expertise Unique	Lack of influence
Organization is sound	Constituency base is too small
Opportunities	Threats
Changing role of Pharmacist	Workload-volunteers
Government open to support initiatives	Fragmentation of faculties
that support change in health care	Changing role of Pharmacists
Increased need for academics	
Disconnect-training and practice	

Based on the most important items identified from our SWOT we applied a decision matrix to determine strategies that would allow us to achieve our goals. From the decision matrix we can determine how to:

- 1. Use strengths to take advantage of opportunities
- 2. Overcome weaknesses to take advantage of opportunities
- 3. Use strengths to minimize threats
- 4. Overcome weaknesses to minimize threats

#### Use Strengths to take advantage of Opportunities:

Build a national perspective for recruiting grad students and academics Raise AFPC profile – showcase people and profession Use our strengths to promote Rx role change Use our experts to develop a distinct image/persona/voice for AFPC

#### Weaknesses to take advantage of opportunities:

Identify key projects and write grants to secure supplemental funding Advocate role of primary care to broaden constituent base. Use past successes to create portfolio to raise awareness. Develop collaborative lobbying

#### **Strengths to minimize threats:**

Use our expertise to inform the profession of our relevance to their mission. Recognize councilors and other volunteers (reward, value, incentive, merit). Use our national perspective to identify commonalities to decrease fragmentation. Identify national issues to increase relevance to membership (increase attendance at conference).

Increase faculty representation on council to decrease workload. Identify faculty specific expertise.

#### Overcome weaknesses to minimize threats:

Ongoing strategic planning activities
Improve focus to reduce workload
Greater involvement with current resources
Determine current communication strategy with external groups
Increase the number of joint meetings with common themes
Identify ways to increase Dean support – ideas that Deans cannot refuse
Increase visibility with other organizations and disciplines

#### Monday Morning, February 9, 2004

Strategies Requiring Action Plan Development (**Priorities Bolded**)

Raise Profile of AFPC

Leadership role in recruitment of graduate students and faculty

Develop a plan for long term stable funding

Increase collaborative relationships with other groups.

Broaden constituency base.

Identify the skills available to us within the organization Develop a better working relationship with the Deans

#### Next Steps:

Susan, Roy and Frank to finalize a strategic plan for presentation to Executive and Council at the Annual General Meeting in Vancouver. Susan to develop a business plan consistent with the strategic plan and the activities anticipated therein for years 2005 – 2009.

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

## MINUTES MID-YEAR COUNCIL MEETING

## February 9, 2004 Maple Room Hilton Suites Toronto/Markham Conference Centre and Spa

9:00 AM – following an early morning closing session of strategic planning.

- 1. Remarks from President Susan Mansour: Susan welcomed everyone to the business meeting and officially welcomed new councilor, Chantal Pharand and ADPC representative, Dean Franco Pasutto. Susan asked for comments on the strategic planning process and congratulated Roy on organizing and conducting a highly successful planning session.
- 2. Roll Call and Approval of the Agenda

President Susan

#### Present:

Simon Albon, Sheila Kelcher, Roy Dobson, Zubin Austin, Sylvie Marleau, Chantal Pharand, Jean Lefebvre, Ann Marie Whelan, Susan Mansour, Lili Wang, Franco Pasutto, Mike Namaka and Frank Abbott.

Item 4.4 was added to the agenda.

Approval of the revised agenda – moved/seconded, Zubin/Sheila; Carried.

3. Approval of Council Meeting Minutes

Council Meeting, Thursday, May 29, 2003 – moved/seconded, Roy/Zubin; Carried. Council Meeting, Sunday, June 1, 2003 – moved/seconded, Zubin/Simon; Carried. Proceedings 2003 – moved/seconded, Simon/Anne Marie; Carried.

- 4. Business Arising from the Minutes:
  - 4.1 Compendium of Pharmacy Practice and Education Student/Resident Projects: Frank reviewed the success of the first version of this publication and the subsequent loss of funding for a second compendium. Frank asked for approval to continue fund raising for this project. It was evident from the discussion that it remained one of AFPC's priorities. To reduce costs, it was suggested that we might distribute the compendium ourselves.
  - 4.2 Faculty Role in Residency Projects: Frank spoke to the request from the Hospital Pharmacy Residency Board that

all Faculties of Pharmacy in Canada increase their involvement with the Hospital Pharmacy Residency Programs. The issue was raised at the Annual Deans meeting in 2003 but remains unresolved. Franco spoke to the need to increase community residency programs. It was recommended that Frank write to Shallen Letwin regarding taking this issue to the Deans again and what collaborative action is required to move towards some resolution of the request.

#### 4.3 Standards for Clinical Faculty Tenure Track:

This item was taken to the Deans Annual meeting in October of 2003 and Dean Collins was to collect and collate data on the current standards and practices for clinical faculty tenure track across Pharmacy Faculties in Canada. Once this data is obtained, Frank was to communicate the results to CCCP. After some discussion, it was agreed that councilors would take on the task of collecting the data in their respective Faculties. Analysis of the data could provide material for a suitable publication – Zubin, Sheila and Mike agreed to champion the task and this item was to be placed on the AFPC project list.

4.4 Educational Outcomes for Entry Level Pharm D.

Susan is to chair and lead this task. Discussion of who should be on this task force included Sharon Mitchell of the University of Alberta, Debra Sibbald of the University of Toronto, and Nancy Winslade, consultant in Health Professions Education and Assessment, Montreal.

#### 5. Committee Reports:

#### 5.1 Awards Committee:

Committee chair, Lili Wang, reviewed the items that the committee was to address during the current year and described the progress that was made with respect to updating the Awards Booklet. The CFP Poster Award is now awarded to the top two posters in the competition at the Annual Conference. The awards are \$ 500 each. Wording in the booklet encourages CFP poster awardees to attend the awards presentation part of the AFPC Annual Conference and the banquet. Two best candidates (up from one) from each of the Faculties of Pharmacy are now eligible to compete for the Merck Frosst Postgraduate Pharmacy Fellowship Awards. Second year students are now eligible to apply for the Apotex Undergraduate Pharmacy Practice Research Award. Thanks to the work of Sylvie Marleau, Ema Ferreira and Jean Lefebvre corrections to the French wording in the booklet were made to be consistent with the English text. Lilly also reviewed the number of applicants for each of the active awards.

There was some discussion about the difficulties of some Faculties in finding candidates for the Apotex undergraduate awards and how unspent funds were to be utilized. This problem will need further discussion.

#### 5.2 Bylaws Committee:

Committee chair, Lavern Vercaigne, was unable to be at the midyear meeting but submitted an interim report that recommended changes to the criteria for "Honored Life Member". The report contained the following motion from Lavern:

"On retirement or disablement, an Honored Life Membership will be awarded to individuals who have made major contributions to AFPC and have been members for 10 years (including at least 5 consecutive years at the time of their retirement or disablement) or an active non-member who has made a major contribution to the organization."

Rationale: The rationale is that all members of Faculties across Canada are now members simply by being employed at the University (with a greater than 0.2 EFT appointment.) In this case, they really have not made a decision to be an active member, to pay dues, to vote, etc). Therefore, there should be a component of making a major contribution to AFPC even for individuals that have been simply employed at a University for a long time (and by default are members of AFPC). The motion by Lavern was seconded by Sheila and the motion carried.

#### 5.3 Communications Committee:

Simon Albon, committee chair, reviewed activities regarding the Newsletter with respect to submission formatting, category formatting and additional categories. These changes have facilitated the editor in streamlining the editing process and producing a newsletter on a timely basis. Website user statistics indicate that the AFPC newsletter is being accessed regularly online. The Communications Committee would like to thank Rebecca Law for the outstanding job that she continues to do as editor. Susan is to send a letter of thank you to Rebecca. Simon spoke to the smooth working relationship with Felicia Lo of Planetship Design. Statistics of Web Page use were presented for reference. The AFPC domain name (www.afpc.info) has been renewed for a five-year period. Proposed Phase II development of the Website that includes roster information, online abstract review and a mirror site in French awaits funding. Frank described a project to include a section of the web site for ADPC - largely contact information. He also mentioned some requests from industry and the profession to post job opportunities. There is no policy for the latter and Simon and Frank are to explore suitable rates for posting ads from Pharmacy employers. Moved/seconded, Sheila/Anne Marie to approve the proposal for ADPC data on the web site. Carried.

#### 5.4 Conference Planning Committee (2004):

Simon Albon, Conference Chair, presented a report of the conference giving an overview of the events, the members of the organizing committee and their respective responsibilities. Most of the information is contained online through the web site. What is new to the Conference are School Posters and Simon spoke briefly to the expectations of preparing and presenting School Posters. It was expressed that a visit to the Faculty should be scheduled in, if possible. Dean Sindelar of the host Faculty has agreed to take on the responsibility of fund raising for the Conference through the auspices of the Faculty's Development Office. Frank spoke to the generous donation already received from Merck Frosst to support the Pharmacy Practice Research Symposium.

#### 5.5 Conference Planning Committee (2005):

In 2005, AFPC is meeting in Saskatoon on June 24-26 just prior to the Life Long Learning in Pharmacy Conference. Roy Dobson, Conference Chair, stated that the Hotel (Delta Bessborough) is booked and a venue for the

banquet has been chosen. Council will meet on the Friday with the Conference opening that evening. The Annual General Meeting will occur on Saturday with the New Council meeting occurring on the following Sunday. Saturday will have a research focus with Sunday providing a Teachers workshop, to blend with the Life Long Learning Conference to follow.

#### 5.6 Education Committee:

Committee chair, Zubin Austin, presented his report describing the AFPC program evaluation and outcomes assessment template that is available on the AFPC web site. There have been no comments or feedback about this tool made to the committee as of February. Some re-examination of the template may be necessary in view of the on-going discussions about the entry-level Pharm D programs. A national study examining academic dishonesty in Canadian Pharmacy Faculties is continuing and participating Faculties are urged to complete the distribution of the surveys as soon as possible.

#### 5.7 Nominating Committee:

Lavern Vercaigne, committee chair, has indicated that Frank will need to write those Faculties (University of Alberta, University of British Columbia and the University of Manitoba) regarding election of a councilor for a three year term.

#### 5.8 Planning and Finance Committee:

Sylvie Marleau, chair, and Susan Mansour spoke to the fact that the Financial Statement for 2003 and the Budget for 2004 were still in draft form and changes to these would be made in consultation with Frank with ultimate approval of the revised financial documents to occur by Email. Sheila mentioned that AFPC might look to PEBC with respect to funding. The Chain Drugs are another potential source of revenue. Concern was raised about the low income from the Annual Conference and it was suggested that, in future, we not offer honorariums to speakers.

#### 5.9 Research Committee:

Committee chair, Mike Namaka, reviewed the items raised for the committee at the Annual General Meeting in Montreal in May/June of 2003. A preliminary list of terms of reference for the research committee has been established and a final form of these should be available for the Annual Meeting in Vancouver in June 2004. Lisa Dolovich has agreed to serve a liaison member of the committee and is currently chair of the Pharmacy Practice Research Committee. Pharmacy Practice magazine has agreed to post information about our award winners in 2004. The issue of collecting data regarding the funding and area of research of graduate students in Faculties of Pharmacy was taken to the annual Deans meeting in October. President Rita Caldwell suggested to Mike that he work with Dean Collins to construct a survey document for the purpose of collecting graduate student data. The research committee will continue to work with the awards committee to ensure that award winner presentations are directed successfully towards a wide audience.

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

#### 6.1 Task Force on Experiential Education:

Committee chair, Fred Rémillard, had provided a written report updating the activities of the task force and some of the difficulties encountered with respect to data collection. It was anticipated that a draft report of the Task Force would be available for editing by March or April and a final report of recommendations submitted to the Annual meeting of AFPC in June, 2004. Frank was to encapsulate the midyear report of the Task Force for presentation to the CACDS Board during the meeting with the Deans on February 10, 2004.

#### 6.2 CPhA Human Resources Project:

Past President, Lavern Vercaigne submitted a report updating the activities of the steering committee for the Pharmacy Occupational Sector Study of Pharmacists and Pharmacy Technicians. AFPC has official representation on the steering committee. The final application to HRDC to fund the sectoral study is nearly complete. A research plan is being drafted that will be included in the application. A situational analysis of the pharmacy sector is being updated in 2004 to summarize changes that have taken place in the profession over the last 3 years. CPhA, NAPRA, and CACDS have entered into an agreement with the HRDC and are the official signatories for the study. AFPC will be asked to sign a memorandum of understanding with the signatories.

#### 6.3 ADPC Representative:

Dean Franco Pasutto expressed his intent to be a conscientious representative from the Association of Deans and to actively communicate issues of mutual concern to AFPC and ADPC.

#### 6.4 CPhA Academic Board Member:

Linda Suveges felt that her reports of CPhA Board activities that were distributed to faculty and reported in the Newsletter were sufficient for her report.

#### 6.5 CCAPP:

AFPC representative, Sylvie Marleau, reported on the status of CCAPP site visits, the development of standards for the Entry Level to practice Pharm D degree, and the goal of CCAPP to accredit colleges offering formal training programs for pharmacy technicians.

#### 6.6 PEBC:

Appointees, Linda Suveges and Louise Mallet did not submit a formal report but indicated that they have communicated activities of AFPC such as the strategic planning process and upcoming meetings of AFPC to the PEBC Board.

#### 6.7 CCCEP:

AFPC representative Marc Desgagné will be completing six years of steadfast service in this capacity. Incoming President, Sylvie Marleau is to investigate a replacement for Marc.

#### 6.8 USP:

Colin Briggs is completing his term of office on the Council of Experts and USP has requested a nomination or recommendation of a qualified representative from AFPC. Frank is to send information on USP to the Faculties and call for interested candidates.

6.9 Pharmacy Technician Stakeholder Group:

There was no official report at this time from representative, Wayne Hindmarsh.

7. Executive Director's Report:

Frank presented the Executive Director's report.

The meeting adjourned at 1:45 PM

#### **MINUTES**

#### AFPC ANNUAL COUNCIL MEETING SHERATON VANCOUVER WALL CENTRE HOTEL PORT ALBERNI ROOM THURSDAY, JUNE 10, 2004

#### 8:00 AM Continental Breakfast 8:30 AM

- 1. Opening Remarks: President Susan Mansour welcomed everyone to Vancouver and reminded everyone that we would have a busy few days ahead of us. Susan thanked Simon Albon and Frank for their work in preparing the Annual Conference and members of Council and the Executive Director for a productive and successful year.
- 2. Roll Call and Approval of Agenda: Present and accounted for were Susan Mansour (President), Sylvie Marleau (President Elect), Lavern Vercaigne (Past President), Franco Pasutto (ADPC Representative), Simon Albon (UBC), Sheila Kelcher (AB), Roy Dobson (Sask), Mike Namaka (Man), Zubin Austin (Toronto), Chantal Pharand (Montréal), Jean Lefebvre (Laval), Anne Marie Whelan (Dalhousie), Lili Wang (MUN), and Frank Abbott (Executive Director).

A motion by Zubin Austin/Sheila Kelcher that the agenda be approved was carried.

#### 3. Council Meeting Minutes:

- 3.1 Notes from Strategic Planning Session Midyear Council Meeting, Toronto February 8-9, 2004 for information. Roy Dobson was thanked for putting these minutes and notes together.
- 3.2 Midyear Council Meeting, Toronto, February 9, 2004 for approval. Moved by Zubin Austin and seconded by Anne Marie Whelan that the minutes be approved-carried.

#### 4. Business Arising from the Minutes

4.1 Compendium of Pharmacy Practice and Education Student/Resident Projects: Frank gave a brief history of the Compendium and stated that we are not likely to receive any further funding from the original sponsor of this project. Discussion around the table suggested that the Compendium was a worthwhile project and we should include it in our fund raising activities. There was also a suggestion that the abstracts that appear in the Compendium were good resource material for presentation at an Annual Conference.

