## **PROCEEDINGS**

### **OF THE**

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

# DURING 2011 INCLUDING THE

SIXTY- EIGHTH ANNUAL MEETING

**JUNE 5 - 8, 2011** 

WINNIPEG, MANITOBA

## TABLE OF CONTENTS

	Page
AFPC Mission Statement	4
AFPC Constituent Faculties 2010-2011	5
AFPC Officers 2010-2011	5
AFPC Representatives to Affiliate Organizations	6
AFPC Committee Chairs and Other Positions	6
Recipients of Major AFPC Awards	7
AFPC Honored Life Members	14
AFPC Annual Meetings and Officers	16
PART 1.0 AFPC Annual Conference 2011	
Conference Title Page	21
Welcome from Conference Chair	
Welcome from AFPC President	25
Welcome from Acting Dean Lavern Vercaigne	26
AFPC - CPERC 2011 Conference Planning Committee	
Looking Ahead to CPERC 2012 in Quebec City	
AFPC Executive and Council	
AFPC - CPERC 2011 Conference Program	32
AFPC Conference Sessions	
Satellite Evening Session	41
AFPC 2011 Award Winners	
2011 Poster Listings	54
2011 Poster Abstracts	
AFPC - CPERC Sponsors	76
Conference Exhibitors	
PART 2.0 Minutes of AFPC Meetings 2010 - 2011	
Minutes, Mid Year Council Meeting, February 4-5, 2011	79
Minutes, AFPC Annual Council Meeting, June 5, 2011	
Minutes, Annual General Meeting, June 6, 2011	
List of AGM Attendees 2011	
Minutes, AFPC New Council Meeting, June 8, 2011	
, , , , , , , , , , , , , , , , , , ,	
PART 3.0 Reports of AFPC Standing Committees, Representatives & Delegate	es
President's Report	
ADPC Liaison's Report	
AFPC Awards Committee Report	
AFPC Bylaws Committee Report	
3 <sup>rd</sup> CPERC (2012) Report	114
AFPC Communications Committee Report	115
AFPC Education Committee Report	
Levels of Performance Expected of Students Graduating from First	
Professional Degree Programs in Pharmacy in Canada	119

AFPC Nomination Committee Report	138
PEBC Liaisons Report	139
PEBC Update – 2011 Annual Board Meeting Summary	
PEP Canada Report to AFPC	
Planning & Finance Committee Report	
Auditor's Report	
2010 AFPC Financial Statement with 2009 & 2010 Actual	
2011 AFPC Operating Budget Forecast	157
AFPC Research Committee Report	
Blueprint for Pharmacy Report	
CCAPP Report	
Executive Director's Report	
AFPC Proposed New Governance Model	

## ASSOCIATION OF FACULTIES OF PHARMACY OF CANADA MISSION STATEMENT

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

#### Goals and Objectives:

- (a) Foster advancement of academic pharmacy in Canada
- To promote excellence in pharmacy education, research and scholarly activity.
- To support members, Deans and Faculties in advancing knowledge, skills and expertise critical to pharmacy education, research and scholarly activity.
- To encourage high standards by assuming an advisory role for the development of policies, guidelines and standards used for the accreditation of pharmaceutical education programs.
  - (b) Stimulate and provide opportunity for the development and exchange of ideas among pharmacy educators with a view to improving curricula, teaching and learning.
    - To showcase and promote innovations in pharmacy teaching and research.
    - To provide members and external organizations with the ability to easily identify and access AFPC members with expertise and skills in teaching and research.
  - (c) Establish and maintain liaison with pharmacy and relevant educational associations, other health professions, governmental agencies, and members of the pharmaceutical industry to further the development, support, and improvement of pharmacy education, practice, and research.
- To be recognized by external organizations as the leading representative on academic pharmacy affairs in Canada.
- To be seen as "the voice" of academic pharmacy in Canada.
  - (d) Support and advance the interests of AFPC members.
- To secure independence through consistent, long term funding for the ongoing operations of AFPC and for special projects.
- To be valued by faculty members so as to increase their involvement in AFPC.
- To be valued by the Deans so that they look to AFPC for assistance on relevant projects and support faculty member involvement in AFPC.

#### 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 2010 - 2011**

Memorial University of Newfoundland, School of Pharmacy, St. John's NF

Linda Hensman, Director (709) 777-6571

Dalhousie University, College of Pharmacy, Halifax, NS

Rita Caldwell, Director (902) 494-2457

Université Laval, Faculté de Pharmacie, Québec, QC

Jean-Pierre Gregoire, Doyen (418) 656-2131

Université de Montréal, Faculté de Pharmacie, Montréal, QC

Pierre Moreau, Doyen (514) 343-6440

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

Henry Mann, Dean (416) 978-2880

University of Waterloo, School of Pharmacy, Waterloo, ON

Nancy Waite, Interim Dean (519)-888-4408

University of Manitoba, Faculty of Pharmacy, Winnipeg, MB

Lavern Vercaigne, Acting Dean (204) 474-8794

University of Saskatchewan, College of Pharmacy & Nutrition, Saskatoon, SK

David Hill, Dean (306) 966-6328

University of Alberta, Faculty of Pharmacy & Pharmaceutical Sciences, Edmonton, AB

James Kehrer, Dean (780) 492-0204

University of British Columbia, Faculty of Pharmaceutical Sciences, Vancouver, BC

Robert Sindelar, Dean (604) 822-0360

## **AFPC OFFICERS 2010 - 2011**

#### **Executive**

President Lalitha Raman-Wilms (Toronto)
President Elect Ingrid Price (British Columbia)
Past President Mike Namaka (Manitoba)
ADPC Representative Lavern Vercaigne (Manitoba)

Executive Director Harold Lopatka

#### Council

Tessa Nicholl (British Columbia)

Nése Yuksel (Alberta)

Bev Allen (Saskatchewan)

Silvia Alessi-Severini (Manitoba)

Nancy Waite & Anson Tang (Waterloo)

Andrea Cameron (Toronto)

Dan Thirion (Montréal)

Frédéric Calon (Laval)

Mary MacCara (Dalhousie)

John Hawboldt (Memorial)

# AFPC REPRESENTATIVES TO AFFILIATE ORGANIZATIONS

Association of Deans of Pharmacy of Canada – Lavern Vercaigne (Manitoba) Academic Board Member, Canadian Pharmacists Assoc. – Rita Caldwell (Dalhousie) Canadian Council for the Accreditation of Pharmacy Programs

- Susan Mansour (Dalhousie) & Carmen Vézina (Laval)

Canadian Council for Continuing Education in Pharmacy – Maria Bystrin (Saskatchewan)

Canadian Patient Safety Institute – Andrea Cameron (Toronto)Pharmacy Examining Board of Canada – Anne Marie Whelan (Dalhousie) & Lavern Vercaigne (Manitoba) Representative to the Blueprint Steering Committee – Zubin Austin and Lalitha Raman-Wilms (Toronto)

Representative to Canadian Pharmacy Practice Research Group – vacant Representative to United States Pharmacopeia Convention – Raimar Löbenberg (Alberta)

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

Awards Committee – Andrea Cameron (Toronto)

Bylaws Committee – Mike Namaka (Manitoba)

Communications Committee – Daniel Thirion (Montreal)

Conference Planning Committee – Silvia Alessi-Severini (Manitoba)

Editor, AFPC Communications – Rebecca Law (Memorial)

Education Committee – Nese Yuksel (Alberta)

Executive Committee – Lalitha Raman-Wilms (Toronto)

Finances – Bev Allen (Saskatchewan)

Nominations Committee – Mike Namaka (Manitoba)

Pharmacy Experiential Programs Canada (PEPC) – Representative: Bev Allen

(Saskatchewan) and/or Andrea Cameron (Toronto), Nancy Waite (Waterloo),

Program Evaluation Task Force – Ingrid Price (British Columbia)

Research Committee – John Hawboldt (Memorial) and Frederic Calon (Laval)

Strategic Planning – Roy Dobson (Saskatchewan)

## 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
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#### JANSSEN-ORTHO AWARD

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

## PFIZER RESEARCH CAREER AWARD

2005	Raymond Reilly, University of Toronto
2006	Helen Burt, University of British Columbia
2007	Thomas Einarson, University of Toronto
2008	Kishor Wasan, University of British Columbia
2009	Murray Krahn, University of Toronto
2010	Ingrid Sketris, Dalhousie University
2011	Peter Wells, University of Toronto

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

1995	Cheryl Cox, University of Alberta
1996	David Fielding, University of British Columbia
1997	Kristin Janke, Dalhousie University
1998	not awarded
1999	not awarded
2000	Pat Farmer, Susan Mansour, Anne Marie Whelan, Dalhousie
2001	Zubin Austin, University of Toronto
2002	Claude Mailhot, Université de Montréal
2003	Simon Albon, University of British Columbia
2004	Jean-Louis Brazier, Université de Montréal
2005	Andrea Cameron and Lesley Lavack, University of Toronto
2006	Steve McQuarrie and John Mercer, University of Alberta
2007	Louise Mallet, Université de Montréal
2008	Not Awarded
2009	David Gardner, Dalhousie University
2010	Marie-Claude Vanier, Université de Montréal
2011	Nancy Waite, University of Waterloo

## RECIPIENTS OF THE AFPC NEW INVESTIGATOR AWARD

## **UPJOHN-AFPC** New Investigator Award

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

## **ASTRA PHARMA - AFPC New Investigator Award**

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

## **ASTRAZENECA – AFPC New Investigator Award**

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

2007	Zubin Austin, University of Toronto
2008	Frédéric Calon, Université Laval

## **SANOFI-AVENTIS – AFPC New Investigator Award**

2009	Afsaneh Lavasanifar, University of Alberta
2010	Olivier Barbier, Université Laval
2011	Benoît Drolet, Université Laval

#### ROCHE GRADUATE STUDENT RESEARCH AWARD

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

### GLAXOSMITHKLINE GRADUATE STUDENT RESEARCH AWARD

2002	Erica Rosemond, University of Toronto
2003	Huy H. Dao, Université de Montréal
2004	Thomas Chacko Pulinilkunnil, University of British Columbia
2005	Shirley Teng, University of Toronto
2006	Lichuan Liu, University of Toronto
2007	Patrick Ronaldson, University of Toronto
2008	Marie Lordkipanidzé, Université de Montréal
2009	Carl Julien, Université Laval
2010	Melissa Cheung, University of Toronto
2011	Niladri Chattopadhyay, University of Toronto

## CANADIAN FOUNDATION FOR PHARMACY GRADUATE STUDENT AWARD FOR PHARMACY PRACTICE RESEARCH

2009	Marie Lordkipanidzé, Université de Montréal
2010	Ani Byrne, University of Toronto
2011	Not Awarded

## WAL MART CANADA FUTURE ACADEMIC LEADER AWARDS

- Jennifer Beales (Toronto), Kelly Anne Grindrod (British Columbia), Stephanie Lucas (Dalhousie), Cynthia Lui (Manitoba), Véronique Michaud (Montréal)
- 2009 Nina Boucher (Laval), Judith Fisher (Toronto), Diala Harb (Montréal), Jason Kielly (Memorial), Marie Lordkipanidzé (Montréal), Shanna Trenaman (Dalhousie)

## AFPC NATIONAL PHARMACY STUDENT RESEARCH POSTER AWARDS

- 2008 Mélanie Bousquet (Laval), Danny Costantini (Toronto), JR Colin Enman (Dalhousie), Daryl Fediuk (Manitoba), Sherif Hanafy Mahmoud (Alberta), Vincent Nichols (Montréal), Manhar Powar (British Columbia), Mohamed A. Shaker (Memorial), Tara Smith (Saskatchewan)
- Abeer Ahmed (Memorial), Aws Alshamsan (Alberta), Charles Au (British Columbia), Étienne Audet-Walsh (Laval), Graham Brown (Saskatchewan), Mark Chambers (Dalhousie), Kelvin KW Hui (Toronto), Maud Pinier (Montréal), Ousama M Rachid (Manitoba)
- Ahmed S. Abdelmoneim (Manitoba), Marie-Ève Bédard-Dufresne (Montréal), Niladri Chattopadhyay (Toronto), Dalia Amr Hamdy El Sayed (Alberta), Melissa Hawkins (Dalhousie), Sandy YH Lu (British Columbia), Nicolas Morin (Laval), Nafiseh Nafissi (Waterloo), Ravi Shankar Prasad Singh (Saskatchewan), Meghan Wall (Memorial)

## AFPC Rx and D PHARMACY STUDENT RESEARCH POSTER AWARDS

2011 Arash Falamarzian (Alberta), Ian Wong (British Columbia), Jovana Tomic (Saskatchewan), Lacey Corbett (Memorial), Mélanie Rouleau (Laval), Melanie Trinacty (Dalhousie), Payam Zahedi (Toronto), Tarek Mohamed (Waterloo), Valery Aoun (Montréal), Yining Li (Manitoba

# MERCK FROSST CANADA LTD POSTGRADUATE PHARMACY FELLOWSHIP AWARD

2008	Antonia Tsallas (British Columbia)
2009	Antonia Tsallas (British Columbia)
2010	Erin Yakiwchuk, University of Saskatchewan
2011	Alexandre Melkoumov, Université de Montréal