#### 4.2 Faculty Role in Residency Projects:

Frank reported that the Dean's discussed this issue at the Annual Meeting in Halifax in October of 2003 and again at the Meeting in Niagara Falls in May 2004. It was the decision of the Deans to recommend that the Provincial Residency Board should approach the appropriate Faculty for discussion of the issue. This decision was not intended to mandate each Faculty to be consistent based on the different cultures that exist at each University. Council gave general approval to this action.

- 4.3 Standards for Clinical Faculty Tenure Track.

  This was an issue brought to AFCP Council in Montreal in 2003 by the Executive of CCCP. The Deans reviewed this item at their annual meeting in Halifax and recommended that data regarding a tenure process for clinical faculty be collected from each of the respective Faculties. Following discussion, Sheila Kelcher offered to champion the project with the help of other council members. Zubin Austin asked for a quick poll around the table about the criteria for clinical faculty in each school. It was decided that the objective for the working group would be to collect the information and to write a paper on this issue for publication in the American Journal of Pharmacy Education. Zubin asked Frank to approach Deans and Directors to provide information for their respective Faculty.
- 4.4 Posting ads on the AFPC Website: It was proposed at the Midyear meeting that Frank look into the possibility of charging non-members for posting ads on our web site. Frank checked with the web master and the cost of posting was about \$25. It was suggested that we charge in the range of \$200 and that the new head of the communications committee work with Frank to create a banner regarding advertising on our web page.

#### 5. Committee Reports:

#### 5.1 Awards Committee:

Chair, Lili Wang presented the awards committee report that summarized the results of the student and faculty competitive awards, new honorary members, the Canadian Foundation for Pharmacy Research Poster Awards, and the Apotex Pharmacy Practice Summer Research Awards. The committee also recommended clarification regarding the Merck Frosst Canada Inc. James E. Frosst and Julien Braun Postgraduate Pharmacy Fellowship Awards. The award is traditionally not given to a student who holds another major award, yet the description of the award does not make this clear. Secondly, the award is renewable, yet the number of times the award can be renewed is not specified. The committee proposes to limit renewal for one additional year only.

Sylvie Marleau asked if everyone was aware of the change that now allows two best applicants from each Faculty to compete for the Merck Frosst Award. She also suggested that Lili list the reviewers who helped in the selection of the award winners. Mike Namaka asked about the status of foreign students for the award – exceptional candidates are not excluded. Frank spoke to a possible need to significantly revise the award description based on the availability of funding. Frank was to follow up with Normand Dumoulin of Merck Frosst Canada Inc regarding this year's funding of the postgraduate fellowship award. Sylvie Marleau suggested that if the award value is increased, then we can retain the no other major award rule, but if the value of the award stays the same, we should not be restrictive of the winner having a second major award.

Lavern Vercaigne expressed concerns that Manitoba did not have an Apotex undergraduate pharmacy practice research award holder this year, while Anne Marie Whelan said that Dalhousie had no problems in filling the Apotex award. Franco Pasutto suggested that we may need to expand the numbers of eligible candidates for the award and Lavern suggested that community pharmacy residents might be a good example. Frank is to correspond with Alan Kyte of Apotex regarding these issues and will communicate the company's perspective on administering the awards to chairperson Lili Wang.

Frank spoke of concerns from the Canadian Foundation for Pharmacy that the research poster awards were going almost entirely to students doing basic research. Council felt that the 2004 Conference, where education and teaching research abstracts outnumbered the basic research abstracts spoke to a change in the research profiles at Canadian Faculties of Pharmacy. Frank is to relay this message to CFP and to encourage them to continue with their awards program to AFPC. There was also some discussion about the need to increase the CFP Award values since many of the students did not have sufficient funds to fully cover their expenses to attend the meeting. Frank is to correspond with Larry Shipp regarding the CFP awards.

The Awards Committee Report was approved for acceptance on a motion by Lili Wang and seconded by Roy Dobson.

#### 5.2 Bylaws Committee:

Lavern Vercaigne spoke to the Bylaws Committee report and gave a brief summary of revisions to the Honored Life Member criteria, clarifying the application process, recognizing the executive director as part of the administrative structure, describing duties for the ADPC representative, revising the voting procedure to include Email ballots, and the change in location of the head office. For the Honored Life Member criteria, Sheila Kelcher asked what constituted a major contribution. Franco Pasutto suggested that we might need to set some criteria for a major contribution. Lavern felt that it was best to keep it general.

Susan thanked Lavern for his work on the revisions of the bylaws. The Bylaws Committee Report was approved for acceptance on a motion by Lavern Vercaigne and seconded by Sheila Kelcher.

#### 5.3 Communications Committee

Simon Albon presented the report that highlighted some of the activities of the AFPC Newsletter during the year. The use of a standard format for submissions to the newsletter has streamlined the editing process and made for timely turn around times for the newsletter to reach the membership. Rebbeca Law of MUN was thanked for an outstanding job as editor of the AFPC Newsletter.

Statistics indicate that the AFPC web site is being visited on an increasing basis, the most recent example being information about the Conference in Vancouver. Felica Lo will continue as web master and the domain name for the web page (www.afpc.info) has been renewed for a period of five years expiring in 2009. The report recommended that AFPC proceed with phase II development of the Web Site that would include additional information about each Faculty of Pharmacy, roster information, on-line abstract review and acceptance, and the creation of a mirror web site in French. This project had been placed on hold because of budget restrictions. Franco Pasutto stated that the AFPC Web Site was a natural portal of entry for academic pharmacy in Canada and stated that he would attempt to have the Deans commit to funding the development if budget restrictions continue. Zubin Austin asked if there would be a section for graduate student information on the web site. Mike Namaka spoke in support of listing research statistics on the web. Susan Mansour thanked Simon for a tremendous job as chair of the Communications Committee.

The report of the Communications Committee was approved for acceptance on a motion from Simon Albon that was seconded by Sylvie Marleau.

#### 5.4 Conference Planning Committee 2004:

Conference Chair, Simon Albon gave a brief overview of the Conference and said that the School Posters were a first for the AFPC Conference. Celebrating our award winners by having them present at the Opening Dinner was also an innovation that we hoped would prove successful. For the CFP Student Poster Awards, a panel of judges was required and Jean Lefebvre and Zubin Austin offered to be judges with Lavern Vercaigne as back up.

#### 5.5 Conference Planning Committee 2005:

Roy Dobson stated that the space in the Delta Bessborough Hotel is booked. A tentative program has been planned that will bridge to the Life Long Learning in Pharmacy Conference that begins on Sunday, June 26, 2005. Roy said that he would work with Frank on a report for discussion at the New Council Meeting that would better describe the format of the 2005 AFPC Conference.

#### 5.6 Education Committee:

Zubin Austin presented the report that provided an update of the program evaluation and outcomes assessment template and the study examining academic dishonesty. The report also introduced the Life Long Learning in Pharmacy Conference in 2005 for which the education committee, through the efforts of Zubin Austin and Roy Dobson, has been involved in planning the programming for this meeting. The daily themes have been identified for this conference and are appended for information.

The report of the Education Committee was approved for acceptance on a motion from Zubin Austin and seconded by Sheila Kelcher.

#### 5.7 Nominating Committee:

Lavern Vercaigne presented the slate of candidates for the following positions:

President: Sylvie Marleau President Elect: Zubin Austin. New Council Members 2004-2007:

> Alberta – Sharon Mitchell British Columbia – Ingrid Price

Manitoba – Mike Namaka (for a second term)

The motion to accept the Nominating Committee report (Lavern Vercaigne/Simon Albon) was approved.

Departing council members Simon Albon and Sheila Kelcher were thanked heartily for their contributions to AFPC Council and told that they would be missed.

#### 5.8 Planning and Finance Committee:

Susan Mansour presented the audited AFPC Financial Statement for 2003, pointing out any differences between the budget and actual expenses. She stated that the main differences were in the tracking of certain items that are categorized differently by the auditors. For instance, (1) our accounting of the \$5000 hotel reimbursement as revenue is not accounted as revenue by the auditors and (2) bringing Apotex award expenses into the following year for tracking purposes is not included in the audited financial statements. Additionally, our surplus was \$8066.68 versus a budgeted surplus of \$357. However, the annual conference incomes were lower than budgeted. This loss of revenue was balanced by lower expenses for the SPEP task force and the HRDC project.

The Auditor's report for 2003 was approved for acceptance on a motion by Susan Mansour and seconded by Simon Albon.

Susan then presented the revised budget for 2004. There was considerable discussion about the CCAPP membership expense. Sylvie Marleau stated that she had a major role in CCAPP activities as chair of the Standards Committee and this connection would be lost if we were not a full member of CCAPP. After much discussion it was recommended that Frank contact Jim Blackburn of CCAPP to investigate whether we might interact with CCAPP as we do with CCCEP and just pay travel expenses of our delegates. The AFPC budget for 2004 was approved for acceptance on a motion by Susan Mansour and seconded by Sheila Kelcher.

#### 5.9 Research Committee:

Mike Namaka spoke to items raised at the Midyear meeting that included a revised version of the terms of reference for the committee. Other items for action were collecting information on graduate students and their research areas at each of the Faculties, to begin a trend analysis of the abstracts presented at the Annual Conference in terms of the five categories of basic research, clinical research, social and administrative research, pharmacy practice research and educational/teaching research and to have this information available on the Web Site.

Mike said that committee member Lisa Dolovich was a big help with developing the terms of reference and she should be invited to continue on the committee. Sheila Kelcher spoke to an earlier submission of data on graduate students and Mike will reformat the collection form if necessary. Sylvie Marleau stated that the distribution of conference abstracts within the categories frequently reflects the profile of the host Faculty and Mike added, also the theme of the conference.

The report of the Research Committee was approved for acceptance on a motion from Mike Namaka and seconded by Roy Dobson.

#### 5.10 Task Force on Experiential Education:

Conference chair, Fred Rémillard joined Council at 1:30 PM to present the report. Fred provided an overview of the terms of reference, committee activities, and complemented the committee on the efficiency of keeping costs well within the budget. There are 35 recommendations in the report.

Funds will certainly be required to carry out many of the recommendations of the committee. Zubin Austin asked what influence the proposed entry-level Pharm D degree had on the recommendations of the committee. Fred responded that the recommendations were based on an acute awareness of the fact that the quality of the practice sites is even more important for the entry-level Pharm D. program. AACP President Buzz Kerr, who also joined the meeting, spoke about the AACP survey that found it was not so much the quality of the sites but the real dilemma was just the number of sites.

Lavern Vercaigne asked Fred to speak to the major priorities of the recommendations. Fred responded that Priorities according to the Task Force Group were integration of SPEP training throughout the curriculum, preceptor training, creation of a national advisory board, developing and increasing pharmaceutical care (PC) sites, and developing a funding strategy for PC in rural areas. Zubin Austin asked if there was a mechanism to undertake educational research to measure the impact of student contributions to SPEP programs and to patient outcomes. Fred felt that the national advisory board would help deal with such an initiative.

Next steps: There was general agreement that the New Council would decide the course of action regarding the report once councilors have an opportunity to read and digest the document.

#### 5.11 Task Force on Entry-level Pharm D Outcomes:

Susan Mansour was chair of this committee and she presented the report by first recognizing the individuals who were on the committee: Anne Marie Whelan (Dalhousie), Sharon Mitchell (Alberta), Sylvie Marleau (Montréal), Claude Mailhot (Montréal) and Tom Brown (Toronto). Susan also recognized the generous support of Merck Frosst Canada Inc. for an outright grant to fund translation costs and the activities of this committee. The Université de Montréal played a major role in the formatting and the information contained in the document.

Susan stated that the last specific outcome #6, Understand and Apply Research Methodology, is still to be developed. It is expected that a first draft of the last outcome will be available by the end of June 2004. Susan asked for feedback on two points; 1) That we need general interim approval of the report by Council in order to release the information to CCAPP and 2) Endorsement by each Faculty i.e. by the individual Deans. Once the latter is obtained, the outcomes would come back for final endorsement by Council, most likely at the Midyear Meeting in February 2005. Other organizations that APFC needs to communicate with regarding this document are NAPRA and PEBC. Council gave unofficial approval to send the draft to CCAPP and to the Deans for comments.

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

#### 6.1 CPhA Human Resource Project:

Lavern Vercaigne, AFPC representative to the management committee, said that most of the work to date has been to create a convincing argument for Human Resources and Skills Development Canada (HRSDC) to fund a project to undertake a survey to determine the human resource challenges of the pharmacy sector. At a March 2004 meeting in Kananaskis the decision was made to seek funding for the study with a detailed research plan being submitted to HRSDC in May 2004. Confirmation of funding was to be expected in June. The role of Faculty representatives will be to represent academia with respect to number of faculty needed to meet the anticipated human resource requirements. The AFPC budget of \$15,000 is to cover expenses of our representative to attend meetings and to collect the required information for the consultants. Zubin Austin said that HRSDC had made some enquires of the Faculty of Pharmacy, University of Toronto on their International Pharmacist Training Program. Other requests for information from the Faculties will be forthcoming.

The motion to approve the report for acceptance was made by Lavern Vercaigne and seconded by Zubin Austin. Carried.

6.2 Association of Deans of Pharmacy of Canada (ADPC) Representative:

Dean Franco Pasutto gave an oral report that touched on recent activities of the
Association of Deans of Pharmacy of Canada-meeting with CACDS in Toronto and the
continuing issues of enrollment, a very successful meeting with Health Canada arranged
by Director General Bob Peterson, the informative meeting with Rx & D through a
presentation by Jean Marion, funding issues from pharmaceutical companies, and a
meeting with the Board of CPhA in Niagara Falls in May that raised the need for better

communication between the two organizations. The Annual Meeting of ADPC will occur on October 2-5 in Quebec City.

Approval to accept the report was made on a motion from Franco and seconded by Sheila Kelcher.

- 6.3 Canadian Pharmacists Association (CPhA) Academic Board Member:
  Linda Suveges is the unofficial representative of AFPC on the Board of CPhA. She sits as the representative from academia. Board reports can be found in the latest issue of the Communications Newsletter.
- 6.4 Canadian Council for the Accreditation of Pharmacy Programs (CCAPP):

  AFPC representative, Sylvie Marleau presented the report outlining the work of the

  Standards and Guidelines Committee that will meet on June 19, 2004 to work on revision

  of the standards for the baccalaureate and postgraduate Pharm D degrees and to begin

  work on the Entry-Level Pharm D degree standards. CCAPP is thinking to develop a web
  site in order to create a greater visibility for the organization.

Approval to accept the CCAPP report to AFPC was made on a motion by Sylvie Marleau and seconded by Zubin Austin.

- 6.5 Pharmacy Examining Board of Canada (PEBC): A report was not available for the meeting, but Linda Suveges later submitted a report to AFPC that will appear in the reports section of the 2004 Proceedings.
- 6.6 Canadian Council on Continuing Education in Pharmacy (CCCEP): Marc Desgagné (Laval) provided a written report outlining activities of CCCEP over the past year and mentioned that CCCEP was co-host of the Life Long Learning in Pharmacy Conference that will occur next year in Saskatoon in June. This will be the last year that Marc will represent AFPC having been our representative for the past six years. Marc's contributions in this capacity were gratefully acknowledged.

Approval to accept the CCCEP report was made on a motion from Anne Marie Whelan and seconded by Sheila Kelcher.

6.7 United States Pharmacopeia (USP):

Colin Briggs (Man) is stepping down as the representative of AFPC to USP. There is no formal report, although recent AFPC updates have outlined the need to find a replacement for Colin. Council discussed potential replacements for Colin but did not produce any concrete leads. Council suggested that Frank should contact Colin and ask him to give a snap shot of the duties of the USP representative that could then be sent out to faculty members.

6.8 Pharmacy Technician Stakeholder Group:

Frank reported that Dean Wayne Hindmarsh had indicated that he was no longer a member of this committee. Frank followed up with Della Croteau of the Ontario College of Pharmacists who indicated that she would invite Wayne to rejoin the committee. She indicated that the Pharmacy Technicians Stakeholder Group were attempting to establish standards that would be applicable across the Country.

#### 7. Executive Director's Report:

Frank spoke briefly to the report and indicated that the year had been both challenging and rewarding personally. He emphasized that AFPC and ADPC had a very successful year and recognized President Susan Mansour of AFPC and ADPC President Rita Caldwell for their outstanding leadership. The strategic and business plans recently developed for AFPC will certainly help guide the organization to be more effective in representing academics on educational and research issues of importance to Pharmacy in the future.

Approval to accept the report of the Executive Director was made on a motion by Roy Dobson and seconded by Zubin Austin.

#### 8. Strategic Planning Discussion and Revisions:

Susan Mansour referred to the draft of the Strategic and Business Plan, 2005-2009 that was available for Council discussion. Lavern commented that initiative 1.1 on page 3, "increase our visibility with other organizations and professions" was likely to be a meat and potatoes item given the report of the Task Force now being available. Lavern also commented on initiative 1.2 on page 4, "Create interest among members to be active participants in AFPC activities". Resource requirements included a human resources consultant and Lavern felt that we would need to hire someone soon. Dean Franco Pasutto commented on the potential need for administrative help given the involvement of the Executive Director in many of the responsibilities to meet objectives. Mike Namaka made the point about rewarding faculty for their contributions to AFPC. There is a need for tangible recognition and perhaps the Web Site could be used to profile the contributions of these individuals.

It was agreed that the strategic plan would not be distributed until the final form is agreed upon. Susan made reference to potentially striking two new committees, a membership committee and a strategic management and planning committee.

#### 9. In Camera Session

#### 10. New Business

10.1 Canadian Foundation for Pharmacy Working Group: Frank Abbott reported that a Canadian Foundation for Pharmacy Working Group has been stuck and with the help of AstraZeneca Canada Inc., a Web Networking facility has been created to facilitate communication between the various participating pharmacy groups. Both AFPC and ADPC are represented. The initial task is to define the role of the ideal pharmacist.

#### 10.2 Canadian Academy of the History of Pharmacy:

Frank reported that he had met with the Academy during the 2004 CPhA Conference in Niagara Falls. The Academy is in need of membership support to help create a reasonable budget and they would like to set up a Web Site to advertise their activities. Next year in Quebec City, the Academy will be celebrating their 50th anniversary. Frank asked if AFPC might consider helping the Academy. Council asked for a budget from the Academy to help guide their decision.

#### 10.3 Future Conferences:

**February 5 and 6, 2005 in Toronto**: Midyear meeting of AFPC to occur just prior to the ADPC meeting and the Annual Meeting of the Canadian Association of Chain Drug Stores.

**June 24-26, 2005 in Saskatoon**. Sixty second AFPC Annual Meeting and Conference just prior to the International Life Long Learning in Pharmacy Conference.

**June 1-3, 2006 in Edmonton**. Sixty third AFPC Annual Meeting and Conference just prior to the CPhA Conference.

11. Adjournment at 4:00 PM.

Frank Abbott, Recorder.

#### **MINUTES**

Annual General Meeting Sheraton Vancouver Wall Centre Hotel Port McNeill Room, Saturday, June 12, 2004 12:00 PM - 1:30 PM

#### 1. Opening Remarks:

President Susan Mansour welcomed attendees to the 61<sup>st</sup> Annual General Meeting of the Association of Faculties of Pharmacy of Canada. Susan introduced the executive and council members for 2003-2004. President Susan Mansour, Past President, Lavern Vercaigne, President Elect, Sylvie Marleau, ADPC Representative, Dean Franco Pasutto; Council Members: Simon Albon (UBC), Sheila Kelcher (AB), Roy Dobson (Sask), Mike Namaka (Man), Zubin Austin (Toronto), Chantal Pharand (Montréal), Jean Lefebvre (Laval), Anne Marie Whelan (Dalhousie), Lili Wang (MUN), and Frank Abbott (Executive Director).

#### 2. Approval of Agenda:

The agenda and copies of the reports were available for all in attendance. The agenda was approved on a motion from Mike Namaka and seconded by Zubin Austin.

3. Acceptance of 2003 Annual General Meeting Minutes:

The minutes of the 2003 Annual General Meeting held Saturday, May 31, 2003, in Montréal were approved on a motion from Zubin Austin and seconded by Jana Bajcar.

4. Conference Committee Announcements:

Simon Albon reminded everyone about the bus for the banquet and said that posters that were not taken down the previous evening were being stored in the registration area.

5. Greetings from the American Association of Colleges of Pharmacy:

Dr. Robert A. "Buzz" Kerr, Pharm. D., President of AACP, was introduced by President Susan Mansour. Buzz thanked AFPC for giving him the opportunity to attend and presented greetings from the Board and membership of AACP. He spoke of the similarity of the problems and issues facing both organizations. These include program assessment and evaluation, celebrating science and many other activities that are described on the AACP web site. He spoke in particular of the new educational outcomes developed by the Center for the Advancement of Pharmaceutical Education (CAPE). These outcomes are intended to be the goals to which curriculum design should seek to achieve. He also spoke of collaboration and the strength of working together to achieve common goals.

6. Memorial to Deceased Members:

A moment of silence was given in memory of Sharon McKinnon.

#### 7. President's Address:

Sylvie Marleau took over the chair to invite Susan Mansour to give the President's address. Susan encouraged all members to get involved in the executive of AFPC and ADPC. She said that it had been quite an exciting year for AFPC and many initiatives were underway including development of a strategic and business plan to guide the organization and to provide financial stability over the next 5 years. Susan thanked Roy for leading AFPC through this important process. During the year, Council struck a task force to develop the educational outcomes for the Entry Level Pharm D degree. The report of this task force is now under review prior to producing the final version. Comments were welcomed. Susan spoke to the recent report of the Task Force on Experiential Learning that is now in the hands of council for action prior to distributing the report to the membership. Reference was also made to AFPC participation in the Pharmacy Occupational Sector Study of Pharmacists and Technicians. Susan thanked Council and the Executive for their dedication and active contributions during the year. Simon and the conference planning committee were thanked for their hard work in organizing a successful conference. Susan wished incoming president Sylvie Marleau all the best for the 2004-2005 year.

The report of the President was approved on a motion from Susan Mansour and seconded by Marion Pearson.

#### 8. AFPC Committee Reports:

#### 8.1 Awards Committee Report:

Lili spoke to the updating of the awards booklet including the French version and thanked Sylvie Marleau, Jean Lefebvre and others for their contributions to the booklet. Reviewers were acknowledged and thanked and all those who chose to enter the awards competition. Sponsors of the awards were acknowledged. Lili referred to the list of award winners contained in the report and gave congratulations to all of the award winners.

The Awards Committee Report was approved on a motion from Lili Wang and seconded by Sheila Kelcher.

#### 8.2 Bylaws Committee Report:

Past President, Lavern Vercaigne, took everyone through the major changes to the bylaws contained in the report. Revisions have been made to the Honored Life Member criteria and to clarifying the application process. The executive director is now recognized as part of the administrative structure and duties for the ADPC representative have been written. Of important note was the revision of the voting procedure to include Email ballots. The official residence of the AFPC head office has been changed to Vancouver.

The report of the bylaws committee containing the recommended changes to the bylaws was approved on a motion from Lavern Vercaigne and seconded by Franco Pasutto.

#### 8.3 Communications Committee Report:

Sheila Kelcher was delegated by Simon Albon to present the report. The report highlighted the success and timely production of the Newsletter and the increasing use of the Web Site. A show of hands was taken on the use of the Web Site. Statistics on AFPC Web Site use are included in the report. Given the funds, the report recommends that the web site include information on all Faculties, provide for online submission of abstracts

and the creation of a mirror site in French. Felicia Lo will continue as web master. A special thank you was given to Rebecca Law as editor of the Communications newsletter.

The report of the Communications Committee was approved on a motion by Sheila Kelcher and seconded by Roy Dobson. President Susan Mansour gave a special thanks to retiring council member Simon Albon for all his work as chair.

#### 8.4 Education Committee Report:

Zubin Austin gave the report and spoke to the evaluation of programs template and of the presentation on operationalizing program evaluation given at the conference by David Fielding. Data from the honesty questionnaire rating satisfaction with the curriculum and students tendency to cheat should be available soon. Zubin gave an invitation to attend next year's Conference that will be held in conjunction with the International Life Long Learning in Pharmacy Conference in Saskatoon.

The report of the Education Committee was approved on a motion from Zubin Austin and seconded by Jean Lefebvre.

#### 8.5 Nominations Committee Report:

Lavern Vercaigne thanked his committee and stated that AFPC had a great slate of candidates for the following positions:

President – Sylvie Marleau, Université de Montréal

President Elect – Zubin Austin, University of Toronto

#### **New Council Members for 2004-2007:**

Sharon Mitchell, University of Alberta

Ingrid Price, University of British Columbia

Mike Namaka, University of Manitoba (second term)

The report of the nominations committee was approved on a motion from Lavern Vercaigne and seconded by Jacques Turgeon.

#### 8.6 Research Committee Report:

Mike Namaka presented the report noting that there were new terms of reference developed for the committee. Mike extended his thanks to Lisa Dolovich for her input to the committee and to other committee members as well. The research committee will be gathering information using a template on research within the Faculties with the objective of making this information available on the web site. The research profile of abstracts submitted to the Conference is also to be tracked.

The report of the research committee was approved on a motion from Mike Namaka and seconded by Simon Albon.

#### 8.7 Task Force on Experiential Education:

Committee chair Fred Remillard said that he was pleased to state that the report of the task force is now complete and was presented to Council last Thursday, June 10, 2004. Fred

thanked the committee for taking on this added task and the consultant Donna Wheeler-Usher for her commitment and perseverance. Fred spoke briefly to the themes contained in the report for which there are 35 recommendations.

The report of the Task Force on Experiential Education was approved on a motion from Fred Rémillard and seconded by Mike Namaka.

#### 8.8 Task Force on Entry-level Pharm.D. Outcomes:

Susan Mansour reported that the committee had been struck this year and had completed most of their work. When the report is complete it will go to the Dean's Offices for input. A draft form of the report is to be made available to CCAPP this month. Final approval of the report is expected at the midyear meeting of Council in 2005.

The report of the Task Force on Entry-level Pharm D outcomes was approved on a motion from Susan Mansour and seconded by Anne Marie Whelan.

#### 8.9 Strategic and Business Plans:

Susan Mansour gave a verbal report of the activities of Council with respect to strategic and business plans that will occupy the attention of Council and Executive over the next while.

The report of the Strategic and Business Plans was approved on a motion from Susan Mansour and seconded by Zubin Austin.

#### 9. Reports from Special Committees and Delegates

- 9.1 ADPC Representative to the Council (Franco Pasutto) No report was given.
- 9.2 Academic Board Member of CPhA (Linda Suveges) Regular reports provided to AFPC members throughout the year are in lieu of one annual report.

#### 9.3 Appointees to CCAPP:

Sylvie Marleau spoke to the task force regarding the review of standards for existing programs and creating new standards for the Entry-level Pharm D. The annual general meeting of CCAPP is to take place next Sunday in Toronto. Accreditation reports for Dalhousie, Memorial and Alberta are under review. CCAPP has desires for creating a web site along the lines of the Accreditation Council for Pharmacy Education (ACPE) in the U.S.A. Executive director, Jim Blackburn will be attending a Canadian Pharmacy Technicians Educators meeting at which he will be presenting on accreditation of pharmacy technicians.

The report of CCAPP was approved on a motion by Sylvie Marleau and seconded by Mike Namaka.

President Susan Mansour complemented Sylvie for her work on the CCAPP committee.

#### 9.4 Appointment to CCCEP:

Representative Marc Desgagné was unable to attend the AGM but did provide a report that was available for those in attendance. The report touched on the financial situation of CCCEP, the 4<sup>th</sup> Annual National CE Forum, guidelines and criteria for CCCEP accreditation, and the International Life Long Learning Conference in Saskatoon in June of 2005 for which CCCEP is a co-host.

The report of the CCCEP representative was approved on a motion by Susan Mansour and seconded by Anne Marie Whelan. Marc was recognized for serving two terms (6 years) as the representative to CCCEP.

9.5 Report of Representative to Pharmacy Human Resources in Canada - A sector Study of Pharmacists and Pharmacy Technicians:

Lavern Vercaigne gave a progress report on recent advances on the pharmacy human resources study and an outline of the next steps being taken to get the study underway. Issuing research requests for proposals and the hiring of consultants and researchers will occur over the summer of 2004, if the funding is approved. Lavern indicated that there would be requests for input from the Faculties once academia is up for review.

The report of the representative to the Pharmacy Human Resources study was approved on a motion by Lavern Vercaigne and seconded by Dennis Gorecki.

#### 9.6 Representative to PEBC:

PEBC Executive Director, John Pugsley asked about the PEBC report and Frank Abbott said that it would be included in the reports once it was received.

#### 10. Report of the Executive Director:

Frank Abbott reported that it had been a challenging but an exciting initial year as executive director and thanked Presidents Susan Mansour of AFPC and Rita Caldwell of ADPC for their support and encouragement. Previous AFPC executive director Jim Blackburn had been of great assistance throughout the year. AFPC is to be congratulated for the many projects underway and the strategic and business plans will be an excellent guide as the organization focuses on its mission. Frank said that he was very much looking forward to working with President Sylvie Marleau in 2004-2005.

#### 11. Audited 2003 Financial Statements and Budget for 2004:

Susan Mansour spoke to the audited financial statement and the budget for 2004. There is a significant need to keep expenses down while working on new sources of revenue. The recently developed business plan will be a guide to future budgets of the organization. The motion to approve the AFPC Audited Financial Statement for 2003 was passed (Susan Mansour and Sheila Kelcher).

The motion to approve the AFPC Budget for 2004 was passed (Susan Mansour and Zubin Austin).

#### 12. Appointment of Auditor:

Because of the change in the location of the AFPC office to Vancouver, there was a need to seek a new auditor. Susan Mansour moved to appoint Wolridge Mahon Chartered Accountants as the AFPC auditor for 2004. Rita Caldwell seconded the motion. The motion carried.

#### 13. New Business:

Susan Mansour spoke to the next Conference and Annual Meeting to be held June 24-26, 2005 in Saskatoon. In 2006 the Annual Meeting and Conference will be June 1-3 in Edmonton just prior to the CPhA meeting.

#### 14. Transfer of the Presidency:

Susan Mansour handed over the gavel of office to Sylvie Marleau. Sylvie thanked Susan for her tremendous leadership and achievements over the last year and said that she was looking forward to building on her work along with an enthusiastic and competent Council.

#### 15. Confirmation of Signing Authority:

The motion to name Sylvie Marleau and Frank Abbott as signing authorities for AFPC for the 2004-2005 year was approved (Susan Mansour and Fred Rémillard).

16. Adjournment: 1:30 PM

# MINUTES AFPC NEW COUNCIL MEETING SHERATON VANCOUVER WALL CENTRE HOTEL PORT ALBERNI ROOM SUNDAY, JUNE 13, 2004

#### 9:00 AM

- 1. President Sylvie Marleau opened her remarks with a welcome to everyone and introduced her Committee Charges for 2004-2005. These committee duties were based on recommendations from the council meeting of June 10 and new tasks that related to the initiatives described in the strategic plan.
- 2. Roll Call and Approval of the Agenda:

The following executive and council members were present and accounted for: Sylvie Marleau (President), Susan Mansour (Past President), Zubin Austin (President Elect), Franco Pasutto (ADPC Representative), Ingrid Price (UBC), Sharon Mitchell (AB), Roy Dobson (Sask), Mike Namaka (Man), Chantal Pharand (Montréal), Jean Lefebvre (Laval), Anne Marie Whelan (Dalhousie), and Frank Abbott (Executive Director).

Regrets; Lili Wang (MUN). President Sylvie Marleau gave a special welcome to new council members Ingrid Price and Sharon Mitchell and a warm welcome back to Mike Namaka. Toronto will need to elect a new council member to replace Zubin.