# JANSSEN INNOVATION IN EDUCATION AWARD

2011 Roderick Slavcev, University of Waterloo

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

1991	Fares Attalla
1992	Canadian Foundation for Pharmacy
1993	Jean-Guy Cyr
1994	Carl Trinca
1995	Yves Chicoine
1996	Pierre Bois
1997	Jeff Poston
1998	Gerald Duncan
1999	not awarded
2000	Ginette Bernier
2001	Richard Penna
2002	not awarded
2003	not awarded
2004	not awarded
2005	Walter Masanic
2006	Not awarded
2007	Not awarded
2008	Not awarded
2009	Not awarded
2010	Not awarded
2011	Not awarded

### RECIPIENTS OF THE AFPC SPECIAL SERVICE AWARD

1992	Keith McErlane
1993	Helen Burt
1994	UBC Host Committee, 1993 AFPC Biotechnology Conference
1995	Ernst Stieb
1996	Pauline Beaulac
1997	not awarded
1998	not awarded
1999	not awarded
2000	not awarded
2001	Bernard Riedel, Ernst Stieb
2002	Wayne Hindmarsh, Jim Blackburn
2003	David Hill
2004	not awarded
2005	not awarded
2006	not awarded
2007	not awarded
2008	not awarded
2009	not awarded
2010	Simon Albon, Susan Mansour, Sylvie Marleau

# RECIPIENTS OF THE AFPC WOODS-HUGHES SPECIAL SERVICE AWARD

2011 Lavern Vercaigne, Anne Marie Whelan

## **AFPC HONOURED LIFE MEMBERS**

	nto, Ont., 1946-52, 1967	* G. Myers	Edmonton, AB 1989
*G.T. Cunningham	Vancouver, B.C. 1947	*J. Ryan	Halifax, NS 1989
J.G. Richard	Montréal, Quebec 1957	*F. Teare	Toronto, Ontario 1990
*J.R. Kennedy	Toronto, Ontario 1959	K. James	Halifax, NS 1990
*A.F. Larose	Montréal, Quebec 1960	G. Duff	Halifax, NS 1991
*J.I. MacKnight	Halifax, NS 1964	*A. Noujaim	Edmonton, AB 1993
*J.E. Cooke	Halifax, NS 1965	*M. Mezei	Halifax, NS 1994
*R. Larose	Montréal, Quebec 1965	B. Schnell	Saskatoon, Sask. 1995
*R.C. Cary	Toronto, Ontario 1966	G. Nairn	Toronto, Ontario 1995
*G.L. Webster	Chicago, Illinois 1969	E. Stieb	Toronto, Ontario 1995
*J. Antonin Marquis	Quebec, Quebec 1969	R. Coutts	Edmonton, AB 1996
*F.N. Hughes	Toronto, Ontario 1973	A. Shysh	Edmonton, AB 1996
*Mrs. I. Stauffer	Toronto, Ontario 1974	J. Steele	Winnipeg. MB 1996
*H.J. Fuller	Toronto, Ontario 1974	I. Abraham	Halifax, NS 1998
*L.G. Elliott	Montréal, Quebec 1974	P. Beaulac	Montréal, Quebec 1998
A. Archambault	Montréal, Quebec 1975	F. Chandler	Halifax, NS 1998
*J.E. Halliday	Vancouver, B.C. 1978	P. Farmer	Halifax, NS 1998
*G.C. Walker	Toronto, Ontario 1979	R. Tawashi	Montréal, Quebec 1998
*M.J. Huston	Edmonton, AB 1979	Gilles Barbeau	Québec City, QC, 2000
*A.J .Anderson	Edmonton, AB 1980	Robert Goyer	Montréal, QC, 2000
*G.R. Paterson	Toronto, Ontario 1980	Ted Hawes	Saskatoon, SK, 2000
*J .R. Murray	Winnipeg, MB 1981	Gaston Labrecque	Québec City, QC, 2000
*J.J. O'Mara	St. John's, NF 1981	Pierre-Paul LeBlanc	Québec City, QC, 2000
J.A. Wood	Saskatoon, SK 1982	Dick Moskalyk	Edmonton, AB, 2000
L.G. Chatten	Edmonton, AB 1983	James Orr	Vancouver, BC, 2000
F. Morrison	Vancouver, B.C. 1983	Jacques Dumas	Québec QC 2001
*S.K. Sim	Toronto, Ontario 1984	John Bachynsky,	Edmonton, AB, 2002
*J.G. Jeffrey	Saskatoon, SK 1984	Don Lyster,	Vancouver, BC 2002
*D.J. Stewart	Toronto, Ontario 1984	John Sinclair,	Vancouver, BC 2002
*R.M. Baxter	Toronto, Ontario 1985	John Templeton,	Winnipeg MB 2002
*B.E. Riedel	Vancouver, B.C. 1985	Frank Abbott,	Vancouver, BC 2003
P. Claveau Laval,	Quebec, QC 1986	Jacques Gagne	Montréal, QC 2004
*D. Zuck	Saskatoon, SK 1986	John McNeill	Vancouver, BC 2004
*G.E. Hartnett	Saskatoon, SK 1986	Gail Bellward	Vancouver, BC 2004
*J .L. Summers	Saskatoon, SK 1986	Peter O'Brien	Toronto, ON 2004
R. Bilous	Winnipeg, MB 1987	Leonard Wiebe	Edmonton, AB 2005
L. Stephens-Newsham	Edmonton, AB 1987	Colin Briggs	Winnipeg, MB 2005
T.H. Brown	Vancouver, B.C. 1987	Joan Marshman	Toronto, ON 2005
*A.M. Goodeve	Vancouver, B.C. 1987	Jim Blackburn	Saskatoon, SK 2006
*J.O. Runikis	Vancouver, B.C. 1987	Keith McErlane	Vancouver, BC 2006
R. Plourde	Montréal, Quebec 1987	Ed Knaus	Edmonton, AB 2008
*J.G. Moir	Vancouver, B.C. 1988	Thomas Einarson	Toronto, ON 2008

## **AFPC HONOURED LIFE MEMBERS - continued**

Pierre Belanger	Quebec, QC, 2009	
Marguerite Yee	Vancouver, BC, 2010	

<sup>\*</sup> Deceased

### ANNUAL MEETINGS AND OFFICERS

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

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

YEAR	PLACE	PAST CHAIRMAN	CHAIRMAN	VICE CHAIRMAN	SEC/TRES*	RECORDING SEC.
1974(31)	Ottawa	A.M. Goodeve	E.W. Stieb	G.E. Hartnett	R.F. Chandler	H.J. Segal/IL.I. Wiebe
1975(32)	Montréal	E.W. Stieb	G.E. Hartnett	J.W. Steele	K.W. Hindmarsh	R.M. Gentles/L. Goodeve
1976(33)	Saskatoon	G.E. Hartnett PAST PRESIDENT	J.W. Steele PRESIDENT	W.E. Alexander <b>PRESIDENT ELECT</b>	K.W. Hindmarsh	C.J.Briggs
1977(34)	Charlottetown	J.W. Steele	W.F. Alexander	K.W. Hindmarsh	F.W. Teare	C.J.Briggs
1978(35)	Victoria	W.E. Alexander	K.W. Hindmarsh	F.W. Teare	W.A. Parker	C.J.Briggs
				EXE	CUTIVE DIRECTOR	<b>L</b>
1979(36)	Sarnia	K.W. Hindmarsh	F.W. Teare	R.E. Moskalyk	J.A. Wood****	E.M. Hawes
1980(37)	Calgary	F.W. Teare	R.E. Moskalyk	C.J.Briggs	J.A. Wood	E.M. Hawes
1981(38)	Winnipeg	R.E. Moskalyk	C.J.Briggs	M. Mezei	J.A. Wood	E.M. Hawes
1982(39)	Ottawa	C.J. Briggs	M. Mezei	J.L. Summers	J.A. Wood	K.M. McErlane
1983(40)	Montréal	M. Mezei	J.L. Summers	R. Tawashi	A.M. Goodeve	K.M. McErlane
1984(41)	Vancouver	J.L. Summers	R. Tawashi	J. Gagné	A.M. Goodeve	K.M. McErlane
1985(42)	Halifax	R. Tawashi	J. Gagné	J.Bachynsky	A.M. Goodeve	K.M. McErlane
1986(43)	Québec	J. Gagné	J.Bachynsky	K. Simons	K.M. McErlane	H.M.Burt
1987(44)	Jasper	J.Bachynsky	K. Simons	F. Chandler	K.M. McErlane	H.M.Burt
1988(45)	Saint John	K. Simons	F. Chandler	S.M. Wallace	K.M. McErlane	H.M.Burt
1989(46)	Portland	F. Chandler	S.M. Wallace	P.Beaulac	K.M. McErlane	H.M.Burt
1990(47)	Regina	S.M. Wallace	P.Beaulac	H.M.Burt	K.M. McErlane	M. Greer
1991(48)	St. John's	P.Beaulac	H.M.Burt	M. Spino	K.M. McErlane	M. Greer
1992(49)	Winnipeg	P. Beaulac	H.M. Burt	M. Greer	K. Moody	J. Louvelle
1993(50)	Vancouver	H.M. Burt	M. Greer	R. Coutts	K. Moody	J. Louvelle
1994(51)	Charlottetown	H.M. Burt	M. Greer	R. Coutts	K. Moody	J.L. Glennie
1995(52)	Montréal	M. Greer	R. Coutts	J.L Blackburn	K. Moody	J.L. Glennie
1996(53)	Calgary	M. Greer	R. Coutts	J.L Blackburn	K.A. Ready	C.J. Turner
1997(54)	Vancouver	R. Coutts	J.L Blackburn	D. Perrier	K.A. Ready	C.J. Turner/K.A. Ready
1998(55)	St. John's	J. L. Blackburn	D. Perrier	C.J. Turner/1. Sketris	K.A. Ready	K.A. Ready
1999 (56)	Québec City	D. Perrier	I. Sketris	D. Hill	K. Ready/J. Blackburn	
2000 (57)	Saskatoon	I. Sketris	D. Hill	D. Fielding	J.L. Blackburn	
2001 (58)	Ottawa	D. Hill	D. Fielding	A.J. Rémillard	J.L. Blackburn	
2002 (59)	Winnipeg	D. Fielding	A.J. Rémillard	L. Vercaigne	J.L. Blackburn	
2003 (60)	Montréal	A. J. Rémillard	L. Vercaigne	S. Mansour	J.L. Blackburn	
2004 (61)	Vancouver	L. Vercaigne	S. Mansour	S. Marleau	F. Abbott	
2005 (62)	Saskatoon	S. Mansour	S. Marleau	Z. Austin	F. Abbott	
2006 (63)	Edmonton	S. Marleau	Z. Austin	A. M. Whelan	F. Abbott	
2007 (64)	Montreal	Z. Austin	A. M. Whelan	S. Albon	F. Abbott	
2008 (65)	Chicago	A. M. Whelan	S. Albon	R. Dobson	F. Abbott	
2009 (66)	Halifax	S. Albon	R. Dobson	M. Namaka	F. Abbott	
2010 (67)	Richmond	R. Dobson	M. Namaka	L. Raman-Wilms	F. Abbott	
2011 (68)	Winnipeg	M. Namaka	L. Raman-Wilms	I. Price	H. Lopatka	

<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, 2010 to June 30, 2011

## **PART 1.0**

## 68<sup>TH</sup> AFPC ANNUAL CONFERENCE

## **HELD**

WINNIPEG, MANITOBA

June 5 - 8, 2011

# 2<sup>nd</sup> Canadian Pharmacy Education & Research Conference (CPERC)

# 2ème Congrès sur l'enseignement et la recherche en pharmacie au Canada (CERPC)



# Association of Faculties of Pharmacy of Canada (AFPC) 68<sup>th</sup> Annual General Meeting



Ron Garnet and Airscapes

# Pharmacy at the Forks: Education & Research Coming Together

June 5 – 8, 2011 The Fort Garry Hotel Winnipeg, Manitoba



Grajewski Fotograph Inc.