Approval of the agenda was made on a motion by Zubin Austin and seconded by Roy Dobson.

- 3. Appointments and Charges to Committees:
  - 3.1 Awards Committee: Lili Wang was not able to attend this council meeting but has agreed to continue as chair of the awards committee. Sylvie suggested that we should review the awards booklet again this year and requested help from the French-speaking members to assist with the translation. It was also suggested that the awards committee create subcommittees for the review of applications in each of the award categories. Frank is to communicate the changes that were previously discussed such as the Merck Fellowship and the Apotex Award that require some revision. Zubin Austin suggested that we have more awards for social administrative and pharmacy practice and it was suggested that this might be a task for the strategic planning committee to undertake. Perhaps there should be a poster award for pharmacy practice as well as recognition for social administrative research and basic research.

It was agreed that council in conjunction with the awards committee should create a standardized grid for the judging of the Canadian Foundation for Pharmacy poster awards and this mechanism and process for judging be posted in the Awards Booklet.

3.2 Bylaws Committee: Past President Susan Mansour is the chair of this committee.

#### 3.3 Communications Committee:

Committee member Jean Lefebvre agreed to replace Simon Albon as chair of the communications committee. Rebecca Law is to be asked to continue as the Newsletter Editor. Council members were reminded that it was their duty to present Faculty information for the newsletter during the coming year. Other members of the committee are Chantal Pharand and Sharon Mitchell with Simon Albon being approached to facilitate and support the activities of the committee.

Web site development: Frank mentioned that keeping the Web Site current is not always an easy task. Jean Lefebvre asked everyone to inform him or Frank of any need to update the Web Site. It was suggested that we ask the web master, Felicia Lo, to place an exit date on materials posted.

Creating a French version of the web site is a priority and Sylvie Marleau and Chantal Pharand agreed to work with Jean to seek solutions to developing the French version. Susan Mansour stated that if we meet strategic goals we could certainly afford to move on the development. Costs of translation are a major consideration. Franco is to contact Jean as to a source of translation that was not prohibitively expensive.

The strategic plan goal to raise the profile of AFPC calls for initiatives to increase the visibility of AFPC with other organizations and professions and to create interest among members to be active participants in AFPC activities. The communications committee has significant responsibilities in meeting these initiatives. New tasks include defining a current communication strategy (report at Midyear Meeting, 2005), identifying the organizations and professions to be targeted (AGM 2005), creating an AFPC Portfolio on the Web Site (AGM 2005), and identifying/publicizing commonalities among the Faculties that may lead to a sharing of activities (AGM 2005). Sylvie Marleau stated that the Executive would assist the communications committee in creating a portfolio of AFPC success. Towards identifying commonalities across the Faculties, Sharon Mitchell was interested in the experiential training and the cases that are used for teaching/learning. If the Faculties were to share these cases, it would be a great way of creating an effective and powerful resource for learning and would reduce the workloads of those creating the cases. Sharon is to begin work on this as of January 2005. Zubin Austin also endorsed the concept of using the web site for sharing of cases. It has the potential to be a great asset to faculty members.

3.4 **Conference Planning Committee**: Conference chair, Roy Dobson spoke to the plans for the AFPC Meetings and Conference June 24 – 26, 2005 in Saskatoon. It was mentioned that the dates were not optimal for delegates from Quebec because June 24 is Jean Baptiste Day, a significant holiday in Quebec. Unfortunately, the dates are set. Frank Abbott, Roy Dobson and Linda Suveges are to develop the full program come September/04.

For the AFPC Conference in Edmonton June 1-3, 2006 just prior to CPhA, Frank is to communicate with Sharon Mitchell to set details for this meeting.

#### 3.5 **Education Committee**:

The main task this year is to deal with the report of the task force on experiential education. Secondly the committee should work on how to assist with program evaluation. Ingrid Price agreed to chair the Education Committee. Other committee members are Sheila Kelcher, Anne Marie Whelan, Zubin Austin, and Chantal Pharand.

President Sylvie Marleau stated that she would provide the committee with their primary tasks for the coming year. This was subsequently done and is reported here for completeness. In dealing with the report of the Task Force on Experiential Education (SPEP Report) the committee is to consider the priorities arising from the task force group. These are 1) preceptor training, 2) SPEP integrated throughout the curriculum, i.e. all four years, 3) creation of a National Advisory Board for SPEP, 4) increase the number of Pharmaceutical Care (PC) sites through site development and maintenance, 5) funding for PC in rural locations, and 6) undertake educational research to evaluate the contribution of students to SPEP and the impact of experiential programs on student learning, patient outcomes and so on.

All council members were to review the report and to send comments to the Executive Director to be forwarded to the education committee by the end of June 2004. The education committee is to focus on the recommendations that will fulfill the priorities described and where possible to present an action plan for implementation of these recommendations. This work is to be completed by September 1. The President and Executive Director will then provide the final recommendations to the Association of Deans of Pharmacy of Canada prior to the Annual Meeting in Quebec on October 4, 2004. The Canadian Association of Chain Drug Stores will also be advised of the recommendations in a timely manner.

The education committee will also work with the communications committee during 2004-2005 with respect to identifying and publicizing commonalities among the Faculties that may lead to a sharing of activities.

Zubin Austin is to lead a working group to examine the standards for tenure track for clinical faculty within Canadian Faculties of Pharmacy with the intent of writing a paper on the issue for publication. Frank is to contact the Faculties to obtain the information required by the working group.

#### 3.6 **Executive Committee:**

The strategic plan contains a large number of significant tasks for the executive committee. President Sylvie Marleau proposes that the new chair of the membership committee, once selected, would also join the executive committee to assist in meeting the tasks. By the end of this year the committee is to identify potential new members, develop a recruitment strategy, consult with organizations that are successful in using annual meetings as fundraisers, and implement a proposal for advertising revenue from the AFPC Web Site.

At the midyear meeting, the committee is expected to have developed a portfolio of AFPC successes, to have identified the values that members associate with AFPC, developed a 3 year plan for annual meetings as a source of revenue, investigated joint meetings that would maximize revenue and identified new sources of funding.

By the annual meeting in 2005, this committee is to identify organizations/professions that are to be targeted for raising the profile and visibility of AFPC, to post the AFPC portfolio on the web site, to identify and publicize commonalities among the Faculties that may lead to a sharing of activities, to develop a strategy that will promote a new activity valued by the membership, and to develop one policy statement on a current national issue. Working closely with the Deans of Pharmacy on many of these tasks is anticipated.

#### 3.7 **Nominating Committee**:

Susan Mansour agreed to chair this committee. The activities include identifying a president elect and to facilitate the renewal or replacement of council members whose terms are expiring. Susan is to select the members of this committee.

#### 3.8 **Planning and Finance Committee**:

President Sylvie Marleau stated that she was pleased that Roy Dobson had agreed to chair this committee.

#### 3.9 **Research Committee**:

Mike Namaka agreed to continue as chair. Other members of the committee are Lili Wang and Lisa Dolovich. Mike suggested that we needed a letter of thanks to Lisa and an invitation to continue to serve on the committee. Immediate tasks of the committee are to collect and analyze data on graduate student funding and research projects within the Faculties. A trend analysis of posters submitted to AFPC conferences is also to be completed. The research committee is to share responsibility for identifying commonalities among the Faculties that could lead to a sharing of activities.

#### 3.10 Strategic Planning and Management Committee:

Roy Dobson has agreed to chair and once the Deans have viewed the strategic plan to follow up on any recommendations that come forth. There is a need to look at some of the long-range goals of the plan. More immediate is to examine areas of research and education that would have potential to create new awards. Susan Mansour is to send the plan to Frank for forwarding to the Deans.

#### 3.11 **Membership Committee:**

This is a new committee for which a chair is to be selected. The mandate of the committee is to identify new membership and to implement a recruitment strategy. Dean Franco Pasutto will consult with the Deans for suggestions of an individual to chair.

- 4. Confirmation of AFPC Representatives, Delegates and Council Member Assignments:
  - 4.1 ADPC Representative: Dean Franco Pasutto will be happy to continue as our representative subject to the approval of the Deans.
  - 4.2 Canadian Council for Accreditation of Pharmacy Programs: Sylvie Marleau will continue as our representative.
  - 4.3 Task Force on Experiential Education:

Discussion here led to the decision that the education committee was to review the task force recommendations and to determine next steps for the organization with respect to the recommendations. Frank was to send the report to the new council members. Council will review the recommendations made by the education committee and an Email vote will be taken to endorse the document.

4.4 Task Force on Entry-level Pharm. D.:

Susan Mansour will continue to chair the task force. A draft will be sent to CCAPP and to the respective Dean's offices for review. Notification of the task force will be sent to CPhA, CACDS, CSHP, and CCCP.

4.5 CPhA Human Resources Project Planning Committee: Lavern will continue to serve on this committee.

4.6 Canadian Council for Continuing Education in Pharmacy:

Marc Desgagné is to be thanked for the completion of his six year term on this committee. Yvonne Shevchuk will be approached to serve as our representative.

#### 4.7 Communications Editor:

Rebecca Law has agreed to continue serving in this capacity.

4.8 Pharmacy Examining Board of Canada:

Sylvie Marleau will follow-up with Louise Mallet our French speaking representative. Linda Suveges will be contacted by Frank for a report on PEBC.

4.9 Representative to the United States Pharmacopoeia:

As discussed at the annual council meeting, Colin Briggs will be contacted to provide a synopsis of the position and the value of AFPC having a delegate to USP.

- 4.10 Pharmacy Technician Stakeholder Group: As mentioned in the annual council meeting minutes, Wayne Hindmarsh is to be invited by the chair of that committee to continue serving as our representative.
- 5. Business arising from the June 10, 2004 Council Meeting: Strategic Plan
  - Position paper on primary care Zubin Austin could take on this project as part of his research work. Lisa Dolovich and Shannon Neubauer will be approached to participate in the project.
  - Zubin Austin, Anne Marie Whelan, and Lavern Vercaigne will spearhead the work on a paper with respect to the clinical tenure track position in Faculties of Pharmacy in Canada.
  - Discussion ensued about the relative time frames on the above two projects with the decision that the clinical tenure track will take priority. Mike Namaka and Chantal Pharand were added to the clinical tenure track task force.
  - Each council member is to compile a list of expertise within each faculty. Mike Namaka will revise template to include areas other than research and send to all council members.

#### 6. New Business:

6.1 Date and Time for Mid-year Meeting:

Toronto/Markham, Ontario, February 6-7, 2005. It was decided to spend at least ½ day to reflect on strategic planning and the rest of the time on the business meeting.

6.2 Confirmation of Date and Time for 2005 Conference: Saskatoon, June 24 (Council), 25 (AGM), 26, 27 (New Council).

6.3 Confirmation of Date and Time for 2006 Conference: Edmonton, June 1-3, 2006 prior to the CPhA conference.

7. Adjournment – The meeting was adjourned at 11:15 AM on a motion by Susan Mansour.

## **PART 3.0**

### REPORTS OF AFPC STANDING COMMITTEES, REPRESENTATIVES AND DELEGATES

2004

# President's Report to the 2004 Annual General Meeting

### **Executive Director**

I would like to thank Dr. Frank Abbott for his ceaseless and dedicated work over this last year. In the new position of being Executive Director of AFPC as well as supporting the work of the Deans, Frank has had a tremendous workload and served us admirably. Thank-you Frank for your dedication, enthusiasm and commitment to AFPC.

### Strategic Planning

A significant portion of the annual mid-year AFPC council meeting in February was dedicated to strategic planning. Dr. Roy Dobson ably facilitated council through a process of planning which resulted in the formation of a five-year strategic and business plan. This document will be revised by council prior to distribution. The plan will serve to guide AFPC in its activities over the next five year period. I would like to thank Dr. Dobson for his enthusiasm in leading us through this important process.

# Entry-Level Doctorate of Pharmacy Graduate Outcomes Task Force

CCAPP is currently developing standards for an Entry-Level Doctorate of Pharmacy program. In keeping with the tradition of outcomes development by AFPC in a timely manner, AFPC has struck a task force to develop educational outcomes for the Entry-Level Doctorate of Pharmacy. The Task Force has met three times (in person and through conference calls) to develop a first draft of the outcomes. A review process will follow during which all faculties and other relevant stakeholders will be asked for comment prior to revision. The Task Force welcomes comments throughout this process and would appreciate your participation.

# Task Force on Experiential Learning

The Task Force on Experiential Learning, developed by AFPC/ADPC and supported by CACDS as well as the faculties, was formed to investigate issues regarding experiential learning. Chair, Fred Remillard, consultant, Donna Wheeler-Usher, and the task force members expect to provide council with a report this month. This report will then be forwarded to the membership.

Pharmacy Occupational Sector Study of Pharmacists and Pharmacy Technicians AFPC continues to be involved in this project through official representation on the steering committee. A funding proposal to HRDC and a research plan are underway. A situational analysis of the pharmacy sector is being updated in 2004 to summarize changes that have taken place in the profession over the last 3 years. CPhA, NAPRA, and CACDS have entered into an agreement with the HRDC and are the official signatories for the study. As the study begins it is anticipated that AFPC members will be asked to participate in a variety of ways.

### Thank-you

I would like to thank council and executive members for their dedication and willingness to actively contribute to AFPC. We have an exceptional group of individuals who we should be proud to call our colleagues. Thank you all for your support over the past year. I wish Sylvie Marleau all the best as president for the 2004-2005 year. Sylvie is an experienced council member who will be a wonderful AFPC president.

Respectfully submitted, Susan Mansour, BSc(Pharm), MBA President, AFPC (2003-2004)

# AFPC AWARDS COMMITTEE REPORT

Vancouver, June, 2004

Since the Mid-year Council Meeting in Feb., 2004, the Awards Committee has focused on the selection of various award winners for 2004. In this regard, the Committee received tremendous help from council members especially Dr. Frank Abbott, Dr. Sylvie Marleau and Mr. Simon Albon, as well as faculty members who were approached to serve as reviewers. The Committee would like to express its sincere appreciation to all these individuals. The Committee would also like to take this opportunity to thank all the candidates for their participation in the awards program of AFPC. Upon the recommendations of reviewers, the Committee selected the award winners for 2004 as follows:

# **STUDENT AWARDS:**

James E. Frosst and Julien Braun Postgraduate Pharmacy Fellowship Awards.

Nine nominations were received. Students ranked first and second declined the award as they have other major awards. As a result, **Ms. Somayeh Sattari, University of Alberta**, (third on the list) was chosen as the winner.

- AFPC/GlaxoSmithKline Graduate Student Research Award
  - Seven applications were received. Mr. Thomas Chacko Pulinilkunnil, University of British Columbia, was chosen as the winner.
- Canadian Foundation for Pharmacy Research Poster Awards
   See attached.
- AFPC/APOTEX Undergraduate Pharmacy Practice Research Awards
   See attached.

# **FACULTY AWARDS**

AFPC/Janssen-Ortho Research Award.

Two nominations were received and **Dr. John McNeill**, **University of British Columbia**, was the unanimous choice by the review committee.

AFPC-AstraZeneca New Investigator Research Award

Two nominations were received and **Dr. Pierre Moreau**, **Université de Montréal**, was the unanimous choice by the review committee.

• AFPC Bristol-Myers Squibb National Award for Excellence in Education.

Four nominations were received. Dr. Jean-Louis Brazier, Université de Montréal, was

chosen to be the winner.

Canada's Research-Based Pharmaceutical Companies Industrial Visitation Program

Award

Dr. Pollen Yeung, Dalhousie University, was the recipient.

**OTHER RECOGNITIONS:** 

Honorary members

Drs. Gail Bellward, Jacques Gagné, John McNeill, and Peter O'Brien were nominated as

honorary members.

In addition, the Committee is proposing the following changes regarding the **James E. Frosst** 

and Julien Braun Postgraduate Pharmacy Fellowship Awards.

• Although these awards are intended to be given to students who hold no other substantial

awards, it is not clearly stated. The Committee is, therefore, proposing to add to the

"Description": The awards are intended to be given to students who hold no other major

awards.