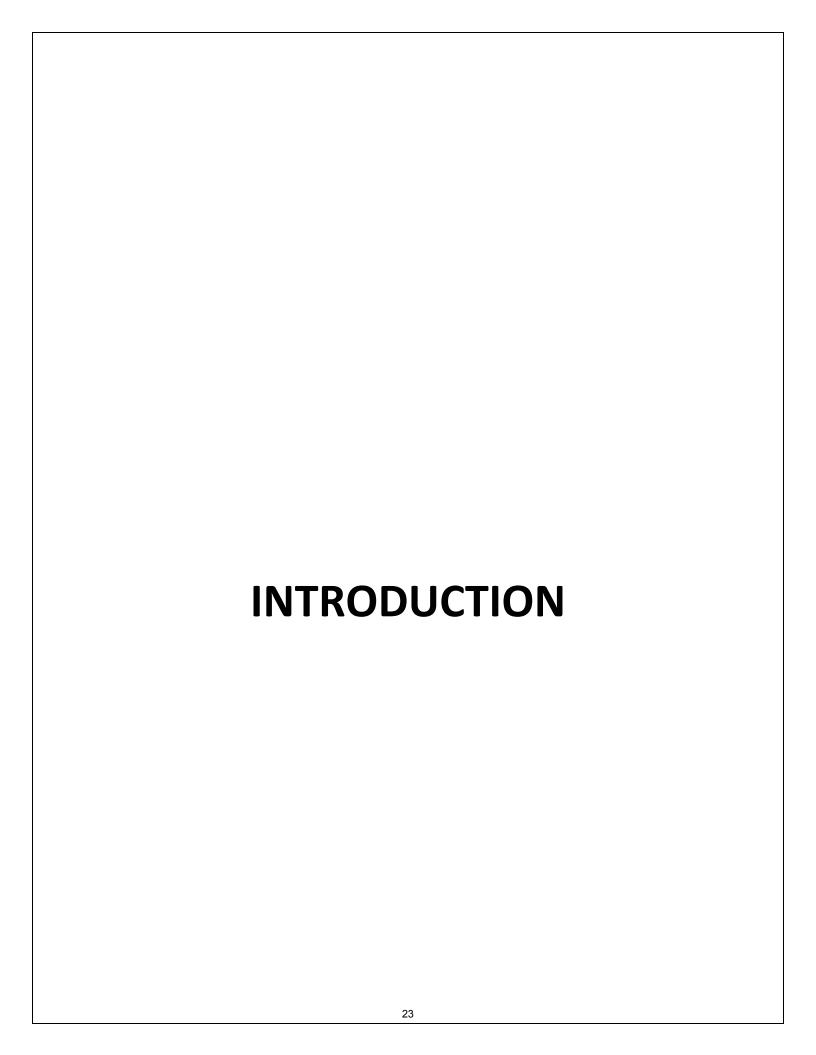
Linda Barringer

Anthony Fernando

## **Table of Contents**

#### **INTRODUCTION**

	Welcome from Silvia Alessi-Severini, Conference Chair	. 24
	Welcome from Lalitha Raman-Wilms, AFPC President	. 25
	Welcome from Lavern Vercaigne, Acting Dean, Faculty of Pharmacy	26
	AFPC Conference Planning Committee	27
	Looking Ahead to the 2012 CPERC in Quebec City	28
	AFPC Executive and Council	29
PROG	RAM	
	Conference Program	32
	Conference Sessions	35
	Satellite Evening Session at the Faculty of Pharmacy (Monday, June 6 <sup>th</sup> )	41
	Award Winners	46
POSTE	ERS	
	Poster Listing	54
	Poster Abstracts	57
Map o	f the Fort Garry Hotel	74
Sponso	ors	76
Confer	rence Exhibitors	77



#### Welcome from Silvia Alessi-Severini, Conference Chair, CPERC 2011 Planning Committee



Bienvenue à tous les participants au deuxième Congrès sur l'enseignement et la recherche en pharmacie au Canada!

It is with a great pleasure that I welcome colleagues and students from all the Faculties of Pharmacy across the country. A special welcome to our guest participants!

It is a very exciting time for Pharmacy education as new opportunities and responsibilities are being presented to our graduates. As the medication experts among health professionals, pharmacists are being called to contribute at an increasingly deeper level to the improvement of health outcomes for all Canadians.

A strong foundation in research is essential to the growth of a successful academic program, and the achievements of our award winners demonstrate the commitment of our Faculties to excellence in research and teaching. Education and research truly come together in providing our students with continuously renewed knowledge and skills.

We are pleased to offer a conference that showcases the new initiatives in interprofessional education, curricular offerings, educational outcomes and program evaluation. Our schedule allows time for discussions and networking that are so important in the development of ideas and the strengthening of collaborations.

I would like to take the opportunity to thank all the members of the local organizing Committee and our AFPC Executive Director for their hard work, our speakers for their valued contributions, our AFPC President, Council and membership for their insightful input, and finally our Faculty and our sponsors for their support.

I hope that you find our conference program informative and stimulating and that you enjoy the famous Manitoba hospitality!

Encore une fois, bienvenue à Winnipeg! J'espère que vous apprécierez la conférence et l'hospitalité du Manitoba!

Mes meilleures salutations.

Silvia Alessi-Severini, B. Sc. (Pharm), Ph.D. Faculty of Pharmacy, University of Manitoba

I ha Hem Jueuin

2011 CPERC Chair

#### Welcome from Lalitha Raman-Wilms, AFPC President



Dear AFPC members, Conference Delegates and Visitors,

Welcome to Winnipeg for the AFPC Second Annual Canadian Pharmacy Education and Research Conference (CPERC). The theme for the 2011 conference, "Pharmacy at the Forks: Education and Research Coming Together", reflects AFPC's mission to support and promote innovation and excellence in both pharmacy education and research.

With the continuing expansion of the pharmacists' scope of practice, pharmacy education is at an important transition point in Canada. As educators, we have a key role in

preparing our graduates to meet the evolving medication-related needs of patients in order to ensure better health outcomes for Canadians. As pharmacy programs continue to enhance curricula, the new AFPC Educational Outcomes (released June 2010) and Program Evaluation tools are becoming important to Faculties. This educational conference includes several sessions which will provide a forum for discussion and sharing on the implementation of educational outcomes, strategies for curricular mapping, and how to effectively develop and implement an evaluation program.

As interprofessional care becomes more mainstream in Canada, pharmacy curricula continue to reflect the importance of interprofessional education (IPE) within our programs. CPERC 2011 will bring together faculty from across the nation to share their views and strategies on the implementation and evaluation of IPE.

In order to ensure that our graduates are competent and confident *Medication Therapy Experts (AFPC 2010 Educational Outcomes)*, more emphasis is being placed on clinical sciences within our programs. However, we need to continue to ensure that our students have a solid foundation in the basic sciences. A session on the integration of pharmaceutical sciences into the curriculum will provide us with the opportunity to reflect on our current programs, and consider strategies to enhance our students' education in this area.

This conference provides a forum for our members to share ideas and approaches in pharmacy education, as well as to recognize excellence in both research and teaching through the many faculty and student awards. Please take some time to hear our award presenters – it is a wonderful celebration of achievement and new ideas are often generated during such forums.

On behalf of all AFPC members, Council and Executive, I would like to thank Silvia Alessi-Severini and her team from the Faculty of Pharmacy at the University of Manitoba, for their hard work in organizing CPERC 2011 and making it both engaging and relevant for all participants. We are fortunate to have representatives from many external partners at this conference; please take some time to get to know them and share ideas.

This meeting also brings my term as President of your Association to a close. I have enjoyed working closely with my colleagues across the country on several key issues this year. These include working with the task force on the development of levels of performance, making AFPC's Program Evaluation Guide available to all Faculties, and, together with ADPC, starting discussions on a new governance model for our Association. I look forward to continuing to work with our Association and to provide support to our incoming President, Dr. Ingrid Price, as the work continues under her leadership. It has been a pleasure this year to work closely with our Executive Director, Dr. Harold Lopatka, whose leadership and hard work has greatly enabled us to increase our organization's visibility. Thank you for this wonderful opportunity.

Over the next couple of days, please take the time to enjoy the Forks, reconnect with colleagues and friends, and meet many of the new delegates and students!

Lalitha Raman-Wilms President, AFPC

#### Welcome from Dr. Lavern Vercaigne, Acting Dean of the Faculty of Pharmacy

Dear AFPC members and colleagues,

On behalf of the University of Manitoba, Faculty of Pharmacy, I would like to welcome you to the 68<sup>th</sup> Annual Meeting of the Association of Faculties of Pharmacy of Canada (AFPC). The conference is entitled "Pharmacy at the Forks, Education and Research Coming Together" and provides an excellent opportunity to network with colleagues, while debating and discussing important aspects of pharmacy education and research.

The conference organizers have put together a very strong program highlighting interprofessional education, educational outcomes, curriculum mapping, program evaluation, integrating basic sciences into new curricula and experiential education. There are also opportunities to interact with our local pharmacy colleagues during continuing education sessions, exploring aspects of expanding roles for pharmacists, learning together in professional development, and patient safety initiatives. The conference also provides a great opportunity to learn about exceptional research occurring across Canada and to recognize very deserving national award winners.

I hope you enjoy your stay in Winnipeg and have the chance to visit with friends and colleagues and take some time to rejuvenate a little. The planning committee has worked hard to organize enjoyable social events that I hope you will able to attend. Winnipeg is gorgeous in the summer, so I hope you have time to relax and enjoy the summer weather.

I also wish to extend my sincere thanks to the organizing committee and everyone involved in organizing the conference. It's a big undertaking on top of life's normal responsibilities, and we have had a talented and dedicated group of individuals to prepare to host you in Winnipeg.

Sincerely,

Lavern M. Vercaigne, Pharm.D. Professor and Acting Dean

## **CPERC 2011 Planning Committee**



Silvia Alessi-Severini

Hope Anderson

Kelly Brink

Shawn Bugden

**Ruby Grymonpre** 

Nancy Kleiman

Harold Lopatka

Alan McIntosh

Terri Martin

Mike Namaka

Lavern Vercaigne

Sheryl Zelenitsky

#### Looking Ahead to the 2012 CPERC in Quebec City



Jean-François Bergeron, Enviro Foto

"Next year the CPERC 2012 Meeting will be held in Quebec city. The Quebec Host Committee is already hard at work planning another exciting AFPC conference. The themes will be related to the challenges and successes in education and research in pharmacy. This conference will be a unique opportunity to present Laval university new PharmD program and the Ferdinand Vandry building, home of our Faculty of pharmacy, which has been completely renovated to include state-of-the-art laboratories for pharmacy practice.

Québec is one of the world's most beautiful cities, and the Old City is a UNESCO World Heritage Treasure and birthplace of the French-speaking culture in America. As the only city in North America still surrounded by ancient stone fortifications, Quebec guards access to the entire region from its perch on the Cape Diamond promontory, high above the mighty St. Lawrence River.

Visit the Québec City Tourism web site at <a href="www.quebecregion.com">www.quebecregion.com</a> to learn more about Québec City.

See you next year in Quebec!"

#### **AFPC Executive & Council**

#### **AFPC Executive**

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## 2<sup>nd</sup> Canadian Pharmacy Education and Research Conference (CPERC)

#### 2ème Congrès sur l'enseignement et la recherche en pharmacie au Canada (CERPC) and 68<sup>th</sup> Association of Faculties of Pharmacy of Canada (AFPC) Annual General Meeting

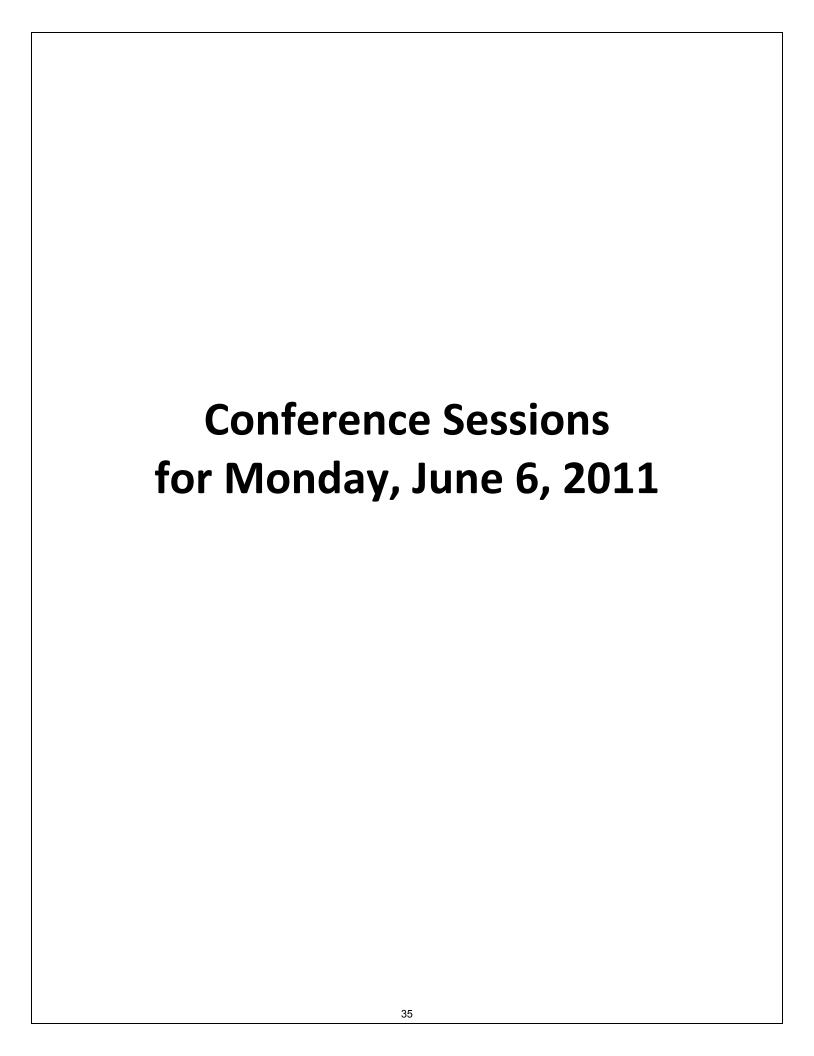
# Pharmacy at The Forks: Education and Research Coming Together June 5-8, 2011 The Fort Garry Hotel Winnipeg, MB