• The current description of "Payment of Stipends & Duration of Support" states that "The term

for the Fellowship awards will be one year. The Fellowship holder may re-apply for another

year by following the procedure described above." It is clear in that the award is renewable

for another year. What is not clear is whether this award is renewable in subsequent years.

The Committee is, therefore, proposing to change it to read "The term for the Fellowship

awards will be one year. The Fellowship holder may re-apply for another year only by

following the procedure described above."

Respectfully submitted,

Lili Wang

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# CANADIAN FOUNDATION FOR PHARMACY RESEARCH POSTER AWARDS 2004 / PRIX DE LA FONDATION CANADIENNE POUR LA PHARMACIE

# **Dalhousie University**

Tim Rees (trees@dal.ca)

Supervisor: Ms. Elizabeth Foy

"Hot on the net: pharmaceutical policy/PDAs"

# **University of Alberta**

Negar Gharavi (Negar Gharavi NGHARAVI@pharmacy.ualberta.ca),

ngharavi ngharavi eskylark.pharmacy.ualberta.ca

Supervisor Ayman O.S. El-Kadi, aelkadi@pharmacy.ualberta.ca

"Mechanisms involved in the modulation of aryl hydrocarbon receptor-regulated genes by tumor necrosis factor- $\alpha$  and lipopolysaccharide"

### **Memorial University of Newfoundland**

Zohreh Amoozgar (zohreh@pharm.mun.ca)

Supervisor Mohsen Daneshtalab

"3-Hydroxy- 4,9-dihydro-isothiazolo[5,4-*b*]quinoline-4-ones as topo-II inhibitors with antitumor activity"

# University of Saskatchewan

Fawzy A. Elbarbry, (f\_barbary@yahoo.com)

Supervisor Jane Alcorn

"Postnatal maturation of cytochrome P450 2E1 and glutathione-S-transferases, pharmacokinetic model validation".

### Université de Montréal

Pierre Morissette, "Morissette Pierre" p.morissette@umontreal.ca

Supervisor Jacques Turgeon

"ABC transporters as a key determinant of sex-related differences in drug-induced Long QT syndrome".

# **University of Toronto**

Emmanuel A. Ho, (eammanuel.ho@utoronto.ca)

Supervisor Micheline Piquette-Miller.

"Regulation of the Rat Mdr1b Promoter in Huh7 Hepatoma Cells

By Proinflammatory Cytokines"

### **University of British Columbia**

Tiffany Ho, (tlmh@telus.net)

Supervisor: Kishor Wasan

"Effect of warfarin on haloperidol lipoprotein and protein association within normolipidemic and hyperlipidemic human plasma"

# **University of Manitoba**

Sreeneeranj Kasichayanula ("Sreeneeranj Kasichayanula" neeranj@hotmail.com)

Supervisor Xiaochen Gu

"In Vitro and In Vivo Percutaneous Permeation of Insect Repellent N, N-Diethyl-m-Toluamide (DEET) and Sunscreen Oxybenzone"

# **Laval University**

Isabelle Plante ( <u>isabelle.plante.6@ulaval.ca</u> )

Supervisor Dr Pascal Daleau

"Electrophysiological characterization of mutations found in the gene Kv1.5 in patients with different forms of atrial fibrillation".

# AFPC/APOTEX UNDERGRADUATE PHARMACY PRACTICE RESEARCH AWARDS FOR 2004

# **Memorial University of Newfoundland:**

Student Recipient: Ms Jennifer Loder (b03jrl@pharm.mun.ca)

Faculty supervisor: Director Linda Hensman

Preceptor: Scott Edwards of the Newfoundland and Labrador Cancer Treatment Centre Project title: Pharmacist directed seamless care program in an ambulatory oncology clinic.

### Université Laval:

Student Recipient: Miss Kassandra Gauthier (kasandra.gauthier.1@ulaval.ca)

Faculty Supervisor: Anne Dionne, Associate Professor

Preceptor: Chantal Gagnon and Isabelle Simard, Hôpital St-Sacrement

Project Title: Etude Descriptive Évaluant L'efficacité et L'innocuité d'un Régime Antiémetique à

base D'ondansétron-dexaméthasone-prochlorpérazine chez des Patients Recevant une Chimiothérapie Adjuvante (CA, CE, FEC, TAC, CEF) pour un Cancer du Sein.

# **Dalhousie University:**

Student Recipient: Karli Mayo (kmayo@dal.ca)

Faculty Supervisor: Dr. Hoan Linh Bahn

Preceptor: Charles MacLean

Project Title: Association between hyperglycemia or insulin administration and increased hospital

mortality in critically ill patients.

### Université de Montréal:

Student Recipient: Valérie Levert (valerie\_levert@hotmail.com or valerie.levert@umontreal.ca)

Faculty Supervisor: Marie-France Beauchesne, Pharm.D.

Preceptor:

Project Title: Évaluation de l'utilisation du plan d'action écrit et individualisé dans l'asthme.

# Leslie Dan Faculty of Pharmacy, University of Toronto:

Student Recipient: Shiri Iskander ( siskander@rogers.com ).

Faculty Advisor: Jana Bajcar

Preceptor: Dr. Allan Mills and Dr. Natalie Kennie

Project Title: Preliminary assessment of medication taking education animations and medication

organizers.

# **University of Saskatchewan:**

Student Recipient: Melissa Karakochuk (mdk701@mail.usask.ca)

Faculty Supervisor: Shannan Neubauer, Yvonne Shevchuk

Preceptor: Nora McKee, MD, Barry Rieder, MD

Project Title: Health Care Professional Satisfaction with Co-located Team-based Primary Health

Care.

# **University of British Columbia:**

Student Recipient: Selina Tang ( <a href="mailto:selinakmtang@hotmail.com">selinakmtang@hotmail.com</a> ).

Faculty Advisor: Rosemin Kassam

Preceptor: Parkash Ragsdale, Wendy Mays, Gary Jung, Christine Lee

Project Title: Impact of SPEP students on patient care.

# AFPC Bylaws Committee Report Vancouver, June 2004

# The following are the recommended changes to the AFPC Bylaws for 2004:

# 1. Issue: Revise the Honoured Life Member criteria referred to under Bylaw 4.2.6

Criteria 1 of the awards booklet reads:

On retirement or disablement, Honoured Life Membership will be awarded to active members who have been members for 10 years including at least 5 consecutive years at the time of their retirement or disablement, (i.e. retired regular member). Criteria 2 is for individuals who have made a major contribution to AFPC but are not eligible to be regular academic members, (i.e. non-member, but major contributor).

# Recommendation: Revise the awards book to combine the two criteria

On retirement or disablement, an Honoured Life Membership will be awarded to individuals who have made major contributions to AFPC and have been members for 10 years (including at least 5 consecutive years at the time of their retirement or disablement) or an active non-member who has made a major contribution to the organization.

**Rationale:** The rationale is that all members of Faculties across Canada are now members simply by being employed at the University (with a greater than 0.2 EFT appointment.). In this case, members really have not made a decision to be an active member, vote, contribute opinions on issues, etc. Therefore, there should be a component of making a major contribution to AFPC, instead of only being a member for a long period of time.

# 2. Issue: Clarify Membership Application Processes

Currently members holding a 0.2 EFT appointment at a "Constituent Faculty" are granted membership to AFPC by the constituent Faculty. The current criteria should be updated to depict this.

**Recommendations:** Bylaw 4.1 should remain as "Application for membership", however, 4.1a should be revised to read: "Application for "Constituent Faculty", "Associate", or "Affiliate" membership in the AFPC shall be addressed in writing to the executive director in such form as the council may from time to time prescribe. "Individual and student memberships are granted by Constituent Faculties as described in 4.2.2 and 4.2.5."

**Rationale:** Individual members of each Faculty are not required to apply directly to AFPC for membership.

# 3. *Issue:* The Executive Director should be recognized as part of the administrative structure.

Currently, the executive director is not formally recognized under Bylaw 8.1 as being part of the "Administrative structure".

**Recommendation:** In 8.1, the phrase "and where appointed, an Executive Director or other professional staff, so designated" should be added.

**Rationale:** The executive director should be recognized as part of the administrative structure.

# 4. Issue: Revise Bylaw 11.2 "Duties of officers"

Although the executive director is not an officer of the AFPC, the executive director duties are listed under this section. Although the ADPC appointee is an officer of AFPC, there are no specified duties.

**Recommendation:** The Executive Director duties listed under 11.2.d. should be moved to 8.2.c. The wording changes would also need to include: "The duties of the executive director and all professional staff employees......"

**Recommendation:** A new 11.2 d should be included that describes the duties of the ADPC appointee, as follows: "The appointee from the Association of Deans of Pharmacy of Canada shall communicate with and represent the Deans of Pharmacy of Canada regarding matters of interest to the organizations."

**Rationale:** These changes more clearly describe the duties of the ADPC appointee and document the executive directors role in a more appropriate bylaw.

# 5. *Issue*: Update the Bylaws so that consideration of issues and voting can take place by email between the mid-year and annual general meetings.

Currently the Bylaws do not include documentation allowing consideration of issues and voting to take place by e-mail between meetings.

**Recommendation:** The Bylaws should include a general statement under 3.2 c. stating: "Written" correspondence may take the form of e-mail, fax, mail, courier, or personal delivery of documents, where appropriate.

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

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

**Recommendation:** Under Bylaw 10.4 a. wording of the Bylaw should be revised to read "...prepare and circulate to the voting members <u>an electronic (e-mail) or written</u> 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 labelled 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.

6. Issue: The head office of AFPC has changed but it is not documented in the Bylaws.

**Recommendation:** Bylaw 6.0 should be changed to reflect a new head office in Vancouver (instead of Saskatoon) in the province of British Columbia (instead of Saskatchewan).

**Rationale:** The new head office is in Vancouver, B.C.

Recommendations respectfully submitted for AFPC membership consideration and vote at the Annual General Meeting in Vancouver, June 12, 2004.

Lavern M. Vercaigne, Pharm.D. Chair, Bylaws Committee.

# Association of Faculties of Pharmacy of Canada Annual General Meeting June 10-12, 2004 Vancouver, British Columbia

# **Communications Committee Report**

Membership: Simon Albon, Chair (University of British Columbia)

Rita Caldwell (Dalhousie University) Sheila Kelcher (University of Alberta) Jean Lefebvre (Laval Université)

Rebecca Law (AFPC Newsletter Editor, Memorial University of Newfoundland)

# **Committee Activities:**

#### 1) AFPC Newsletter:

The newsletter continues to be published three times per year (January, March, September). AFPC Councillors in each Faculty provide newsletter submissions to Rebecca Law, the newsletter editor, for publication. On a rotating basis each Faculty is asked to provide a "Spotlight" for the newsletter highlighting specific activities within the Faculty. Published spotlights for 2004 were University of Manitoba (January issue) and University of Saskatchewan (March issue). The spotlight on the University of Toronto will appear in the September issue. The newsletter is circulated by the Executive Director through e-mail to the membership through the AFPC Councillors and posted on the AFPC website. Recent AFPC Website User Statistics (see the attached 2004-06 Stats. PDF for details) indicates that the AFPC Newsletter is being accessed regularly online. Rebecca continues to use the new format for newsletter submissions to streamline the editing process. These changes include:

### 1) Submission Formatting:

- submissions should be brief (no limit was set but councilors were asked to keep submissions to a reasonable length). Currently, Rebecca is able to fit most Faculty submissions into ½ to 1 pages in length.
- submissions to be submitted in Word 95 or 97 using New Times Roman 11pt font.
- submissions should not be double- or 1.5-spaced and there should not be a space between any tiles and subsequent text. In particular, Format Paragraph Spacing should be set to "Opt" spacing before and after each paragraph. The Hard Return should be used to add a space between paragraphs. In addition, hanging indents should not be used.

# 2) Category Formatting:

- New grants and grant renewals should be submitted as separate categories.
- Titles of grants should be in quotes and italics.
- No bolding of investigators names.
- No listing of amounts received.
- No listing of the duration of the grant.

#### 3) Additional Categories:

- Academic appointments, promotions, resignations or retirements.
- General faculty news (major programmatic, research, facility or other undertakings by the faculties)
- Individual faculty news [major awards and presentations only (not attendance at conferences and titles of paper/poster presentations), elections to offices in professional associations/societies, research accomplishments and other timely achievements].

- Opportunities (upcoming meetings, conferences, workshops etc.)
- Major visitors
- Education corner (teaching innovations)
- Research corner (new research developments)

**NOTE:** The Communications Committee would like to thank all submitters to the AFPC Newsletter for their efforts in adhering to the submission format and deadlines. This has allowed for timely turn-around times for the Newsletter to reach our membership. **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 User Statistics

AFPC Website User statistics have been attached to this report . In general, the website is receiving more visitors and more hits. Visitors are spending more time on the site. For the February-May 2004 time period visitors were seeking conference information most often.

# 3) AFPC Website Re-design Project: Phase II

Further development of the AFPC Website was put on hold pending clarification of the AFPC financial situation.

**Proposed Phase II Development:** Phase II planning for the Website Redesign Project included adding additional information about each pharmacy school, roster information, developing online conference abstract acceptance and review and creation of a mirror site in French. External funding for Phase II was being sought. The Communication Committee suggests that with the success of the AFPC website, Phase II development should be initiated over the next year. It is also suggested that external funding be secured for Phase II.

### 4) AFPC Website Maintenance

Felicia Lo of Planetfish Design continues to provide support for the AFPC website. The Communications Committee would like to thank Felicia for the outstanding job she continues to do as webmaster for the AFPC website.

### 5) AFPC Domain Name Renewal

The AFPC domain name (<u>www.afpc.info</u>) was renewed for a five year period at a cost of \$ 150.00. The expiry date will be Feb. 5, 2009.

Respectfu	lly su	bmıt	ted,
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Simon P. Albon

# Association of Faculties of Pharmacy of Canada Education Committee Report Annual General Meeting June 2004 Vancouver, British Columbia

# 1. AFPC Program Evaluation and Outcomes Assessment Template

At the annual meeting in 2002, Dr. David Fielding presented a workshop on curricular outcomes and evaluation. As a result of this workshop, a template was developed and made available on the AFPC website. Faculties and individuals were encouraged to read, review, use, and comment upon this tool, and provide feedback to the Education Committee.

At this year's AGM, Dr. Fielding will be presenting a follow-up to this work at a session titled Measuring Educational Outcomes: Operationalizing Program Evaluation. Based on this session, additional follow-up may be required by the Education Committee. We will work with Dr. Fielding as required to ensure all faculties have access to this work.

# 2. Study examining academic dishonesty

A national study examining academic dishonesty in pharmacy education is now complete. Participating schools included Alberta (Sheila Kelcher), Saskatchewan (Fred Remillard), Manitoba (David Collins) and Toronto (Zubin Austin). Preliminary data analysis is currently being undertaken.

# 3. Life Long Learning in Pharmacy Conference 2005

The Education Committee will be pleased to work with the Conference Planning committee in developing programming for next year's joint conference in Saskatoon. Currently, the Education Committee (through Zubin Austin and Roy Dobson) has been involved in planning programming for this meeting. Daily themes have been identified and approved by the International Committee, and we are currently working on identifying appropriate speakers.

Respectfully Submitted,

**Zubin Austin** 

# Nominating Committee Report AFPC Annual General Meeting, Vancouver, June 9-13, 2004

The Nominating Committee members included Jacques Turgeon (Montreal), Cheryl Cox (Alberta), Fred Remillard (Saskatchewan) and Lavern Vercaigne (Manitoba).

# Calls for nominations were announced to every member by e-mail.

The following nominations have been received:

1.) President: Dr. Sylvie Marleau

2.) President Elect: Dr. Zubin Austin

3.) Councillors: I am pleased to announce that the following members have been elected to AFPC council.

Alberta: Sharon Mitchell British Columbia: Dr. Ingrid Price

Manitoba: Dr. Mike Namaka (second term)

Congratulations!