## **CPERC Program**

Sunday, June 5, 2011					
8:00 – 17:00	AFPC Council Meeting	Salon C			
15:00-19:00	Registration	Lobby			
18:30-19:30	Reception	Concert Hall			
	Greetings from Manitoba's Minister of Health,				
	Honourable Theresa Oswald				
19:30-21:30	Opening Dinner	Concert Hall			
	Monday, June 6, 2011				
7:00-17:00		Crystal Ballroom Atrium			
	Registration/Poster/Exhibit	Crystal Ballroom			
7:00-8:00	ADPC Breakfast Meeting	Salon C			
7:00-8:00	Breakfast	Crystal Ballroom			
8:00-9:30	Interprofessional Education	Crystal Ballroom			
	IPE/C – Two Wicked Questions in Search of Answers				
	John Gilbert, Canadian Interprofessional Health Collaborative				
9:30-10:00	Break	Crystal Ballroom Atrium			
10:00-12:00	IPE Panel Discussion	Crystal Ballroom			
	Ruby Grymonpre, University of Manitoba (Chair)				
	Kelly Brink, University of Manitoba				
	Andrea Cameron, University of Toronto				
	Harriet Davies, Dalhousie University				
	Lynda Eccott, University of British Columbia				
	Wayne Hindmarsh, CCAPP				
	Marie-Claude Vanier, Université de Montréal				
12:30-14:00	AFPC –AGM & Luncheon (Members Only)	Crystal Ballroom			
12:30-14:00	Box Lunch for Non-Members	Crystal Ballroom Atrium			
14:00-15:35	Educational Outcomes, Curriculum Mapping, & Program Evaluation	Crystal Ballroom			
	Coming Together				
	Sheryl Zelenitsky, University of Manitoba (Chair)				
	Educational Outcomes: What Are They and How Are They Used?				
	Terri Schindel, University of Alberta				
	Curriculum Mapping: from Theory to Application Sheryl Zelenitsky, University of Manitoba				
	Cheryl Kristjanson, Director UTS, University of Manitoba				
	Breakout: Small Group Discussions				
15:35-15:50	Break  Break	Crystal Ballroom Atrium			
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15:50-17:00	Program Evaluation: Ensuring Value & Sustainability Ingrid Price, University of British Columbia Breakout: Small Group Discussions	Crystal Ballroom
A	Monday, June 6, 2011 (Evening) Satellite Evening Session at the Faculty of Pharmacy potex Centre, 750 McDermot Ave, University of Manitoba, Bannat (Pre-Registration Required)	tyne Campus
18:00-18:15	Arrival at the Faculty of Pharmacy (Apotex Centre)	
18:15-19:00	Tour & Dinner Reception	Main Floor Atrium
19:00-21:00	CE Sessions: Exploring Professional Boundaries Shawn Bugden, University of Manitoba (Chair) Pharmacy Vaccine Administration Christine Hughes, Associate Professor, University of Alberta Jennifer Isenor, Assistant Professor, Dalhousie University PD Together Shawn Bugden, President, Manitoba Pharmaceutical Association Learn to be Safe: Simulations for Safety Laurie Thompson, Executive Director, Manitoba Institute for Patient Safety Susan Lessard-Friesen, Deputy Registrar, Manitoba Pharmaceutical Association Mentorship for Pharmacy Undergraduate Students	Alumni Theatre 071
	Harold Lopatka, Executive Director, Association of Faculties of Pharmacy of Canada  Tuesday, June 7, 2011	
7:00-12:00	Registration/Poster/Exhibit	Crystal Ballroom
7:30-8:30	Breakfast	Crystal Ballroom Atrium
8:30-10:00	Integrating Basic Sciences Into New Curricula Lavern Vercaigne, University of Manitoba (Chair) Integration of the Basic and Clinical Sciences Across the Curriculum: a U.S. Model Victor Yanchick, Virginia Commonwealth University Making Basic Sciences Relevant Through Context and Discipline Integration Pierre Moreau, Université de Montréal	Crystal Ballroom
10:00-10:15	Break	Crystal Ballroom Atrium
10:15-12:00	National Award Winners' Presentations  Mike Namaka, University of Manitoba & Andrea Cameron, University of Toronto (Chairs)  - Peter Wells, University of Toronto - Benoît Drolet, Université Laval - Roderick Slavcev, University of Waterloo - Nancy Waite, University of Waterloo - Nilandri Chattopadhyay, University of Toronto	Crystal Ballroom
12:00-14:00	Box Lunch  Poster Judging  Alan McIntosh, University of Manitoba & Frédéric Calon, Université Laval	Crystal Ballroom
14:00-15:30	Experiential Education Kelly Brink & Nancy Kleiman, University of Manitoba (Chairs) Interprofessional Education Within 4 <sup>th</sup> year Pharmacy Experiential Rotations: Spinning the Yarn at the University of Toronto Katrina Mulherin, PEP-Canada	Crystal Ballroom

	From concept to reality: Interprofessional education and collaborative practice works!  Cathy Rippin-Sisler and Susan Bowman, WRHA  Development and evaluation of a Preceptorship Experiential Rotation within the hospital pharmacy works  Donna Woloschuk, WRHA	
15:30-16:00	Break	Crystal Ballroom
16:00-17:00	Round Table Discussions	Crystal Ballroom
17:00-22:00	Closing Dinner (Ticket Required)	The Forks Market
Wednesday, June 8, 2011		
8:00-12:00	AFPC Council Meeting	Salon C



#### **Interprofessional Education**



John H.V.Gilbert, Ph.D., FCAHS

Dr. John Gilbert is founding Principal & Professor Emeritus, College of Health Disciplines, UBC where he was also founding Director of the School of Audiology and Speech Sciences, and Director of the School of Rehabilitation Sciences. It was his vision and leadership that led to the concept of interprofessional education being developed as a central tenet of team-based collaborative patient-centred practice and care. Many universities, colleges, and institutes across Canada are now developing these concepts as part of health sciences training.

Throughout his long career he has served on many national and international boards and committees.

#### His many honours include:

- a Fulbright Scholarship;
- a David Ross Research Fellowship;
- a Medical Research Council of Canada Post-Doctoral Scholarship;
- the Outstanding Alumnus Award of the School of Liberal Arts, Purdue University;
- a UBC Isaac Killam-Walton Outstanding Teaching Award;
- 50<sup>th</sup> Anniversary Medal for outstanding service to the UBC Faculty of Medicine; and
- The Distinguished Service Award of the British Columbia Institute of Technology.
- The National Health Sciences Student's Interprofessional Mentorship Award is named in honour of Dr. Gilbert.
- The Dr. John H.V. Gilbert Interprofessional Scholarship at UBC named in honour of Dr. Gilbert on his retirement from UBC.

John is a Fellow of the Canadian Academy of Health Sciences, immediate Past President, International Association for Interprofessional Education and Collaborative Practice. He was Co-Chair of the WHO Study Group on Interprofessional Education & Collaborative Practice, during the 2008-2009 academic years, he was Virtual Visiting Scholar, Humber College, Toronto, and recently retired from Health Canada's FTP Collaborating Committee on Entry to Practice Credentials.

#### At the present time:

John is Project Lead, the Canadian Interprofessional Health Collaborative, funded by Health Canada. He serves on Health Canada's FTP committee on Health Education Policy Taskforce; the Boards of the Michener Institute for Applied Health Sciences in Toronto; the British Columbia Health Education Foundation; the School of Health Sciences Advisory Committee of the Justice Institute of BC, and British Columbia's Patient Care Quality Review Board. He is a member of the Editorial Board of the Journal of Interprofessional Care, and Co-Editor of the open access Journal of Research in Interprofessional Education. He is Senior Scholar, WHO Collaborating Centre on Health Workforce Planning and Research, Dalhousie University; Visiting Adjunct Professor at the National University of Malaysia, External Scholar Faculty of Graduate Studies, Dalhousie University, and a member of the Steering Committee of the WHO Health Professions Global Network.

## IPE: Six Questions and Two Wicked Questions. Exploring six common issues that cross the literature about IPE & IPC and two pervasive questions that are major obstacles to implementation

"The literature on interprofessional education for collaborative patient centred practice (IECPCP) essentially covers six major questions and two wicked problems that any post-secondary institution contemplating the introduction of IPE/C needs to consider and resolve. This presentation will explore these issues and their significance for education and learning through practice (clinical) education" (Blessedly short at 51 words! Sydney Smith the great C19th cleric and wit once wrote: "Running your pen through every other word you've just written injects unimaginable rigour into your writing style").

### **IPE Panel Discussion**

Ruby Grymonpre, University of Manitoba (Chair)

#### Kelly Brink, BScPharm

Structured Practical Experiential Program Coordinator & Instructor, Faculty of Pharmacy University of Manitoba Kelly graduated from the University of Manitoba with a Baccalaureate Degree in Pharmacy in 1999. She worked at the pharmacy department at St. Boniface Hospital and then moved to the Faculty of Pharmacy in 2004. Kelly coordinates the experiential program at the Faculty as well as teaches in the pharmacy skills labs and performance based assessment program. Kelly is the Faculty's liaison to the University's IPE Initiative and is a member of the IP Clinical Placement Working Group. Kelly also maintains a clinical practice at St. Boniface Hospital in an outpatient Heart Failure Clinic.

#### Andrea Cameron, B.Sc.Phm., University of Toronto

Andrea Cameron received her B.Sc.Phm. from the University of Toronto in 1981, and began a career in hospital pharmacy, with a one year residency program at the Toronto General Hospital, followed by clinical pharmacist and management positions at The Wellesley Hospital in Toronto, until 1997. She then joined the Leslie Dan Faculty of Pharmacy, as a Coordinator with the Structured Practical Experience Program (SPEP). In March last year she was appointed Director of the newly formed Office of Experiential Education at the Faculty.

Andrea has been involved with many Interprofessional Education initiatives through the Centre for IPE at U of T, and was the lead for implementation of Multiple Mini Interviews for Admissions, initiated in 2010, for the Pharmacy undergraduate program. Andrea is also currently on AFPC Council.

### Harriet Davies, BSc(Pharm), CDE

Coordinator of Clinical Education & Regional Residency Coordinator, College of Pharmacy, Dalhousie University Harriet Davies has been a pharmacist for fifteen years, and has worked in community pharmacy in Ontario and Nova Scotia. Since 2004, Harriet has worked as Coordinator of Clinical Education at the Dalhousie University College of Pharmacy where she oversees the five experiential education courses. She has held the Certified Diabetes Educator (CDE) certification since 2004 and continues to work part-time each week as a community pharmacist in Halifax, Nova Scotia. Harriet holds a Bachelor of Science with Honours in Biology from Acadia University and a Bachelor of Science in Pharmacy from Dalhousie University, and is currently completing her Master of Education (Curriculum Studies) as part of an *Interprofessional Cohort* offered by the Acadia University School of Education and the Dalhousie University Department of Medical Education.

#### Lynda Eccott, University of British Columbia

Lynda Eccott has been an educator in the Faculty of Pharmaceutical Sciences (U.B.C) for the past 17 years, which is also where she obtained her MSc. in Pharmacology. She is the Director of Interprofessional Curriculum at the College of Health Disciplines, where her primary goal is to advance Interprofessional education (IPE) and collaboration (IPC) on campus for all the health and human service programs. Within the College, Lynda chairs both the Interprofessional Curriculum Committee, as well as the Interprofessional Student Advisory Group. (i-SAG) Within pharmacy, she has recently been appointed as the Coordinator of IPE Curriculum where she is creating a pathway of IPE learning opportunities for their students. She has presented her research in this area both nationally and internationally.

#### Wayne Hindmarsh, M.Sc., Ph.D.

#### **Professor and Dean Emeritus, University of Toronto**

#### **Executive Director of the Canadian Council for Accreditation of Pharmacy Programs**

Wayne is currently Professor and Dean Emeritus at the University of Toronto and Executive Director of the Canadian Council for Accreditation for Accreditation of Pharmacy Programs. He served as Dean of the Leslie Dan Faculty of Pharmacy at the University of Toronto from 1998-2009. Previously, he was Dean of Pharmacy at the University of Manitoba (1992-1998) and Assistant Dean at the College of Pharmacy and Nutrition at the University of Saskatchewan. He obtained his bachelor of science in pharmacy and M.Sc. degree from the University of Saskatchewan and a Ph.D. from the University of Alberta. His research accomplishments include over 80 manuscripts in the area of 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 has served on a number of academic committees including a term as president of the Association of Faculties of Pharmacy of Canada, Chair of the Association of Deans of Pharmacy of Canada and, President of the Canadian Council for Accreditation of Pharmacy Programs and the Pharmacy Examining Board of Canada.

#### Marie-Claude Vanier, B.Pharm., M.Sc.

Professeure agrégée de clinique, Faculté de pharmacie, Université de Montréal

Clinicienne, Chaire Sanofi-Aventis en soins pharmaceutiques ambulatoires, UMF-GMF Cité de la Santé de Laval Présidente, Comité Interfacultaire Opérationnel de formation à la collaboration interprofessionnelle Graduated from Université Laval, Marie-Claude is a pharmacist since 1989 and hold a joint clinical and academic appointment as Associate clinical professor at the Faculty of pharmacy of Université de Montréal and pharmacist at the Family Medicine Clinic of l'Hôpital de la Cité de la santé de Laval (CSL). She is also clinician of the Sanofi Aventis endowment chair in ambulatory pharmaceutical care of these two organizations. Marie-Claude collaborated to development of a curriculum of Interfaculty courses on interprofessional collaboration for health sciences and psycho-social sciences students at Université de Montréal. This program includes 10 health professions and reaches over 1000 students. Since March 2010, she is chair of the Interfaculty Operational Committee developing and coordinating these courses. In 2009, Marie-Claude was recognized in Quebec as a role model in interprofessionnal collaborative practice by l'Actualité Pharmaceutique and awarded the *pharmacien de Coeur et d'action* prize in the inderdisciplinarity category. She was also granted the 2010 AFPC-Bristol-Myers Squibb National Award for excellence in Education for her involvement in interprofessional collaboration education.

### Educational Outcomes, Curriculum Mapping and Program Evaluation Coming Together

Sheryl Zelenitsky, University of Manitoba (Chair)

Educational Outcomes: What are they and how are they used?

#### Terri Schindel, BSP, MCE, University of Alberta

Terri Schindel completed a Bachelor of Science in Pharmacy at the University of Saskatchewan and a Master of Continuing Education degree at the University of Calgary. Terri worked primarily in hospital pharmacy practice in the areas of oncology/hematology and geriatrics. She joined the Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta in 1996 and worked in continuing professional development until 2010. She is now a Clinical Associate Professor and Associated Dean, Undergraduate Programs and serves on the Curriculum Committee. She is a doctoral student in an interdisciplinary PhD program at the University of Alberta. Areas of interest include: professional learning and identity, qualitative research methods, and curriculum development and evaluation.

#### **Abstract**

Educational outcomes provide a foundation for curriculum development, assessment of student learning, and program evaluation. In this afternoon workshop, an overview of the development of the AFPC Educational Outcomes, based on pharmacists as medication experts, is presented. The seven competency areas that comprise the educational outcomes define what students are expected to be able to do upon completion of their first professional degree program in pharmacy. A companion document outlining levels of performance of the educational outcomes is forthcoming. The way that various Faculties have implemented the educational outcomes will be discussed.

### Curriculum Mapping: From therapy to application – The University of Manitoba experience

#### Cheryl Kristjanson, Director of University Teaching Services, University of Manitoba

Dr. Kristjanson is currently the Director of University Teaching Services (UTS) at the University of Manitoba. UTS serves as an educational resource for teaching and learning issues and focuses on: Curriculum and/or program development; Faculty Development; Evaluations of Curriculum/ Programs/Courses; Faculty and Student Assessments. Dr. Kristjanson's fields of specialization/interest include educational leadership, organizational change, curriculum development and evaluation. Her current research interests are in the area of how cognitive thinking styles of physicians impact patient safety and the first year teaching experiences of university faculty.

#### Sheryl Zelenitsky, BScPharm, Pharm.D., University of Manitoba

Sheryl obtained a BScPharm at the University of Manitoba (UofM) and PharmD at the State University of New York. She also completed a post-doctoral research fellowship in the area of antimicrobials and infectious diseases. Sheryl began her career as a clinical pharmacist in general medicine and surgery at the St. Boniface General Hospital in Winnipeg. She joined the Faculty of Pharmacy (UofM) in 1993 and served as Associate Dean (Academic) from 2004-2009 and Acting Dean for 2006. She is currently Acting Associate Dean (Academic) and chairs the Curriculum Management Committee responsible for the mapping, delivering and evaluation of the curriculum.

#### **Abstract**

A curriculum map documents the relationship between learning components of the curriculum and provides a valuable tool for analysis, communication and planning. This session will review one experience in developing a pharmacy curriculum map using AFPC educational outcomes. Practical strategies for engaging stakeholders, facilitating the process and creating a functional curriculum map will be presented. Attendees will participate in discussions of their own experience, as well as opportunities and challenges in mapping educational outcomes and levels of performance.

### **Program Evaluation: Ensuring Value and Sustainability**

Sheryl Zelenitsky, University of Manitoba (Chair)

Program Evaluation: Ensuring value and sustainability

#### **Ingrid Price, University of British Columbia**

Ingrid Price is a faculty member in Pharmacy at the University of British Columbia. She has served on the AFPC Council for 6 years, during this time; she became the chair of the Program Evaluation Task Force that created the Program Evaluation Guide for Canadian Faculties of Pharmacy. Ingrid has a keen interest in program evaluation and supporting schools across the country to develop and implement useful and sustainable evaluation strategies.

#### **Abstract**

An effective program evaluation allows schools to identify whether all aspects of the program (from recruitment of students to professional development of teaching faculty) are effective in achieving the desired goals of the program. Participants will familiarize themselves with the elements of planning and implementing an effective and sustainable program evaluation related particularly to evaluating the efficacy of an entry-to-practice program to achieve its educational outcomes. As with many things, one size does not fit all, and the same is true with program evaluation, therefore, participants will be engaged in activities to link the elements of program evaluation with the culture and needs of their individual pharmacy program.

# Satellite Evening Session at the University of Manitoba Faculty of Pharmacy Apotex Centre, 750 McDermot Ave Bannatyne Campus

Monday, June 6, 2011 6:00 – 9:00 pm (Pre-Registration Required)

6:00 – 6:15 pm Arrival at the Faculty of Pharmacy (Apotex Centre)

6:15 – 7:00 pm Tour & Dinner Reception

7:00 – 9:00 pm **CE Sessions: Exploring Professional Boundaries**Shawn Bugden, University of Manitoba (Chair)

#### **Pharmacy Vaccine Administration**

### Christine Hughes, Associate Professor, Faculty of Pharmacy & Pharmaceutical Sciences, Chair-Pharmacy Practice Division, University of Alberta

The legislative changes in Alberta paved the way for the development of training programs and pharmacist certifiers. Pharmacist administration of vaccines is underway in Alberta with publically funded influenza campaigns. Pharmacists with travel health expertise have developed a specialized niche. Training of pharmacy students is in place in the undergraduate program and students play a role in campus flu clinics. From this solid foundation the future of pharmacist vaccination in Alberta will be considered.

# Jennifer Isenor, BScPharm, PharmD, Assistant Professor of Pharmacotherapeutics Skills Lab Administrator, Assistant Coordinator of Continuing Education College of Pharmacy, Dalhousie University

This presentation will review the legislative changes that enabled pharmacist vaccination and review the immunization training program developed at Dalhousie University. The current statistics on immunization training will be reviewed as the future of pharmacist vaccination in Atlantic Canada is considered.

#### PD Together

#### Shawn Bugden, President, Manitoba Pharmaceutical Association

The Interprofessional Continuing Professional Development Network for the health professions represents Manitoba's attempt to reach across professional boundaries to deliver professional development. This session will explore these efforts and the challenges encountered in learning together.

Learn to be Safe: Simulations for Safety

Laurie Thompson, Executive Director, Manitoba Institute for Patient Safety Susan Lessard-Friesen, Deputy Registrar, Manitoba Pharmaceutical Association

Case simulations are key learning opportunities for inter-professional teams. This session will introduce the safety-based simulations developed through the Manitoba Institute of Patient Safety.

### Mentorship for Pharmacy Undergraduate Students Harold Lopatka, Executive Director, Association of Faculties of Pharmacy of Canada

Mentorship is a valuable tool used in many fields for an older individual to help a provide guidance and counsel to a younger individual. Students transitioning from the university setting to a work environment face uncertainty and stress. Pharmacy students encounter similar issues (personal and career related) to other university graduates as they transition. A mentorship program has been operational since 2007 where alumni pharmacists provide guidance and counsel to third year undergraduate pharmacy students. The program has been successful in enabling undergraduate students and pharmacists build and maintain relationships. The presentation will provide an overview of the structure and experiences from the University of Alberta pharmacy student mentorship program.



### **Integrating Basic Sciences Into New Curricula**

Lavern Vercaigne, University of Manitoba (Chair)



Victor A. Yanchick, Ph.D.

Dean and Professor and E.O. McCalley Chair
School of Pharmacy, Medical College of Virginia
Virginia Commonwealth University

Victor A. Yanchick was appointed Dean and Professor of the School of Pharmacy at Virginia Commonwealth University on July 1, 1996. Prior to his appointment at Virginia Commonwealth University he served for eleven years as Dean and Professor of Pharmacy at The University of Oklahoma Health Sciences Center College of Pharmacy. He began his academic career at The University of Texas at Austin holding various administrative positions including Assistant Dean for Academic Affairs and Associate Dean. He earned his Bachelor of Science degree in pharmacy and a Master of Science degree in Hospital Pharmacy from The University of Iowa. He also completed an ASHP-accredited residency program in hospital pharmacy from the University Hospitals in Iowa City, Iowa. Dr. Yanchick received his Ph.D. from Purdue University.

He was named Distinguished Alumnus both from Purdue University School of Pharmacy and from the College of Pharmacy at The University of Iowa. In 2001 he was elected to the National Academies of Practice and holds membership in a number of national professional organizations. He has published many articles in the areas of geriatrics and gerontology, authored four book chapters, and has given over 200 invited presentations to professional groups and conferences. He has supervised the M.S. or Ph.D. programs of 20 graduate students. He is listed in International Who's Who, Who's Who in America, and Men and Women in the Health Professions.

Dr. Yanchick has a long standing involvement with the American Association of Colleges of Pharmacy (AACP). He was appointed as a member of the AACP's Commission to Implement Change in Pharmacy Education and served three separate terms on the AACP Board of Directors. Dr. Yanchick was elected Chair of the Council of Deans of this organization in 2005 and in July 2008 was inducted as President of the AACP.

Dr. Yanchick is married to the former Donna Bush and has two sons, Jeffrey and David, and one daughter, Jill Ann and seven grandchildren. His two sons are graduates of the University of Oklahoma College of Pharmacy.

For relaxation he enjoys watercolor painting, gardening, and is a Class A racquetball player.

### Integration of the Basic and Clinical Sciences Across the Curriculum: a U.S. Model

This presentation will review the experience of the School of Pharmacy at Virginia Commonwealth University in a curricular transformation that included the integration of both the basic and clinical sciences into a team based curricular design that would meet accreditation standards. The standards that are required by the Accreditation Council for Pharmacy Education will be briefly covered as will the structure and content of the new curriculum at the VCU School of Pharmacy. This curriculum includes a two year modular clinical therapeutics sequence that integrates clinical therapeutics with pharmacology, pharmaceutics, and medicinal chemistry and examples of how this integration is carried out will be presented. In addition, examples of how principles of both the basic and pharmaceutical sciences are integrated into the six semester Foundations of Pharmacy Practice laboratory courses will be discussed.

Also presented will be the results of a faculty survey that provided feedback to the curriculum committee as to what improvements need to be made to improve the success of our integrated curriculum. Finally, the perceived positive benefits from both the faculty and student standpoints will be discussed.



**Pierre Moreau**, B.Pharm., Ph.D. Dean, Faculty of Pharmacy at Université de Montréal

Pierre Moreau has obtained a Baccalaureate in pharmacy from Université de Montréal in 1988. Working part-time as a pharmacist, he completed a master degree and then a Ph.D. in cardiovascular pharmacology (hypertension) under the guidance of Nobuhary Yamaguchu and

Jacques de Champlain at Université de Montréal. His first postdoctoral training was done in the laboratory of Thomas Lüscher from 1993 to 1995 in Berne, Switzerland, while his second postdoc in molecular medicine was performed under the supervision of Pavel Hamet at Hôlte-Dieu de Montréal.

In 1997, he was appointed assistant professor at the Faculty of Pharmacy of Université de Montréal, where he initiated his independent research career. During this period, he was awarded several young investigator prizes in the field of hypertension research. He was promoted associate professor in 2002 and full professor in 2007. He has published more than 80 peer-reviewed articles in the best cardiovascular journals, with continuous funding from the Canadian Institutes for Health Research.

In 2006, he was asked to fill in a position of Acting Dean and was nominated Dean in early 2007. Under his leadership, the Faculty of Pharmacy has seen a 40% growth in its student body and operating budget. He is currently undertaking a second mandate as Dean of the Faculty of Pharmacy at Université de Montréal.

### Making basic sciences relevant through context and discipline integration

Pierre Moreau, Chantal Pharand, Françoise Crevier, Johanne Vinet and Claude Mailhot Faculty of Pharmacy, Université de Montréal

Basic sciences are usually thought first into a pharmacy program to form a solid foundation on which applied and clinical sciences are layered upon. For students, basic sciences are often perceived as a barrier towards being a health care professional, since they seem to depart from the daily tasks of a pharmacist. They do not realize what is the thought process of a pharmacist and on what basis it relies. Even once the basic knowledge is acquired, students do not always appreciate that it is responsible for their understanding of the more applied sciences learned later in the program.

While constructing our Pharm.D. program using a competency based approach, we aimed at providing context to basic sciences in an effort to underline their relevance to pharmacy education. We chose to do so by integrating disciplines into courses with very concrete objectives, thus providing context to the students. For instance, anatomy, histology, physiology and biochemistry were integrated into courses entitled: Normal function of the human body. The aim is for the student to be able to explain to a patient how an organ system usually works. Similarly, pathology, pharmacology and pharmacotherapy were integrated into courses of pharmaceutical care, allowing students to understand simultaneously the disease process, therapeutic targets and how we can successfully achieve therapeutic goals with appropriate medication usage. Medicinal chemistry, compounding and basic pharmacology were also integrated in a unique way, helping students understand a product monograph.

By bringing clinical sciences early into the program to provide context and by mixing fundamental and clinical disciplines, we have achieved the impossible: we never get the "do we really need to learn that?" question anymore.

### **Award Winners**

### Pfizer Research Career Award



**Peter Wells**, Pharm.D., Professor, University of Toronto: Division of Biomolecular Sciences, Faculty of Pharmacy; and Department of Pharmacology and Toxicology, Faculty of Medicine.