Respectfully submitted,

Lavern M. Vercaigne, Pharm.D. Chair, Nominating Committee

# AFPC AGM Research Committee Report June 12, 2004 Vancouver, BC

Committee Members: Chair (Mike Namaka), Lisa Dolovich (liaison member and Chair of Pharmacy Practice Research Committee), Lili Wang (liaison member from the AFPC awards Committee, Jean Lefebvre, Emma Ferreira

# Items raised at the midyear meeting in Toronto: Feb 8-9<sup>th</sup>/04

- Submit a revised version of the terms of reference of the research committee for subsequent review and modification by executive and council.
- Contact all councilors of AFPC to request information on the number of graduate students, category of research, level of graduate training and source of graduate student stipends for the Research Committee. This information will be compiled on an annual basis for the purposes of governing the efforts of the research committee. In addition, it was suggested that this information to be posted on the AFPC website.
- Trend Analysis of research posters submitted to AFPC (2003 and future years) in terms of 5 research categories: clinical research, basic science research, social and administrative research, pharmacy practice research and educational/teaching research. The preferred format for the graphical representation of the collected data is in the % format rather than actual numbers.
- Request that the graphical representations created from the trend analysis of research poster graphs be posted or accessible on the AFPC website.

# Information Update for the 2004 AGM in Vancouver June 9-13<sup>th</sup>,2004.

**Terms of Reference:** A proposed list of the terms of reference for the research committee has been established based on feedback collected and received at during the midyear meeting in Toronto Feb 8<sup>th</sup> and 9<sup>th</sup>,2004. This list was developed on the basis of the mission statement for AFPC that states: "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:

- To foster scholarly research excellence in pharmacy through diverse specialties that include: education-teaching, social administrative, clinical, basic science and pharmacy practice research conducted across Canada.
- To increase the visibility of clinical, basic science and practice research as a career option to pharmacy students across Canada.
- To foster research collaboration amongst the Faculties of Pharmacy across Canada.
- To enhance awareness and accessibility of the research conducted by individual Faculty and entire academic institutions across Canada.

### **Terms of reference:**

#### GOAL #1

➤ To facilitate the development of guidelines for scholarly research practice conducted by graduate students across Canada.

- > To develop program assessment measures, indicators and processes that will guide institutions in measuring research performance / effectiveness and research culture for internal evaluation and cross-institutional comparisons.
- ➤ To assist the Association of Faculties of Pharmacy across Canada in developing its research, graduate education and scholarship agenda.

### **GOAL #2**

➤ To promote career opportunities in clinical, basic science and practice research to pharmacy students across Canada.

### **GOAL #3**

- ➤ To establish a database of scholarly research activity conducted across Canada that will be accessible to AFPC members across Canada.
- > To organize and deliver an annual research forum that rotates through the diverse research specialties that include: education and teaching, social administrative, clinical, basic science and pharmacy practice.

#### GOAL #4

- ➤ To maintain regular dialogue with external organizations such as CPhA (Director of Research, Chair Canadian Pharmacy Practice Research Group), CSHP Research Committee (Chair) and others regarding common issues in pharmacy research and to create a synergy of efforts (e.g advocacy, research transfer).
- To promote members to use a central research database that identifies and trends the type(s) of scholarly research activity conducted within academic institutions across Canada.

**Research Data Collection Across Canada:** Dr Frank Abbott has forwarded my request to all AFPC councilors regarding my request for the following information: # of graduate students, type of research, level of graduate student training and stipend funding source (if any) for graduate students. The research committee will generate a template of all data collected which will be used to shape the direction and focus all future efforts. At present we have received responses from the Manitoba, Dalhousie, Memorial, Montreal and Alberta.

### **Trend Analysis of Submitted Research for Poster Presentations:**

Frank has assisted the research committee once again in providing the necessary data for the 2004 AGM. Please see the attached raw data and graphical representations for the 2003 and 2004 academic years. During the AGM, the research committee would like to make a request to post this information on the website.

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.

# TASK FORCE ON EXPERIENTIAL EDUCATION

# Annual General Meeting Report - June 2004

The members of the Task Force Committee included:

SPEP: Andrea Cameron, Cheryl Cox, Rosemin Kassam, Gilles Leclerc Practice: Charlie Bayliff, Nancy Roberts, Parkash Ragsdale, Karen Zed

AFPC/ADPC: Rita Caldwell, David Collins, Fred Rémillard, Chair

Others Amy Seaden (CAPSI), Christina Bisanz (CACDS), Donna Wheeler-Usher (Consultant)

Terms of Reference for the Task Force were as follows:

- 1. To identify and clarify the issues facing experiential learning for pharmacy programs.
- 2. To develop a strategy for addressing these issues with the resources that is available to the Task Force.
- 3. To formulate options or strategies for recognition of the costs of experiential education to faculties of pharmacy resulting from the placement of students in hospital and community pharmacies and other agencies for clinical learning.

Following the AFPC Annual Conference (2003), the Chair obtained the services of our consultant Donna Wheeler-Usher from Halifax. The Chair briefed her on our progress so far including the mandate and the information collected at the first meeting held in Winnipeg (May 2002). The momentum was delayed by the departure of the initial Chair, finding a replacement and the need for securing additional funds.

The Chair and consultant prepared an agenda and an action list, which was reviewed by Task Force members. A teleconference was held on June 17, 2003 and members were assigned duties of their interest from the action list. Reports were due by early September but unfortunately because of everybody's busy schedule, it took until November before they were completed. Because of some information gaps, it was decided that the consultant would also interview both hospital and community practitioners representing different regions of Canada. The first draft was completed in early May and reviewed by the Task Force members for comments. The second revision was completed at the end of May and reviewed by a subcommittee of the Task Force via a teleconference to prioritize the recommendations. The final document will be presented to the AFPC Executive and Council at the Annual Conference in June for its review and acceptance.

In closing I would like to thank all the committee members for taking on this added task despite their already extremely busy workload. I especially want to recognize and offer my sincere appreciation to our consultant Donna Wheeler-Usher for her perseverance and commitment to this very challenging project. And finally I want to thank ADPC and CACDS for their generous financial support of the Task Force on Experiential Education.

Respectfully submitted,

Fred Rémillard, Chair

# Pharmacy Human Resources in Canada A Sector Study of Pharmacists and Pharmacy Technicians AFPC Liaison

# Annual General Meeting, Vancouver, June 9-13, 2004

Two Steering Committee meetings were held since the last AFPC Annual General meeting. The first meeting was in Ottawa, on Jan 24 and 25, 2004. The second was a follow-up meeting in Kananaskis on March 28<sup>th</sup> and 29<sup>th</sup>, 2004 (funded entirely by HRSDC).

**Please find attached**, a progress report outlining recent advances in the Pharmacy Human Resources Study.

# Highlights include:

- 1.) An updated "Situational Analysis" of the Pharmacy sector is near completion. A consultant was hired to update the previous situational analysis prepared in 2001.
- 2.) The project received \$84, 557 of funding to complete a detailed research plan for the Sector Study.
- 3.) A consultant company, Edwin Blewitt and Associates, was hired to help the Steering Committee develop a detailed research plan, identify priorities and determine next steps.

# Next steps currently underway:

- 1.) Final funding application for the sector study (including the detailed research plan) to be sent to HRSDC- May 2004
- 2.) Publication of Updated Situational Analysis June 2004
- 3.) Confirmation of funding approval from HRSDC- expected in late June
- 4.) Hiring of Project Manager- summer 2004
- 5.) Issuing of research requests for proposals and hiring of consultants and researchers summer 2004.

Respectfully submitted,

Lavern M. Vercaigne, Pharm.D Steering Committee Member on the Pharmacy Sector Study for AFPC

### PHARMACY HUMAN RESOURCES IN CANADA

# A Sector Study of Pharmacists and Pharmacy Technicians

This is the second in a series of updates of the work and progress of the sector study of pharmacists and pharmacy technicians. This study, in partnership with Human Resources and Skills Development Canada (HRSDC; formerly HRDC) is the first national study of pharmacy human resources of its kind in Canada and will guide planning and decision-making about the pharmacy labour force in the future.

# **Purpose and Objectives**

The overall purposes of this study are:

- To complete a comprehensive analysis of the short and long-term human resource challenges facing the pharmacy sector.
- To propose a coordinated plan of action, involving all relevant stakeholders, which will prevent or minimize the potential negative consequences associated with the human resource challenges presently facing the pharmacy sector.

This sector study will examine a range of supply and demand issues, including an assessment of how changes in the health care environment and technology will affect future roles, skill requirements, education and training of both pharmacists and pharmacy technicians/assistants. The shortage of pharmacists has developed at a time when pharmacists are being called upon to play an expanded role on the primary health care team. Failure to address pharmacy manpower issues will compromise the ability of the profession to respond to these expectations and to achieve its potential in Canada's health care system.

The pharmacy sector study process, like similar HRSDC sector initiatives, is designed to build consensus among stakeholders with respect to the underlying causes of the human resources challenges facing pharmacy and the strategies that are most likely to rectify the situation. This consensus will be a catalyst for taking coordinated action on issues critical to the future of pharmacy.

Assumptions about the supply and demand for pharmacists will be valid only if they are based on correct assumptions about health care delivery models of the future, and the role that each health care provider will be expected to play in that future system. Throughout the study, pharmacy will work with governments and other disciplines, particularly medicine and nursing, to develop recommendations and integrated health human resources strategies.

# **Update on Activities**

After nearly two years of preparation, the pharmacy human resources sector study is poised to move to the research stage, thanks to the collaboration of a number of pharmacy stakeholders, HRSDC and Health Canada.

Meeting, for the fourth time, in Ottawa January 23-24, 2004 the steering committee noted that interim funding of \$84,557 for the development of a research plan had been approved by HRSDC. A consultant firm, Edwin Blewett and Associates, guided the steering committee through a day-long workshop to define the research goals, identify priorities and determine next steps. A consultant was also engaged to update the Situational Analysis prepared in 2001 by the Canadian Pharmacists Association (CPhA) and HRSDC.

The steering committee met again on March 28 and 29<sup>th</sup> in Kananaskis, Alberta to finalize the research workplan. As the research goals became clearer, the steering committee reached consensus on those aspects of the study that were essential and established clear priorities for the researchers.

Since HRSDC requires a detailed research plan and budget, this interim step will lead to the next steps of hiring the project manager and an RFP for the research work. Understanding that this research, originally planned for stage II of the study has been moved up in its sequence, the Terms of Reference were amended to reflect the new timeframes. It was determined that the terms must include reference to home care and ambulatory clinics.

Further, to provide the legal foundation for the study, the Steering Committee supported incorporation of the "Pharmacy Sector Study Corporation" with CPhA, the National Association of Pharmacy Regulatory Authorities (NAPRA), and the Canadian Association of Chain Drug Stores (CACDS) signing the incorporation agreement and undertaking the financial accountability for this project.

In addition to CPhA, CACDS, NAPRA, and HRSDC, a number of other national pharmacy organizations are represented on the Management Committee: Canadian Association of Pharmacy Technicians, CAPT; Canadian Society of Hospital Pharmacists, CSHP; Pharmacy Examining Board of Canada, PEBC; Association of Faculties of Pharmacy of Canada, AFPC; and Association of Deans of Pharmacy of Canada, ADPC. The Steering Committee is comprised of these core partners, the cochairs (Fred Martin, PEI; Kevin Hall, MB), and a host of interested stakeholders including pharmacy regulatory colleges, pharmacy students, employers, employees, unions, Health Canada and provincial governments.

Given that many stakeholders are involved, the Steering Committee is finalizing a Memorandum of Understanding (MOU). The document outlines the roles and responsibilities of steering committee members and invited participants, and the process of decision making, which is one of consensus rather than balloting. Processes are being put into place to assist the committee in dispute resolution and problem solving.

A key element to the sector study will be the signing of the contribution agreement (CA) between the Pharmacy Sector Study Corporation and HRSDC. The CA outlines the time and financial contribution required to see the project through. It is important to note that HRSDC is contributing just over a 50% share and the stakeholders the balance. Participating pharmacy organizations will also need to sign the CA to confirm their contribution. Stakeholder contributions includes "in-kind" and cash contributions, including time spent working on the project.

The steering committee determined that a project manager, external to the group but reporting on a monthly basis and overseen by the management committee, was preferential to any one organization assuming the work. Overarching direction and activities will be established by the steering committee. The project manager will work closely with CPhA, as the secretariat pharmacy organization for the Study (i.e., CPhA to provide accounting and secretarial services and be a liaison for operational issues) A detailed job description has been approved and advertising for the right candidate to manage the sector study research will occur when the CA has been signed.

A communications working group has been established. With a goal of keeping all pharmacy stakeholders involved and informed, a format for information sharing will be developed along with a website to host current documents and progress reports.

# **Next Steps**

- Final funding application to HRSDC May 2004, with a total budget of approx \$2.4 million
- Publication of updated Situational Analysis June 2004
- Confirmation of funding approval from HRSDC expected in late June
- Hiring of Project Manager summer 2004
- Issuing of research requests for proposals and hiring of consultants and researchers summer 2004

In summary, the Steering Committee and HRSDC will deliver the most comprehensive study of the pharmacy sector ever undertaken. It is estimated that the project will take two years from RFP to final report and recommendations. For more information, e-mail CPhA at <a href="https://hrstudy@pharmacists.ca">hrstudy@pharmacists.ca</a> or call 1-800-917-9489, x 255.

# **CCAPP** report to AFPC

# Annual council and general meeting, June 10, 2004

- 1. **CCAPP's Board of Directors and Annual General Meetings.** CCAPP AGM will be held on June 20, 2004, in Toronto. The Standards and Guidelines Committee will have a Workshop on June 19, 2004 to address the revision of the current 1998 baccalaureate and postgraduate Pharm.D standards and guidelines, taking into account recommendations from the Deans of the Faculties, Colleges and Schools of Pharmacy of Canada. The Committee will also address the issue of entrylevel Pharm.D standards and guidelines development. The process for inviting input from the profession is currently being considered.
- 2. **Site Visit Accreditation Team Reports.** CCAPP conducted three on-site team evaluations in the fall of 2003: Dalhousie University, Memorial University and the University of Alberta. During the June 20 meeting of the Board of Directors, these on-site review reports will be considered by the Board. The University of Alberta report is currently being reviewed.
- 3. **Establishment of a new web site.** In order to establish a greater visibility, CCAPP board will consider a recommendation for the development of a new web site by a firm established in Saskatoon. The site will be developed along the lines of the ACPE web site.
- 4. **Canadian Pharmacy Technician Educators meeting.** Executive Director Jim Blackburn is making a presentation to the Canadian Pharmacy Technician Educators meeting in Windsor on June 19. This meeting will also receive presentations from CPhA, OCP and the Accreditation Council for Pharmacy Education in the USA. CPTE is continuing to consider the possibility of developing an accreditation program for pharmacy technician programs.

Respectfully submitted, Sylvie Marleau May 31, 2004

# Memorandum

À: Frank Abbott, Directeur exécutif

**AFPC** 

**De:** Marc Desgagné

**Date:** 2004.06.08

Sujet: 2003-2004 Annual Report from AFPC delegate to the Canadian Council on Continuing

Education in Pharmacy (CCCEP)

The Council of the Canadian Council on Continuing Education (CCCEP) met on two occasions during this year and held 2 teleconferences.

Deb Barnhill (Halifax) has assumed the Presidency of the Organization. Suzan Lessard-Friesen (Manitoba) will assume this function as of July 1<sup>st</sup> 2004. Nora MacLeod-Glover will replace Bernie DesRoches as the Ontario College of Pharmacists in June 2004.

Details of CCCEP 2003 annual report are available for consultation on <a href="www.cccep.org">www.cccep.org</a>. The following points are of particular importance to AFPC:

### Financial Situation:

The commencement of the CCCEP financial year was changed in 2003 to start from July 1<sup>st</sup> instead of April 1<sup>st</sup>. During the 2003 fiscal year, CCCEP paid \$15,209 to satisfy its GST liability but was able to recover \$16,757 from its clients. As of March 31, 2004, the 2003-2004 financial year was showing a surplus of \$26,337 of revenues over expenses. An increase in the number of programs submitted for accreditation and benefits from the 2003 Annual Continuing Education Forum explain these good financial results. The 2004-2005 budget is balanced with a prevision of a surplus of \$1484 of operating revenues over expenses. Due to the absence of sponsorship for the 2004 annual meeting of the Organization plus the absence of a National continuing education forum in 2004 and 2005, CCCEP has identified and will implement different avenues to increase its benefits and reduce its expenses. Two of those avenues include an increase of 10% of the accreditation fees effective July 1<sup>st</sup> 2004 and proposing a 25% increase to \$1250 in the contribution of the participating bodies to the travel pool.

### 4th Annual National CE Forum

CCCEP hosted the 4<sup>rd</sup> National Forum on Continuing Pharmacy Education in November, 2003. This activity generated a surplus of \$8,607. Due to CCCEP involvement with and the schedule for the 2005 6<sup>th</sup> International Conference on Life Long Learning in Pharmacy which will take place in June 2005, there will be no National CE Forum in 2004 or 2005.

### Guidelines and Criteria for CCCEP Accreditation:

The *Guidelines and Criteria for CCCEP Accreditation* have continued to be subject to revision and amendment as necessary based on issues arising in their implementation. Guidelines are available on CCCEP Web site at <a href="www.cccep.org">www.cccep.org</a>. The revision process will continue over the next months, with a particular attention being paid to electronic based programs.

Two organizations which had previously been accredited under a pilot project as Continuing Education providers are currently or have completed their renewal process. The Division of Outreach Education from the University of Alberta has been renewed to January 2005 and the Canadian Pharmacist Association is about to submit its renewal. The Ontario Pharmacists Association has indicated its intention to apply to participate in this pilot project.

# Home Study Program:

CCCEP has made the decision to withdraw from the Home Study Program effective January 2004.

#### Others:

CCCEP has accepted to co-host the 6<sup>th</sup> International Conference on Life Long Learning in Pharmacy. This Conference to which AFPC is also co-host will be hosted by the College of Pharmacy and Nutrition in Saskatoon from June26-29 2005 under the theme *Practice, Academia and Industry - Building Bridges through Continuous Professional Development*. The Organization will go through a full review and revision of its Bylaws in the coming months. CCCEP next Annual meeting will take place in Toronto on November 26-27, 2004.

It has been a privilege for me to represent AFPC to CCCEP over the last years. Time has now come for me to provide the opportunity for another colleague from our Organization to represent AFPC to CCCEP. I wish to sincerely thank the Association for its continuous support.

# PEBC UPDATE

LETTR

Vol. 8 No. 1 March 2004

# 2004 Annual Board Meeting Summary



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Canada held its 2004 Annual Board Meeting on February 21, 2004 in Toronto. Standing committees met over the 3 days preceding this meeting. The following are highlights of recommendations made and issues addressed by the Board. For further information, you may contact PEBC Board appointees, President Scott Way, or Registrar-Treasurer John Pugsley.

The Pharmacy Examining Board of

# Board Membership Changes

Changes to Board membership which occurred at the close of the Annual Board Meeting, due to expiration of terms of office were:

### **Canadian Society of Hospital Pharmacists**

Darcy McLurg replacing Andrea Cameron

### L'Ordre des pharmaciens du Québec

Jean-Francois Guévin replacing André Gagnon

# **2004 Executive Committee**

President - Scott Way Vice-President - Linda Suveges Past-President - Bev Allen Executive Members Larry Boggio Kathy McInnes

# 2003 PEBC Statistics

### **PEBC Register:**

There were 877 names added to the Register by examination in 2003 (780 in 2002).

#### **Qualifying Examination:**

A total of 1453 candidates wrote the Qualifying Examination-Part I (MCQ) in 2003, as compared to 1301 in 2002. A total of 1255 candidates took the Qualifying Examination-Part II (OSCE) at eleven sites across Canada in the Spring, and at five sites in the Fall, compared to 1175 in 2002. In Ontario, a new site was established at Hamilton (Spring and Fall sittings).

There were a total of 34 candidates who were assessed for non-certification purposes (16 for the Alberta College of Pharmacists, 17 for the College of Pharmacists of British Columbia and 1 for the Manitoba Pharmaceutical Association).

### **Evaluating Examination:**

There was a significant increase in the number of candidates writing this examination, 933 in 2003, as compared to 737 in 2002.

#### **Document Evaluation:**

A total of 783 applicants in 2003 were ruled acceptable for admission into the Evaluating Examination, compared to 994 in 2002.

PEBC UPDATE
The Pharmacy Examining
Board of Canada

Contributor: J. Pugsley

# **Finances**

Revenues were up, largely as the result of the significant increase in applications for the Evaluating Examination and the Qualifying Examination from international pharmacy graduates. Expenditures were underbudget due to various reasons including: unfilled staff positions, less travel due to workload with the handling of SARS, and cost efficiencies with the optimal utilization of tracks required for the OSCE. The Finance Committee continues to monitor details.

# Pharmacy Sector Study Corporation

Ron Eros serves as the PEBC representative on the Steering Committee and the Management Committee of the Sector Study of Pharmacists and Pharmacy Technicians. PEBC is currently a member of the Steering Committee, and will soon become a signatory to a Memorandum of Understanding which will outline the responsibilities of members, and the governance model. Although the study is moving forward, HRDC has asked for more detail on the research planning before approving the final application. Interim project funding has been approved allowing the study to proceed in the first step of Phase II to provide this information.

# HRDC Pharmacy Technician Project

Past-President Bev Allen serves as the PEBC representative on the Pharmacy Technician Stakeholder Task Force. A project proposal has been submitted to HRDC requesting funding to develop a competency profile, and certification and accreditation process for technicians. HRDC has requested more information to clarify the difference between this project and the HRDC Pharmacy Sector Study. Janet Cooper, from CPhA, will be working with the technician proposal to better define the differences between the two submissions.

# Qualifying Examination Parts I (MCQ) and II (OSCE)

In 2003, a new examination centre for the OSCE was established in Hamilton, Ontario in order to accommodate the increasing number of international pharmacists seeking licensure in Canada, especially in Ontario. There are now four OSCE sites in Ontario. PEBC continues to conduct research on the OSCE. In 2003, a journal article on the development and validation processes for the PEBC OSCE was published in the American Journal of Pharmaceutical Education. Continued research is planned for 2004.

The Board is very grateful for the excellent work and commitment of the OSCE Chief Administrators and Chief Examiners and the staff associated with Standardized Patient Centres across Canada. PEBC appreciates the continued support of the schools of pharmacy, the staff at the examination centres and the many pharmacists who participate as assessors. Provincial Regulatory Authorities also continue to assist PEBC by publicising the need for pharmacist assessors.

As the result of SARS, candidates, assessors and staff were screened at all testing centres across Canada for the Spring 2003 Qualifying Examination-Part I (MCQ) and Part II (OSCE), and for the Summer 2003 Evaluating Examination. As the result of SARS, the Toronto

OSCE site was relocated to a non-hospital setting for the Spring and Fall examinations. PEBC greatly appreciates the support of pharmacists and other health professionals who assisted with the SARS screening this past year.

# PR/Communications Plan

The Board held a special communications workshop session at the 2004 Annual Board meeting, to develop key messages and positioning statements for PEBC. This will be incorporated into PEBC's Communications Plan.

# National/Regional Assessment Centre(s)

PEBC is involved in ongoing discussions with the Medical Council of Canada regarding the potential establishment of a collaborative National or Regional Assessment Center(s).

# **Board Meetings**

The next Board meetings are tentatively set for October 29-30, 2004 (Mid-Year and Committee Meetings) and February 19, 2005 (Annual Meeting with Committee Meetings preceding).

Addendum: Linda Suveges May 2004 Qualifying Exams:

The Qualifying Examination-Part I (MCQ) was written at 11 sites with 1005 candidates writing. For Part II (OSCE) approximately 950 took the exam at 11 sites. Over 400 pharmacists participated as assessors/or track coordinators. Over 350 standardised patients and 150-200 additional exam staff were utilized to conduct the examination

# ASSOCIATION OF FACULTIES OF PHARMACY OF CANADA Annual General Meeting, June 12, 2004 Sheraton Vancouver Wall Centre Hotel

#### **EXECUTIVE DIRECTOR'S REPORT:**

In the twelve months since I have taken on the position, let me express my sincere appreciation to the Executive and Council for their extensive support and goodwill as I have learned the duties and responsibilities of Executive Director. Many thanks go out to Dr. Jim Blackburn for being such a great resource on procedures and for facilitating the smooth transition of the office to Vancouver. With my position now having the added responsibility to ADPC, there has been some adjustment required to share the workload of the two organizations. Fortunately, my familiarity with the activities and functions of ADPC has helped considerably with the adjustment to the new tasks and responsibilities. I would like to give a brief overview of significant AFPC and ADPC activities since June, 2003 in somewhat chronological order:

- □ Following the Montreal conference an overview or synopsis of the conference was prepared for distribution to Councillors. This task was suggested during the new council meeting and I hope that the summary proved useful. If so, we will continue this practice after future AFPC conferences.
  - Captions were prepared to accompany pictures of the award winners for posting on the AFPC web page. Communications were made to Rx & D to have these pictures included on their web site, but apparently this was not successful. Presentations from invited speakers to the Montreal Conference were also posted and it would be useful to obtain some feedback as to reader interest.
  - The program evaluation and outcomes assessment template is available on the AFPC web site with requests for feedback to Zubin Austin, chair of the education committee. This office was not privy to any significant comments regarding the document, although AACP has interest in further developments of this initiative in Canadian Faculties.
  - There was communication with the awards committee to set in motion the recommendations from the Montreal meeting regarding changes to wording and eligibility for awards. Thanks to Sylvie Marleau, Ema Ferreira, and Jean Lefebvre the French translation of the Awards Book was completed in a timely manner. Stakeholders for the awards agreed to the proposed changes. Council approved the revised booklet through an Email vote, which I think is a first for this Organization. I was pleased to be able to present the Faculties with a new edition of the Awards Book at the normal time in September of 2003. Lili Wang and her committee are to be congratulated for their efficiency and prompt action on the recommendations. The awards program for 2004 was faced with a dilemma regarding the Merck Frosst Postgraduate Research Fellowship Awards. Because of recent developments at Merck, budgetary restrictions at Merck Frosst threatened to eliminate all three of the fellowship awards. An appeal from this office helped to restore funding to cover one fellowship award for 2004 and we will be working with Merck Frosst to restore the original funding as soon as possible.
  - Information on the distribution of abstracts was presented to Mike Namaka chair of the Research Committee and changes have been made to the call for abstracts to include categories into which the abstracts will be classified. The call for abstracts for the Annual Conference in Vancouver in June, 2004 has gone out and the format of the abstract was revised to be consistent with that of the Canadian Society for Pharmaceutical Sciences. CSPS has agreed to publish AFPC abstracts as part of the conference proceedings in the Journal of Pharmacy and Pharmaceutical Sciences.

Following the Dean's meeting in Montreal and the CPhA meeting in Vancouver, the issue of International Prescription Services was in the spotlight. The Deans of Pharmacy were asked for their position on this type of practice and a position statement was prepared that gave full support to the position taken by CPhA. An issue for the Faculties was that quality experiential sites needed to be available for the training of our pharmacy students.

In July, the AFPC office was moved from Saskatoon to Vancouver thanks to the help of Dr. Jim Blackburn.

A report to AACP was prepared for purposes of the AACP annual conference held in Minneapolis in July. President Susan Mansour and myself attended the meeting to bring greetings from AFPC. The AACP was very interested in the Task Force on Experiential Education and has asked for a copy of the final report. Of interest to your Ex Dir was the revenue generating aspects of our much larger sister organization. An online centralized pharmacy school application service called PharmCAS is a relatively new initiative of AACP and is proving to be very popular with applicants.

The Compendium of Pharmacy Student/Resident Pharmacy Practice/Pharmacy Education Research Projects for the Year 2001 was published in the June issue of the Canadian Journal of Hospital Pharmacy and the account was settled for the publication costs. It was hoped that publication of the Compendium might become an annual event, but our sponsor Merck Frosst Canada has declined any further support.

The 2003 Proceedings were completed in September thanks to the editorial assistance of Lavern Vercaigne. Three hard copies were sent to each of the constituent Faculties and electronic versions were available to faculty members. Each year, the Proceedings are posted on the Web Site and it would be useful to obtain statistics of use and some feedback from faculty as to the value of this practice.

The annual meeting of the Association of Deans of Pharmacy of Canada was held in Halifax on October 4-7, 2003. President Susan, ADPC representative Rita Caldwell and myself presented a report from AFPC at the business meeting on October 6/03. A case was made for the importance of strategic planning and a plea made for funding of the midyear meeting in 2004. In a follow up meeting of the Deans in Toronto on November 17, 2003 approval was given to provide funding for the midyear meeting of AFPC in Toronto in February. With Rita Caldwell assuming the Presidency of ADPC at the business meeting in Halifax, Dean Franco Pasutto from the Faculty of Pharmacy and Pharmaceutical Sciences in Edmonton accepted the position of ADPC representative to AFPC.

From the Halifax meeting, your ED is to gather information on faculty shortages and impending retirements in order to provide an overview of the extent of the problem in Faculties of Pharmacy in Canada. A template was obtained from AACP who are engaged in a similar survey of American Schools of Pharmacy.

Planning has been active for the 2004 annual conference in Vancouver and the 2005 annual conference in Saskatoon. AFPC is meeting jointly with CSPS in 2004 and conjointly with the Life Long Learning Conference in 2005.

In November of 2003, the Deans of Pharmacy became aware of activities by the Advisory Committee on Health Delivery and Human Resources (ACHDHR) working group on entry-to-practice credentials for health professionals. The objectives of the working group were to develop fair and effective national principles and policy to address concerns of the Conference of Deputy Ministers of Health. While the group had representation from NAPRA and CPhA, there were no academics from Pharmacy or of any other health profession. A letter from the Association of Deans of Pharmacy of Canada was sent to Mr. Ian Green, Deputy Minister of Health Canada regarding the apparent lack of consultation with academic pharmacy. The letter also described recent developments in Pharmacy education with respect to the entry-level Pharm D degree.

In November of 2003, AFPC was approached by the Association of Canadian Medical Colleges and the Canadian Hospice Palliative Care Association to support their application for funding of a project titled, "Educating Future Physicians in Palliative and End-of-Life Care". AFPC has agreed to be a collaborating partner on this initiative and to serve as a member of the resource group. Several recommendations of Pharmacy faculty members who might serve as resource people in palliative care have come in from across the country.

February, 2004 was a busy month with both AFPC Council and ADPC meetings occurring just prior to the CACDS Conference in Toronto/Markham. AFPC held a very productive 2-day meeting with half of that time dedicated to strategic planning. A committee was struck to craft the educational outcomes for the Entry Level Pharm. D. degree. CACDS was interested in the progress of the Task Force on Experiential Education and your executive director provided an update at a joint meeting of the Deans of Pharmacy and the Board of CACDS on February 10, 2004. ADPC met with Jeff Poston of CPhA and held a teleconference with CPhA President Bernd Staeben to discuss issues of mutual interest.

At the invitation of Bob Peterson, Director General of Health Canada, Deans Gorecki, Hindmarsh and Sindelar plus myself, traveled to Ottawa on February 12/04 for a one-day conference with several groups from Health Canada. This was a very informative meeting with several areas identified whereby increased interaction and collaboration of Pharmacy Faculties with Health Canada could be achieved. It is anticipated that follow up on this initiative will occur at the October meeting of ADPC.

On February 15/04, ADPC, at the invitation of NAPRA, met with the National Drug Scheduling Advisory Committee to discuss the relevance of Canada's Drug Scheduling System.