#### Radical damage—from the fetus to the aging brain.

To exert their toxicity, many drugs and environmental chemicals must be converted or "bioactivated" in the body to reactive and highly toxic free radical intermediates, which enhance the formation of reactive oxygen species (ROS) that damage cellular macromolecules like DNA, proteins and lipids, and/or alter cellular signal transduction. If, for genetic and/or environmental reasons, cellular pathways for ROS detoxification and/or DNA repair are inadequate, enhanced ROS formation can cause cellular dysfunction or death leading to a wide range of toxicities. Since an adverse outcome is primarily dependent upon the balance between bioactivation and protective pathways for ROS detoxification and DNA repair, an imbalance can result in toxicity even at therapeutic drug concentrations or "safe" levels of environmental chemicals. The developing embryo is particularly susceptible to ROS-initiated damage due to its high levels of drug bioactivating enzymes like prostaglandin H synthases (PHSs), and limited antioxidative enzymes for ROS detoxification, together with sensitive developing systems, leading to structural birth defects and postnatal dysfunctions like cognitive deficits and cancer. The adult brain exhibits a similar profile of high bioactivating potential coupled with limited protective antioxidative capacity, with enhanced susceptibility to the neurodegenerative effects of amphetamine analogs like methamphetamine and ecstasy. In both the embryo and adult brain, even in the absence of drug exposure, reduced capacities for ROS-detoxification and/or DNA repair enhances risk due to endogenous ROS.

### Sanofi-Aventis New Invesigator Award



**Benoît Drolet,** B.Pharm., Ph.D., Associate Professor, Faculté de pharmacie, Université Laval

The prevalence of diabetes for all age-groups worldwide was estimated to be 2.8% in 2000 and 4.4% in 2030. Interestingly, diabetes (type I and II) has been extensively associated with increases of both QT interval duration and dispersion. In fact, the prevalence of QTc prolongation among diabetic patients was shown to be as high as 26%. Excessive QT interval prolongation is well-characterized as an important risk factor for triggering torsades de pointes, a life-threatening ventricular arrhythmia. Of increasing concern, both to clinicians and to the pharmaceutical industry, is the proarrhythmic effect of drugs targeted for both antiarrhythmic therapy as well as for non-cardiovascular indications. As a consequence, a number of drugs have been withdrawn from the Canadian market by regulatory authorities over the last decade. Moreover, many other potentially useful drugs have failed to gain regulatory approval for this same reason. As the QT interval reflects the dynamics of ventricular repolarization, activity of repolarizing cardiac potassium channels is mainly responsible for QT interval duration. In humans, ventricular repolarization mostly relies on the delayed rectifier potassium current; with its rapid  $(I_{Kr})$  and slow  $(I_{Ks})$  components. Although a number of studies have shown the deleterious impact of type II diabetes on the QT interval, much less is known about the contribution to QT interval prolongation of the metabolic syndrome, frequently recognized as a precursor state of type II diabetes. This syndrome has been variously defined, but generally consists of 3 or more of the following components: hyperglycemia, hypertension, hypertriglyceridemia, low HDL, and increased abdominal circumference and/or BMI at >30 kg/m<sup>2</sup>. Within the last two years, we have successfully developed a guinea pig model of metabolic syndrome by using chronic exposure (>6 months) to a high fat and high sucrose diet (HFSD). Further experiments in our lab with these animals have shown that metabolic syndrome in guinea pig potentiates the QT-prolonging effect (and proarrhythmic potential) of drugs.

### Janssen Innovation in Education Award



**Roderick Slavcev,** PhD, MBA, MSB, CBiol., Assistant Professor, Pharmaceutical Sciences, University of Waterloo

Roderick Slavcev specializes in gene therapy and biochemistry of nucleic acids with experience in both academic and industrial settings. Prior to gathering valuable marketing and clinical experience as a medical liaison for the pharmaceutical industry he completed his post-doctoral fellowship at the Department of Medical Genetics and Microbiology at the University of Toronto in the area of bacteriophage P1 plasmid partition and chromosomal segregation. His current research group comprises Mediphage Bioceuticals (MB) and encompasses pharmaceutics, cell biology, genetics, molecular biology, virology and technology transfer within the ultimate aim of bringing new treatments to the global environment, especially less developed countries. MB research projects focus on bacteriophage-based biotechnology and include the use of coliphages and phage-encoded genes and genetic elements to design and construct vectors for the development of novel vaccines, biopharmaceuticals and gene therapy systems, and the identification and application of novel phage genomic anti-bacterial genes to treat and dispose of the clinical culprits of global bacterial infection.

Roderick Slavcev is an Assistant Professor, Pharmaceutical Sciences at the University of Waterloo, School of Pharmacy and holds the Shopper's Drug Mart Professor of Business and Entrepreneurship Chair. Holding an MBA specialized in biopharma management and commercialization, Roderick currently directs and delivers the School of Pharmacy's novel business curriculum initiative. He also created and was instrumental in designing one of the most comprehensive Medical Microbiology Laboratory programs to be offered by a Canadian Pharmacy curriculum. He also currently serves as an editorial board member for Pharmaceutica Analytica Acta.

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### Demand Pull Development and Implementation of a Novel Business Program at the University of Waterloo, School of Pharmacy

The ability to manage projects, people, money and/or time is a critical learning component of arguably any role in any organization and the injection of strategy into every level of this ongoing task is the key to aligning personal or organizational goals with outcomes. The discipline of Pharmacy is diverse, and operates at the interface between clinical practice and business; between clinician and patient, and as such requires appropriate business and leadership skills to adeptly plan and operate with efficiency and quality. The innovation described here is an outcomes-based approach to the design, development and delivery of a novel strategic management program with the driving objective to confer the knowledge and process skills that (hopefully) generate decisive leaders in pharmacy and lead the redefinition of this profession.

The stigmatic viewpoint that business taints the purity of science has successfully separated these two areas with very little exposure of one to the other, despite the fact that a functional business model must underlie any and every clinical practice in order for it to be sustainable. Pharmacy is an extremely versatile profession that paves the way to superior positions in private and public sectors alike, while also providing a strong potential for entrepreneurial endeavour. In order to effectively graduate students to this profession that are capable of leading and evolving the meaning of pharmacy into the future, the need for real personal and organizational management and leadership skills is high, and bridges a recognized gap among pharmacy educational curricula in Canada.

The approach of outcomes-based education is hardly a new model. Educators radically rethink the delivery of professional education by starting at the end and working backwards. However, what assessment tools can be used to accurately assess and effectively evaluate the results? An iterative "demand pull" (outcomes) assessment model to education is also outlined here. The model, although not in itself the focus here, presents the process followed that guided the initial design of the management program, and that will continue to govern its improvement and pertinence.

### Bristol Myers Squibb National Award for Excellence in Education



**Nancy Waite**, PharmD, FCCP, Associate Director of Practice-Based Education, University of Waterloo

Nancy Waite is the Associate Director of Practice-Based Education and Interim Hallman Director (until last week) at the new School of Pharmacy, University of Waterloo. She earned her BScPhm at University of Toronto and her PharmD and Fellowship at Wayne State University in Detroit, MI. In her current position, she is responsible for overseeing the development of the curriculum, and has specific responsibilities for experiential programming which includes co-op and community service-learning, the practice-based courses/labs, residencies/fellowships and continuing professional development. Through various academic and clinical positions in Canada and the United States, she has experience providing clinical pharmacy services in rural and teaching hospital clinics, teaching professional and student audiences, and conducting pharmacy practice research.

As the scope of pharmacy practice changes, health care reform continues and technology advances, all Schools of Pharmacy are adapting their curricula. It has been my privilege and pleasure to participate in this progress and to lead significant initiatives to move pharmacy education forward at the School of Pharmacy, University of Waterloo. As a new program, the hallmark of our curriculum is innovation. Starting from a blank slate, we have been able to blend best practices and incorporate unique features that will prepare our students for an environment that will be characterized by change.

Among its most innovative elements, is our approach to experiential learning that includes an award-winning Community Service Learning component and a co-operative education model, unique in Canada and one of only two co-op pharmacy programs in North America. I will provide a brief overview of our experiential programming and guiding principles, measures of success and key learnings.

### gsk (GlaxoSmithKline) Graduate Student Research Career Award



Niladri Chattopadhyay, Ph.D. Candidate, University of Toronto

Niladri Chattopadhyay is a pharmacist and experimental therapeutics Ph.D. candidate in the laboratory of Dr. Raymond Reilly at the Department of Pharmaceutical Sciences, University of Toronto. He obtained his BSc degree in pharmacy from the University of Mumbai and MSc in pharmaceutical sciences from the University of Toronto. Niladri is investigating the use of trastuzumab (Herceptin)-conjugated gold nanoparticles (AuNPs) for enhanced X-radiation treatment of locally advanced breast cancer (LABC). He is the recipient of a Canadian Institutes of Health (CIHR) Vanier Graduate Scholarship and a U.S. Department of Defense Breast Cancer Research Program Predoctoral Fellowship as well as a Connaught Fellowship from the University of Toronto.

My research focuses on locally advanced breast cancer (LABC), which has an unusually high and unacceptable mortality with only 1 in 2 patients surviving at 5 years. Locally advanced breast cancers (LABCs) are characterized by their large size, growth into the skin or chest muscle and under the arm. They carry a poor prognosis and it is difficult to prevent cancer recurrence in the breast which typically occurs in 14% to 39% of the cases. To prevent this, we propose to dramatically increase the effect of radiation therapy using gold nanoparticles bound to a drug that specifically targets BC cells. The drug is trastuzumab (Herceptin), which is currently used to treat patients that have aggressive breast cancer. It has long been known that X-radiation doses delivered to tumors can be greatly enhanced by their interaction with certain materials known as radiosensitizers. Preferential delivery of these radiosensitizers to tumors would then provide effective treatment while lowering the side effects associated with high dose radiation treatment. Gold nanoparticles due to their unique properties when exposed to X-rays are excellent candidates to be evaluated as a radiosensitizer. Further, gold nanoparticles are well tolerated in the body and are currently under investigation in human trials.

This presentation will illustrate the design and construction of gold nanoparticles that can specifically recognize and internalize into breast cancer cells and the potential DNA damaging effects when combined with focused X-radiation. The current research could ultimately have a major impact on the treatment of LABC, which has unacceptable recurrence and mortality rates by specifically killing breast cancer cells with lower energy radiation than is currently used clinically.

### **Experiential Education**

Kelly Brink & Nancy Kleiman, University of Manitoba (Co-Chairs)



#### Katrina Mulherin, PEP-Canada

Katrina Mulherin is a Structured Practical Experience Program (SPEP) Coordinator within the Office of Experiential Education at the Leslie Dan Faculty of Pharmacy, University of Toronto. Her current clinical practice occurs within the Neonatal Intensive Care Unit at Sunnybrook Health Sciences Centre. Katrina received her Doctor of Pharmacy degree from the University of Toronto and her undergraduate pharmacy degree from Dalhousie University. Research inclinations include

describing how pharmacists relate to their practice and the use of documentary and narrative to induce insight and change. You can find her thriving / experimenting in her various urban Toronto practices.

### Interprofessional Education within 4<sup>th</sup> Year Pharmacy Experiential Rotations: Spinning the yarn at the University of Toronto.

Threads of interprofessional teaching and learning coalesced over the last decade at the University of Toronto and produced the current formal interprofessional education (IPE) component within the Structured Practical Experience Program (SPEP). This presentation is a singular sample of a Canadian Pharmacy Faculty's history, development, implementation, assessment, outcome and projected future of IPE within experiential learning.



### Cathy Rippin-Sisler, RN, MN Regional Director Clinical Education and Continuing Professional Development, WRHA

Cathy originally graduated from the Health Sciences Centre School of Nursing, and went on to complete both a Baccalaureate and Master's Degree in Nursing from the University of

Manitoba. She has worked in a variety of clinical practice settings in both acute care and community. For several years Cathy taught in both Diploma and Baccalaureate nursing programs. She moved into administrative work in 1998 first assuming the role of WRHA Nursing Director, Family Medicine, and then moving into the Chief Nursing Officer position at Seven Oaks General Hospital, a position she held for 10 years. In addition to maintaining an appointment as Assistant Professor, Faculty of Nursing, University of Manitoba, Cathy returned in 2009 to her "education roots" by assuming the position of WRHA Regional Director, Clinical Education and Continuing Professional Development. A major focus for Cathy in this position has been working on initiatives related to Interprofessional Education and Practice to ensure that the WRHA Interprofessional Education and Collaborative Patient Centred Care Action Plan gets implemented in a timely fashion.

Susan Bowman, BMR(PT)
Manager, Physiotherapy/Orthopedic Clinic, Grace Hospital and
Project Manager IPE&CP Initiatives, WRHA

Susan graduated from University of Manitoba with a Bachelor's Degree in Medical Rehabilitation in Physiotherapy in 1989. She has been the manager of the Grace Hospital Physiotherapy Department and Orthopedic Clinic since 1995. In addition, Susan was the Project manager for a joint WRHA/University of Manitoba project on interprofessional student placements in 2009/2010 and a project facilitator on a Health Canada funded project on Developing Collaborative Practice and Learning Environments Across the Continuum of Care in Western Canada in 2010/2011.