The Canadian Foundation for Pharmacy and AstraZeneca Canada Inc. held a Pharmacy Executive Workshop in Toronto on February 15-17, 2004. AFPC, the Deans of Pharmacy, Executive directors of National and Provincial Pharmacy and Regulatory Associations were in attendance. The goal of the workshop was to plan how the various pharmacy organizations might work together to move the profession forward. The initiative for the workshop came from the CFP mission to be a catalyst for change in developing and supporting evolving pharmacist care to optimize health outcomes.

This successful workshop was followed by a second meeting of the group at the CPhA meeting in Niagara Falls on May 15, 2004. From that meeting, the immediate goal is to develop a consensual definition of the 'new pharmacist'. A working group has been struck to deal with this task and pharmacy academics are being represented by the AFPC Executive Director and the President of ADPC.

Enrollment data from the Faculties was collected for sharing information to ADPC, CACDS, the HRDC situational analysis, and to the University of Waterloo.

CPhA held a national stakeholder conference on E-Therapeutics in Ottawa on April 30, 2004 at which your Ex. Dir. attended. E-Therapeutics is a major project for Canadian Pharmacy and for healthcare, in general. The conference provided the first opportunity to explore collaboration with CPhA on the e-therapeutics initiative by the various academic units in Pharmacy.

On May 16/04, at the CPhA Annual Conference in Niagara Falls, ADPC met with CPhA Executive Director Jeff Poston, President, Bernd Staeben, incoming President, Garth McCutcheon, academic board member, Linda Suveges, and other members of CPhA. The Entry Level Pharm D degree, ADPC representation, communication issues, and pharmacy practice infrastructure and funding, were among the topics discussed. It was agreed that there is a certain amount of work to be done with CPhA and the Deans. Face to face meetings on a regular basis were suggested as well as providing opportunities for input on position statements or other CPhA activities. Jeff Poston and Frank Abbott are to liaise to form a working group to deal with issues of the day.

To conclude, President Susan Mansour and the members of the AFPC Executive and Council are to be congratulated for a very productive year. The strategic planning session and the

business plan were major undertakings as were the committee on educational outcomes for the entry-level Pharm D and the Task Force on Experiential Education. ADPC and the individual Deans are to be warmly thanked for providing additional funding to allow the strategic planning session to take place. It was a pleasure to be part of the administrative and work activities of both organizations.

Finally, as a member of the 2004 Conference Planning Committee, I would like to acknowledge the intuition and leadership of Conference Chair, Simon Albon, and the other hardworking members of his committee. Considering the time and attention that were directed towards this event, we should anticipate a highly successful Annual Conference in Vancouver.

Respectfully submitted, Frank S. Abbott, PhD June 10, 2004

# **PART 4.0**

# AFPC FINANCIAL STATEMENTS

2004



Association of Faculties of Pharmacy of Canada Financial Statements December 31, 2003



CHARTERED ACCOUNTANTS & BUSINESS ADVISORS 366 - 3RD AVE. S., SASKATOON, SK S7K 1M5 PH. (306) 665-6766 FAX (306) 665-9910 www.mnp.ca

**Auditor's Report** 

To the Board members of Association of Faculties of Pharmacy of Canada:

We have audited the balance sheet of Association of Faculties of Pharmacy of Canada as at December 31, 2003 and the statements of revenue, expenditures, and net assets, including supporting schedules, and cash flows for the year then ended. These financial statements are the responsibility of the organization'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 organization as at December 31, 2003 and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles.

Saskatoon, Saskatchewan

May 27, 2004

Maryer Navia Parny LLP

366 - 3rd Avenue South, Saskatoon, Saskatchewan, S7K 1M5, Phone: (306) 665-6766, 1-877-500-0778

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# Association of Faculties of Pharmacy of Canada Balance Sheet As at December 31, 2003

	AS Ut Deci	ember 31, 200.
	2003	200.
Assets		
Current Cash	46,013	39,317
Investments (Note 3)	133,703	132,311
T T SMEARLY LIGHT	179,716	171,628
Net Assets Net assets	179,716	171,628
	179,716	171,628
Approved on behalf of the board		
Director	Directo	r

The accompanying notes are an integral part of these financial statements



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# Association of Faculties of Pharmacy of Canada

Statement of Revenue, Expenditures and Net Assets
For the year ended December 31, 2003

	2003	2002
Revenue (Schedule 1)	173,895	178,593
Expenditures (Schedule 2)	165,807	180,328
Excess (deficiency) of revenue over expenditures	8,088	(1,735)
Net assets, beginning of year	171,628	173,363
Net assets, end of year	179,716	171,628

The accompanying notes are an integral part of these financial statements



# Association of Faculties of Pharmacy of Canada

Statement of Cash Flows
For the year ended December 31, 2003

39,317

46,013

43,718

39,317

	2003	2002
Cash provided by (used for) the following activities		
Operating		
Excess (deficiency) of revenue over expenditures	8,088	(1,735)
Investing		
Interest reinvested	(1,392)	(2,666)
Increase (decrease) in cash resources	6,696	(4,401)

The accompanying notes are an integral part of these financial statements

Cash resources, beginning of year

Cash resources, end of year



# Association of Faculties of Pharmacy of Canada

Notes to the Financial Statements

For the year ended December 31, 2003

#### 1. Intended purpose of the entity

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.

#### 2. Accounting policies

These financial statements have been prepared in accordance with Canadian generally accepted accounting principles, and include the following significant accounting policies:

#### Investments

The Association's investments are recorded at cost plus accrued interest to the date of the balance sheet.

#### Measurement uncertainty

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 and disclosure of contingent assets and liabilities at the date of financial statements and the reported amounts of revenues and expenses during the reporting period. These estimates are reviewed periodically and, as adjustments become necessary, they are reported in earnings in the periods in which they become known.

#### 3. Investments

	2003	2002
CIBC GIC - Maturing Jan 2, 2008, 1.3%	14,410	14,223
CIBC GIC - Maturing June 27, 2006, 4.25%	21,134	20,672
CIBC GIC - Maturing June 27, 2007, 3.75%	21,026	20,620
CIBC GIC - Maturing Oct 28, 2005, 3.0%	20,215	20,107
CIBC GIC - Maturing Oct 28, 2004, 2.6%	20,186	20,093
CIBC GIC - Maturing Oct 28, 2004, 2.0%	36,729	36,596
	133,700	132,311



2002

# Association of Faculties of Pharmacy of Canada Schedule of Revenue

For the year ended	December 31 2003

	2003	2002
Membership:		
Faculty	73,291	55,799
Affiliate	18,000	19,000
Associate	525	450
Other income - annual conference	968	4,165
Other income - interest income	3,672	2,667
Other income - Rx & D grant	*	4,000
Awards income - Apotex	40,000	40,000
Awards income - AstraZeneca	3,000	3,000
Awards income - Bristol-Myers Squibb	944	1,476
Awards income - C.F.P. student travel	10,000	10,000
Awards income - C.F.P. best poster	1,000	1,000
Awards income - Janssen-Ortho	1,304	2,076
Miscellaneous income	17,156	8,950
Awards income - GlaxoSmithKline	2,500	2,500
Other income - gain on sale of computer	1,500	-
Other income - history book sales	35	1,510
Other income - MerckCompendium	-	22,000
	173,895	178,593



# Association of Faculties of Pharmacy of Canada Schedule of Expenditures For the year ended December 31, 2003

	2003	200
	THE COURT OF THE C	
Meeting expenses - AGM council	23,591	15,348
Meeting expenses - MID-YEAR council	13,089	11,160
Meeting expenses - AACP AGM	1,593	1,630
Meeting expenses - CCCEP	1,201	1,000
Meeting expenses - ADPC & Rx & D	1,442	764
Meeting expenses - CPhA	- <del>-</del>	500
Operating expenses - audit services	1,495	1,091
Operating expenses - bank charges	329	65
Operating expenses - computer expenses	392	
Operating expenses - executive director honorarium	40,833	29,583
Operating expenses - executive director travel grant	2,142	3,000
Operating expenses - office supplies	541	405
Operating expenses - photocopies	42	134
Operating expenses - printing	429	2,203
Operating expenses - postage	284	395
Operating expenses - courier	39	154
Operating expenses - telephone/fax	2,078	2,246
Operating expenses - web site maintenance	5,069	8,624
Operating expenses - Canada Revenue Agency	30	30
Operating expenses - miscellaneous expense	2 <b>■</b> ))	990
Other expenses - CCAPP expense	6,420	6,420
Other expenses - Rx & D grant expense		4,000
Other expenses - CPhA forum expense	1=1	539
Other expenses - history book expense		1,570
Awards expense - Apotex scholarships	35,000	40,000
Awards expense - AstraZeneca	1,725	2,403
Awards expense - Bristol-Myers Squibb	1,890	1,476
Awards expense - CFP travel grants	9,960	9,750
Awards expense - CFP poster awards	1,000	1,000
Awards expense - Janssen-Ortho	2,087	2,076
Awards expense - Grad student	900	1,734
Other expenses - human resources project	1,011	3,711
Other expenses - task force SPEP	-	7,531
Other expenses - comp. project	10,000	4,000
Other expenses - office move	1,195	-1,000
Operating expenses - E.D. advertisements	1,173	3,853
Meeting expense - advances	Ξ	8,812
Meeting expense - Trans. Novartis	-	1,000
Meeting expense - Trans. Novartis  Meeting expense - Cert. comm	. <del>-</del> :	1,131
Meeting expense - Cert. comm		1,131
	165,807	180,328



# AFPC STATEMENT OF INCOME AND EXPENSES 2003

**AND** 

BUDGET 2004

# AFPC FINANCIAL STATEMENT 2003 WITH 2004 BUDGET

INCOME		2003 BUDGET	2003 ACTUAL	2004 BUDGET
Memberships				
Memberships	FACULTY	\$ 74,657.00	\$ 73,291.00	\$ 75,025.00
	AFFILIATE	\$ 20,000.00	\$ 18,000.00	\$18,000.00
	ASSOCIATE	\$ 1,000.00	\$ 525.00	\$600.00
	TOTAL	\$ 95,657.00	\$ 91,816.00	\$93,625
OTHER INCOM	E			
	Special Levy for 2004 midyear m	tg		\$13,500.00
	ANNUAL CONF	\$ 12,000.00	\$ 968.14	\$12,000.00
	Hist. Book Sales		\$ 35.40	
	INTEREST	\$ 3,000.00	\$ 3,650.26	\$ 3,500.00
	Rx & D GRANT	\$ 4,000.00		\$ 4,000.00
	MerckCompendium			
	Computer Sale		\$ 1,500.00	
Awards		\$ 19,000.00	\$ 6,153.80	\$ 33,000.00
Awarus	Apotex	\$ 45,000.00	\$ 40,000.00	\$ 40,000.00
	AstraZeneca	\$ 3,000.00	\$ 40,000.00	\$ 3,000.00
	Bristol-Myers Sq.	\$ 1,200.00	\$ 944.33	\$ 1,000.00
	CFP Student travel	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00
	CFP Best Poster	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00
	GlaxoSmithKline	\$ 2,500.00	\$ 1,000.00	\$ 2,500.00
	Janssen-Ortho	\$ 1,500.00	\$ 2,300.00 \$ 1,304.21	\$ 1,500.00
	Janssen-Ortho	\$ <b>64,200.00</b>	\$ 58,748.54	\$ 59,000.00
Miscellaneous				
moodianoodo	Task Force SPEP	\$ 26,305.60	\$ 15,000.00	\$ 18,000.00
	Hotel-conference reimbursement		\$ 5,000.00	\$ 5,000.00
	CCCP-conference reconciliation		\$ 2,155.94	Ψ 0,000.00
	Unspent 2003 Apotex Award bro	ught forward	Ψ 2,100.01	\$ 5,000.00
	The point 2000 / potex / that a sie	\$ 26,305.60	\$ 22,155.94	\$ 28,000.00
TOTAL INCOME	<u> </u>	\$205,162.60	\$178,874.28	\$213,625.00
		<b>4</b> -00,10-100	¥	<b>4</b> _10,0_0100
EVENOE		2000		2024
EXPENSES		2003	2003	2004
Meeting Expens	205	BUDGET	ACTUAL	BUDGET
weening Expens	AGM Council	\$ 20,000.00	\$ 23,590.95	\$ 24,000.00
	Mid-year Coun.	\$ 9,000.00	\$ 13,089.00	\$ 13,500.00
	AACP AGM	\$ 2,000.00	\$ 1,592.71	\$ 1,700.00
	AACP mid-year	Ψ 2,000.00	Ψ 1,002.71	ψ 1,700.00
	CCCEP	\$ 1,200.00	\$ 1,201.25	\$ 1,200.00
	ADPC Travel Ex Dir	\$ 1,000.00	\$ 1,201.25 \$ 1,441.79	\$ 3,000.00
	CPhA	\$ 1,000.00	Ψ 1,++1.13	ψ 5,000.00
	Total	\$ 34,200.00	\$ 40,915.70	\$ 43,400.00

Operating Expe	enses						
	Audit services	\$	1,200.00	\$	1,495.31	\$	1,500.00
	Bank charges	\$	150.00	\$	328.83	\$	300.00
	Computer expenses	\$	1,000.00	\$	391.78	\$	500.00
	Exec. Dir. Honor.	\$	36,500.00	\$	40,833.35	\$	40,000.00
	E.D. travel grant	\$	3,000.00	\$	2,142.32	\$	3,000.00
	E.D. Advertisements	\$	500.00				
	Office Supplies	\$	500.00	\$	541.36	\$	600.00
	Photocopies	\$	250.00	\$	41.50	\$	50.00
	Printing	\$	1,500.00	\$	428.54	\$	500.00
	Postage	\$	400.00	\$	284.30	\$	300.00
	Courier	\$	150.00	\$	38.98	\$	100.00
	Telephone/fax	\$	2,500.00	\$	2,078.46	\$	2,500.00
	Internet Services			\$	632.53	\$	1,200.00
	Web site maint.	\$	6,000.00	\$	4,436.71	\$	5,000.00
	Revenue Canada	\$	30.00	\$	30.00	\$	30.00
	Miscellaneous	\$	1,500.00				
	Total - operating	\$	55,180.00	\$	53,703.97	\$	55,580.00
Other Expense	<b>s</b> CCAPP	<b>ተ</b>	C 400 00	¢	C 420 00	Φ	C 055 00
		\$ \$		\$	6,420.00	\$ \$	6,955.00
	Rx&D grant	Ф	4,000.00	\$	-	э \$	4,000.00
	CPhA forum					Ф	500.00
	Hist. Book	φ	F 000 00	•	4 040 00	ф	F 000 00
	Human Res. Proj.	\$	,	\$	1,010.69	\$	5,000.00
	Task Force SPEP	\$	,	\$	-	\$	25,000.00
	Comp. Project	\$	10,000.00	\$	10,000.00		
Aurordo	Office Move			\$	1,194.76		
Awards	Anotov	φ	4E 000 00	¢	35,000.00	φ	4E 000 00
	Apotex AstraZeneca	\$	,	\$	•	\$	•
		\$	,	\$	1,725.30	\$	3,000.00
	Bristol-Myers Sq.	\$	,	\$	1,889.86	\$	1,800.00
	CFP travel grants	\$	10,000.00	\$	9,960.00	\$	10,000.00
	CFP best poster	\$		\$	1,000.00	\$	1,000.00
	Janssen-Ortho	\$	·	\$	2,087.32	\$	2,000.00
	GSK grad student	\$	2,000.00	\$	900.00	\$	2,500.00
	Unused Apotex Award to be						
	brought forward to 2004			\$	5,000.00		
	Conference Hotel Deposit			Ψ	0,000.00	\$	5,000.00
	Tot. other expen.	\$	115,425.60	\$	76,187.93	-	111,755.00
	<b>-</b>	•	-,	•	-,	*	, 2222
				-			
TOTAL EXPEN	SES	\$	204,805.60	\$	170,807.60	\$2	210,735.00
Surplus/Deficit		\$	357.00		8,066.68	\$	2,890.00

Notes: \*\* Total commitment to HRDC is \$15,000 (2003-2005)