### From concept to reality: Interprofessional education and collaborative practice works!

Since 2008, the Winnipeg Regional Health Authority (WRHA) has embraced and recognized the value of interprofessional education and collaborative practice (IPE&CP). This presentation will outline key accomplishments, challenges encountered and lessons learned. Results will be shared from an interprofessional clinical placement (IPCP) project. The overall objective of the IPCP project was to support four teams in their efforts to transition to collaborative practice and learning environments (CP&LEs) and, using mixed methods, to measure the impact of individualized team training and IP clinical placements on team collaborative working relationships and on senior health and social care students. The presentation will also outline key strategic actions that have supported the successful adoption of IPE&CP, including a board-endorsed action plan, organizational commitment at the executive level, and the adoption of a competency framework for team education. Finally, the strategic partnership fostered with the interprofessional education (IPE) community at the University of Manitoba will be showcased. Comprising 12 health and social service faculties, the University of Manitoba IPE initiative has been instrumental in supporting the cultural shift in clinical practice settings. The success of this partnership underscores the critical role of strong collaboration between the domains of education and practice for interprofessional practice to truly take root and flourish. This presentation will be of interest to administrators, managers, and educators in both practice and academia.

#### Donna Woloschuk, BSP, PharmD, MDE, FCSHP

Dr. Donna Woloschuk (pronounced Wallace-chuk) studied and worked as a pharmacist in Saskatoon, Regina, Kingston, Cincinnati and Edmonton prior to joining the pharmacies of the Winnipeg Regional Health Authority. Donna is a certified Adult Educator and holds an Advanced Graduate Diploma in Distance Education (Technology) as well as a Master's Degree in Distance Education. She is an active member and Fellow of the Canadian Society of Hospital Pharmacists and a Past Chairperson of the Canadian Hospital Pharmacy Residency Board. She has over 150 publications and presentations to her credit. Donna's current work includes planning, implementing, evaluating and maintaining education and quality improvement initiatives for the Winnipeg Regional Health Authority Pharmacy Program.

### Development and Evaluation of a Preceptorship Experiential Rotation within the hospital pharmacy workplace

Preceptorship is the process by which an experienced practitioner provides coaching, facilitation, direct instruction and role modeling learning experiences within a collegial relationship while continuing to perform some or all of the tasks associated with the position. Training of pharmacy professionals is almost exclusively conducted in experiential settings as 1:1 relationships between a preceptor and a learner. Canadian pharmacy professional associations and workplaces are promoting excellence in preceptorship as a means of improving retention in the pharmacy profession, enhancing national capacity to train new pharmacy professionals, and encouraging pharmacy to be a learning profession. Although text and video preceptorship resources are widely available and several experiential programs have been described in the literature, few programs have been evaluated beyond the level of participant satisfaction with program delivery. WRHA Pharmacy Practice Residency Program developed and piloted a new experiential residency rotation in the 2005-06 academic year. The rotation consisted of selfselected readings from a list of recommended resources, two half-day interactive discussion groups (tutorials) focused on enhancing knowledge of preceptorship and lesson planning, and a structured practical experience during which the resident used his/her lesson plan to precept a learner (Table 1; Appendix 1). An experienced preceptorship coach provided guidance to the resident his/her preceptorship of a learner. Since 2005, more than 20 pharmacists and pharmacy technicians have completed the rotation. The objectives of this research project are: 1) To evaluate preceptorship rotation resource usability and perceived value. 2) To determine perceived value of didactic sessions. 3) To determine perceived value of the structured practical experiential rotation.



### **Poster Listings**

Faculty-Se	lected Student Award Winner Abstracts	
Category	Title & Authors	Page
FAC-1	The Impact Of The Implementation Of A Gynecologic Onology Clinical Pharmacist Program Edwards S., Pharm. D, Clinical Oncology Pharmacy Specialist; Stever S., BSc Pharm; Layden A., BSc Pharm.; Corbett L, BSc Pharm. Candidate	57
FAC-2	<b>D-Lactate alter apoptosis of human vascular endothelial cells</b> Jovana Tomic <sup>1</sup> , Binbing Ling <sup>1</sup> , Katharina Lohmann <sup>2</sup> , Jane Alcorn <sup>1</sup> , Gordon Zello <sup>1</sup> <sup>1</sup> College of Pharmacy and Nutrition, University of Saskatchewan. <sup>2</sup> Western College of Veterinary Medicine, University of Saskatchewan.	57
	Dietary supplementation with phytosterol and ascorbic acid reduces mass accumulation in	
FAC-3	high fat-fed mice Ian T. Wong, Rachel Neumann, Sheila J. Thornton and Kishor M. Wasan. University of British Columbia, Faculty of Pharmaceutical Sciences, Vancouver, British Columbia.	57
FAC-4	Homocysteine induces bone morphogenetic protein-13 expression in rat liver Yining Li <sup>1</sup> , Karmin O <sup>2,3,4</sup> , Yuewen Gong <sup>1</sup> Faculty of Pharmacy, University of Manitoba, Winnipeg, Manitoba, Canada <sup>2</sup> St. Boniface Hospital Research Centre; <sup>3</sup> Department of Animal Science and <sup>4</sup> Physiology, University of Manitoba, Winnipeg, Manitoba, Canada	58
	Chemical tailoring of micelle forming poly(ethylene oxide)-b-poly(ε-caprolactone-g-	
FAC-5	spermine) block copolymers for siRNA delivery Arash Falamarzian <sup>1</sup> , Xiao-bing Xiong <sup>1</sup> , Ommoleila Molavi <sup>3</sup> , Afsaneh Lavasanifar <sup>1,2</sup> . <sup>1</sup> Faculty of Pharmacy and Pharmaceutical sciences, <sup>2</sup> Department of Chemical and Material engineering, <sup>3</sup> Cross Cancer Institute, University of Alberta, Edmonton, Canada	58
	Design, synthesis and structure-activity relationship (SAR) studies of 2,4-disubstituted	
	pyrimidine derivatives: Multi-functional small molecules for the potential treatment of	
	Alzheimer's disease Tarek Mohamed <sup>1,2</sup> , Jacky C. K. Yeung <sup>3</sup> , Xiaobei Zhao <sup>4</sup> , Lila Habib <sup>4,5</sup> , Jerry Yang <sup>4</sup> , Praveen P. N. Rao <sup>1,†</sup> School of Pharmacy, University of Waterloo, Waterloo, Canada, N2L 3G1. <sup>2</sup> Department of Biology, University of Waterloo, Waterloo, Canada, N2L 3G1. <sup>3</sup> Department of Chemistry, University of Waterloo, Waterloo,	
FAC-6	Canada, N2L 3G1. <sup>4</sup> Department of Chemistry and Biochemistry and <sup>5</sup> Department of Bioengineering, University of California, San Diego, 9500 Gilman Drive, La Jolla, California, U.S.A 92093-0358.	59
	Evaluation and characterization of Milrinone-loaded PEG-g-PLA nanoparticles intended for	
FAC-7	<b>pulmonary delivery</b> Valery Aoun, France Varin, Grégoire Leclair and Patrice Hildgen, Université de Montréal, Faculty of Pharmacy, P.O. Box 6128, Downtown Station, Montréal, H3C 3J7	59
TAC 7	<b>Bioidentical hormones: A systematic review</b> Melanie J. Trinacty <sup>1</sup> , Anne Marie Whelan <sup>1,2</sup> , Tannis M.	33
FAC-8	Jurgens <sup>1</sup> College of Pharmacy, <sup>2</sup> Department of Family Medicine, Dalhousie University, Halifax NS Canada B3H 3J5	59
	A Combination Drug Delivery Strategy to Overcome Multi-Drug Resistance in Ovarian	
FAC-9	Cancer Payam Zahedi, Raquel De Souza, Loan Huynh, Micheline Piquette-Miller and Christine Allen. Department of Pharmaceutical Sciences, Leslie Dan Faculty of Pharmacy, University of Toronto, Toronto, Ontario, Canada.	60
	The Intermolecular Disulfide Bonds of UGT1A Splice Products with Active UGT1A Enzymes	
FAC-10	May Determine their Ability to Inhibit Glucuronidation Activity Mélanie Rouleau, Mario Harvey, Judith Bellemare, Chantal Guillemette <sup>1</sup> Laboratoire de Pharmacogénomique, Centre Hospitalier Universitaire de Québec, Faculté de Pharmacie, Université Laval	60
Basic Rese	,	
Dusie Rese	A randomized, double-blinded, placebo-controlled study evaluating the efficacy and safety of nabilone as an adjunctive to gabapentin in managing multiple sclerosis-induced	
BR-1	neuropathic pain Dana A. Turcotte <sup>1</sup> , Michael P. Namaka <sup>1</sup> , Andrew J. Gomori <sup>2</sup> , Farid Esfahani <sup>2</sup> ( <sup>1</sup> Faculty of Pharmacy, University of Manitoba, Winnipeg, Manitoba, Canada. <sup>2</sup> Department of Neurology, Health Sciences Centre, Winnipeg, Manitoba, Canada.)	61
BR-2	<b>Epinephrine Autoinjectors: Integrity of the Delivery Systems</b> Ousama Rachid <sup>1</sup> , Mutasem Rawas-Qalaji <sup>2</sup> , F Estelle R Simons <sup>3</sup> , Keith J Simons <sup>1,3</sup> <sup>1</sup> Faculty of Pharmacy, University of Manitoba, Canada; <sup>2</sup> College of Pharmacy, Nova Southeastern University, USA; <sup>3</sup> Faculty of Medicine, University of Manitoba, Canada	61
	Development and in-vitro evaluation of Modified Release Multiple Unit Matrix Tablets of	
BR-3	Metoprolol Tartrate (MT) Mukesh S. Patel , Natvarlal M. Patel Shri B.M. Shah College of Pharma. Education	62
כ-זוט	and Research., Modasa, Gujarat, India  Analysis of BDNF expression in animal model of MS Wenjun Zhu, Parvez Vora, Emma Frost, and Mike	UZ
BR-4	Namaka	62
BR-5	Activation of CB2 cannabinoid receptors suppresses cardiac myocyte hypertrophy  Yan Lu, Melanie A. Kopilas, Zongjun Shao, Robert R. Fandrich, Elissavet Kardami, Hope D. Anderson Faculty of Pharmacy, University of Manitoba, Winnipeg, Canada. Canadian Centre for Agri-Food Research in Health and	63

	3	
	Medicine, St. Boniface General Hospital Research Centre. <sup>3</sup> Institute of Cardiovascular Sciences - St. Boniface General Hospital Research Centre. <sup>4</sup> Departments of Human Anatomy and Cell Sciences and Physiology, University of Manitoba	
	Hepatocellular study of repellent DEET, sunscreen oxybenzone and their metabolites Daryl	
DD C	Fediuk, Yufei Chen, Frank Burczynski, Xiaochen Gu, Faculty of Pharmacy, University of Manitoba, Winnipeg,	62
BR-6	Manitoba	63
	Staphylococcus aureus harbouring Enterotoxin A as a possible risk factor for multiple	
	sclerosis exacerbations. Michael R Mulvey <sup>1,2</sup> , Malcolm Doupe <sup>3</sup> , Michael Prout <sup>4</sup> , Scott Andresen <sup>4</sup> , Lucy Vuong <sup>4</sup> , Christine Leong <sup>4</sup> , Romeo Hizon <sup>1</sup> , Amy Grossberndt <sup>4</sup> , Meghann Klowak <sup>4</sup> , Aneri Gupta <sup>4</sup> , Maria Melanson <sup>5</sup> , Andrew Gomori <sup>5</sup> , Farid Esfahani <sup>5</sup> , Loressa Klassen <sup>5</sup> , Emma E Frost <sup>4</sup> and Michael Namaka <sup>4,5</sup> <sup>1</sup> National Microbiology Laboratory, Antimicrobial Resistance and Nosocomial Infections, Winnipeg, MB, Canada. <sup>2</sup> Department of Medical Microbiology and Infectious Diseases, Faculty of Medicine, University of Manitoba, Winnipeg, MB, Canada. <sup>3</sup> Department of Community Health Sciences, Faculty of Medicine, University of Manitoba, Winnipeg, MB, Canada. <sup>4</sup> Cellular Neuroscience Research Laboratory, Faculty of Pharmacy, University of Manitoba, Winnipeg, MB, Canada. <sup>5</sup> Department of Neurology, Health Sciences Centre, Winnipeg, MB, Canada. BR-8 Emerging roles of Methyl CpG binding Protein 2 (MECP2) in myelination of brain. Parvez F. Vora <sup>4</sup> , Michael P. Namaka <sup>1,2,3,4</sup> , Emma E. Frost <sup>4</sup> <sup>1</sup> Manitoba Institute of Child Health, <sup>2</sup> Department of Anesthesia, Winnipeg Regional Health	
	Authority, <sup>3</sup> Department of Human Anatomy and Cell Science, Faculty of Medicine, <sup>4</sup> Faculty of Pharmacy, University of	
BR-7	Manitoba, Winnipeg, Canada	63
BR-8	Emerging roles of Methyl CpG binding Protein 2 (MECP2) in myelination of brain  Parvez F. Vora <sup>4</sup> , Michael P. Namaka <sup>1,2,3,4</sup> , Emma E. Frost <sup>4</sup> <sup>1</sup> Manitoba Institute of Child Health, <sup>2</sup> Department of  Anesthesia, Winnipeg Regional Health Authority, <sup>3</sup> Department of Human Anatomy and Cell Science, Faculty of  Medicine, <sup>4</sup> Faculty of Pharmacy, University of Manitoba, Winnipeg, Canada	64
5.1. 0	Porphyrin Complexation: An Approach in Porphyria Therapy Bolanle C. Akinwumi, Alan R.	<u> </u>
BR-11	McIntosh, Faculty of Pharmacy, University of Manitoba, 750 McDermot Avenue, Winnipeg, MB. R3E 0T5	64
	Establishing a nonalcoholic fatty liver disease cell culture model Yufei Chen, Wei Li, Yuewen	
	Gong, Frank J. Burczynski, Faculty of Pharmacy, Department of Pharmacology, Faculty of Medicine, University of	
BR-12	Manitoba, Winnipeg, Manitoba, Canada, and Department of Pharmacology, Faculty of Medicine, Hebei North	65
DIV 12	University, China  Bethoxazin is a potent inhibitor of DNA topoisomerase II Samaa Al-Rushaid <sup>a</sup> , Bharat Bhattarai <sup>a</sup> ,	- 03
	Brian B. Hasinoff <sup>a</sup> , Jack C. Yalowich <sup>b</sup> , and Gaik-Lean Chee <sup>a</sup> <sup>a</sup> Faculty of Pharmacy, University of Manitoba, Winnipeg, Manitoba, Canada R3E 0T5 <sup>b</sup> College of Pharmacy, The Ohio State University, 500 West 12th Avenue, Columbus,	C.F.
BR-13	Ohio 43210	65
	D-galactosamine induced bone morphogenetic proteins-2/4 expression and LDH release in	
BR-14	rat hepatoma cells Weisi Kong, Frank J. Burczynski, Yuewen Gong, Faculty of Pharmacy, University of Manitoba	65
	& Teaching Research Abstracts	- 03
Euucatioi		
ETR-1	Immunization and Injections Training for Pharmacy Students in Alberta Christine A. Hughes, Hoan Linh Banh, Faculty of Pharmacy & Pharmaceutical Sciences, University of Alberta, Edmonton, AB	66
	Maplestone Collaborative Learning Center (CLC): An academic learning site for	
	interprofessional education – report of a learning partnership Harriet K.A. Davies <sup>1</sup> , BSc(Pharm),	
ETR-2	CDE; Dr. Jennifer E. Isenor <sup>1</sup> , BScPharm, PharmD; Catherine S. MacPherson <sup>2</sup> , BHSc, MHSA, CHE; A. Maureen Crossman <sup>3</sup> , BSc(Pharm); Anne Godden-Webster <sup>4</sup> , MSc(Applied) <sup>1</sup> College of Pharmacy, Dalhousie University, Halifax, NS, <sup>2</sup> Collaborative Learning Center, Maplestone Enhanced Care, Halifax, NS, <sup>3</sup> Shoppers Drug Mart Long Term Care, Herring Cove Rd., Halifax, NS, <sup>4</sup> Faculty of Health Professions, Dalhousie University, Halifax, NS	66
	Change in Attitudes and Perspective Among Health Care Learners in a Pilot Inter-	
ETR-3	professional Training Model in a Primary Care Memory Clinic Tejal Patel, PharmD <sup>1,2</sup> , Linda Lee, MD <sup>1,2,3</sup> , Colleen MacMillan, PhD <sup>2,4</sup> University of Waterloo School of Pharmacy, Kitchener, Ontario; Centre for Family Medicine Family Health Team, Kitchener, Ontario; University of McMaster Michael G. DeGroote School of Medicine, Hamilton, Ontario; Wilfrid Laurier University Lyle S. Hallman Faculty of Social Work, Waterloo, Ontario	67
ETR-4	"Happy Together": Integrating Medicinal Chemistry and Pharmacy Practice in Year 1 Simon P. Albon, University of British Columbia, Faculty of Pharmaceutical Sciences; Tony T. Seet, University of British Columbia, Faculty of Pharmaceutical Sciences; Marion L. Pearson, University of British Columbia, Faculty of Pharmaceutical Sciences	67
	Tutor-less Model of Small Group Problem-based Learning in a Large Class Tessa A Nicholl <sup>1</sup>	
ETR-5	<sup>1</sup> Faculty of Pharmaceutical Sciences, University of British Columbia	68
ETR-6	A spring planting of peer teachers within an early hospital experience elective: Measuring the success of the pilot plot Katrina A Mulherin, Andrea J Cameron, Barb A Coulston, Office of Experiential Education, Leslie Dan Faculty of Pharmacy, University of Toronto	68

	Facilitating interprofessional student teaching of ambulatory assistive devices for	
	undergraduate pharmacy students Cheryl A. Sadowski <sup>1</sup> , C. Allyson Jones <sup>2</sup> , Darren Pasay <sup>1</sup> Faculty of	
ETR-7	Pharmacy & Pharmaceutical Sciences, University of Alberta, Edmonton, Alberta T6G 2N8; <sup>2</sup> Faculty of Rehabilitation Medicine, University of Alberta, Edmonton, Alberta	68
LIII /	The parallel presentation of pediatrics and geriatrics in a combined undergraduate	- 00
	pharmacy course Cheryl A. Sadowski, Marlene Gukert Faculty of Pharmacy & Pharmaceutical Sciences,	
ETR-8	University of Alberta, Edmonton, Alberta T6G 2N8	69
F <b>T</b> D 0	Development of an Integrated Evaluation for Assessing Patient Simulations Darren K. Pasay,	60
ETR-9	Lisa M. Guirguis Faculty of Pharmacy & Pharmaceutical Sciences, University of Alberta, Edmonton, Alberta T6G 2N8	69
	<b>Digital lecture recordings: Patterns of use and value in learning</b> Marion L. Pearson, University of	
ETR-10	British Columbia, Faculty of Pharmaceutical Sciences; Jon-Paul Marchand, University of British Columbia, Faculty of Pharmaceutical Sciences	70
LIK 10	Before formal pharmacy education: Options for a person aspiring to be a pharmacist in the	70
İ	Maritimes prior to 1911 Mary E. MacCara and Alyson Toole, College of Pharmacy, Dalhousie University,	
ETR-12	Halifax, Nova Scotia	70
	Development of an interprofessional simulation involving pharmacy students Ann E.	
	Thompson <sup>1</sup> , Elaine J. Greidanus <sup>2</sup> 1Faculty of Pharmacy and Pharmaceutical Sciences 2Health Sciences and Education	
ETR-13	Research Commons 1,2University of Alberta	70
Pharmacy	Practice Research Abstracts	
	Immunization training: preparing pharmacists for an expanded scope of practice	
	Jennifer E. Isenor, BScPharm, PharmD <sup>1</sup> , Corinne M.Tobin, BScPharm <sup>1</sup> , Susan K. Bowles, BScPhm, PharmD, MSc <sup>1,2</sup> ,	
PPR-1	Kathryn L. Slayter, BScPharm, PharmD <sup>1,2</sup> <sup>1</sup> College of Pharmacy, Dalhousie University, Halifax, Nova Scotia; <sup>2</sup> QEII Health Sciences Centre, Halifax, NS	71
	Knowledge and beliefs about the Emergency Contraceptive Pill: Comparison of survey	
	results between pharmacists and women in Nova Scotia Anne Marie Whelan <sup>1</sup> , Donald Langille <sup>2</sup> ,	
	Eileen Hurst <sup>1</sup> , Sandra Aylward <sup>3</sup> , Susan Wedlake <sup>4</sup> <sup>1</sup> College of Pharmacy and <sup>2</sup> Department of Community Health &	
	Epidemiology, Dalhousie University; <sup>3</sup> Professional and Regulatory Affairs, Sobeys Pharmacy Group; <sup>4</sup> Nova Scotia	
PPR-2	College of Pharmacists.	71
PPR-3	The Pharmacists Clinic Sandy Mok¹, James McCormack¹, Alan Low¹, and Tessa Nicholl ¹ ¹Faculty of	72
PPN-3	Pharmaceutical Sciences, University of British Columbia	72
	Why are some people healthy and others not? Laura MacDonald <sup>1</sup> , Leslie Johnson <sup>2</sup> , Nancy Kleiman <sup>3</sup> , Doug Brothwell <sup>4</sup> , Sheryl Sloshower <sup>5</sup> , Moni Fricke <sup>6</sup> (Dental Hygiene, University of Manitoba) <sup>1</sup> , (Occupational Therapy,	
	University of Manitoba) <sup>2</sup> , (Pharmacy, University of Manitoba) <sup>3</sup> , (Dentistry, University of Manitoba) <sup>4</sup> , (Dental	
PPR-4	Hygiene, University of Manitoba) <sup>5</sup> , (Physiotherapy, University of Manitoba) <sup>6</sup>	72
Social Adm	ninistrative Research Abstracts	
	Use of clozapine in a Canadian outpatient population: a chart-review comparison of	
	prescribing (2005-2010) Josée-Anne Le Dorze <sup>1</sup> , David Nguyen <sup>1</sup> , Patricia Honcharik <sup>1,2</sup> , Michael Eleff <sup>3</sup> , Silvia	
	Alessi-Severini <sup>1</sup> <sup>1</sup> Faculty of Pharmacy, University of Manitoba, <sup>2</sup> Department of Pharmaceutical Services, Health	
SAR-1	Sciences Centre, <sup>3</sup> Department of Psychiatry, Faculty of Medicine, University of Manitoba, Winnipeg, Manitoba,	72
24L-1	Canada	12
	Use of clozapine: a chart-review study in a Canadian outpatient population David Nguyen <sup>1</sup> ,  Josée-Anne Le Dorze <sup>1</sup> , Patricia Honcharik <sup>1,2</sup> , Michael Eleff <sup>3</sup> , Silvia Alessi-Severini <sup>1 1</sup> Faculty of Pharmacy, University of	
	Manitoba, <sup>2</sup> Department of Pharmaceutical Services, Health Sciences Centre, <sup>3</sup> Department of Psychiatry, Faculty of	
SAR-2	Medicine, University of Manitoba, Winnipeg, Manitoba, Canada	73
	, , , , , , , , , , , , , , , , , , ,	

### **Poster Abstracts**

### Faculty-Selected Student Award Winners Abstracts

# FAC-1 The Impact Of The Implementation Of A Gynecologic Onology Clinical Pharmacist Program

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Introduction: Within the Dr. H. Bliss Murphy Cancer Centre in St. John's, Newfoundland, clinical pharmacists play a key role in the management and follow-up of ambulatory oncology patients. In 2010, a program was implemented where two clinical oncology pharmacists began to follow gynecology oncology patients specifically, and offered clinical pharmacy services to identify and resolve any adverse drug events (ADEs) caused by their chemotherapy treatments. Materials and Methods: This was a retrospective cohort, which isolated and reviewed pharmacy notes previously documented by gynecologic oncology pharmacists on a randomly generated sample of patients (n=36). These notes are recorded at each patient interaction, by the pharmacist, using OPIS (Oncology Patient Information System) 2000 software. Interventions made by the pharmacist were measured, and assigned to one of seven main categories. These categories were subdivided to show where specific impact was made. Physician involvement and implementation was also documented along with method of intervention (clinic or by phone). Results and Discussion: Of patient charts reviewed (n=36) there were a total of 110 interventions. This yields 3.06 interventions per patient. Of these, 48.0% were Toxicity Management Interventions, 14.5% were Drug Interaction Interventions, and 4.5% represented Changes in Cancer Therapy. Non-Chemotherapy related interventions accounted for 19.1% of all interventions. Over a third of all interventions (33.6%) required consultation with a physician. Of these, 43 % resulted in a newly written prescription. There was a 98% uptake by physicians. Conclusion: The oncology pharmacy specialist has a vital role in identifying and treating Drug Related problems within the gynecology patient population. The impact of the involvement of the clinical pharmacist within this specific program proved to be significant. This project should serve as a framework for future endeavors in clinical pharmacy practice.

### FAC-2 Title: D-Lactate alter apoptosis of human vascular endothelial cells

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Abstract: The morbidity and mortality associated with diabetic cardiovascular complications are a significant public health concern. Endothelial dysfunction and overproduction of several glucose-byproducts are thought to contribute to these complications. One of these byproducts, D-lactate, is elevated in diabetic patients (typical range 0.2 - 0.5 mM), but research has not examined the contribution of D-lactate to the endothelial dysfunction associated with diabetes. High levels of Dlactate have been related to cellular apoptosis in tissues such as liver and lung. We hypothesized that supraphysiological levels of D-lactate can induce excessive apoptosis in human endothelial cells (HUV-EC-C). HUV-EC-C cells were exposed to different concentrations of Dlactate (0.01 mM to 2 mM) for 1, 6, 24 and 48 h. Cell apoptosis was measured using the CellTiter 96® AQueous One Solution Cell Proliferation Assay. Enhanced cellular apoptosis was observed at 0.2 mM D-lactate. To investigate the possible mechanism underlying this effect, we measured mRNA expression levels of several key proteins involved in the phosphoinositide kinase-3/serine/threonine kinase (PI3K/Akt) pathway. The PI3K, Akt, Bcl2-associated agonist of cell death (BAD), endothelial nitric oxide synthase (eNOS) and apoptosis regulator Bcl-2 alpha isoform mRNA expression levels with or without 0.2 mM D-lactate treatment for 1 h, 6 h, 24 h and 48 h were measured using Quantitative RT-PCR. The mRNA expression of all selected genes was downregulated at 6 h (50-70% of the control) with further reductions at 24 h (20-40% of the control). By 48 h mRNA expression of Akt, BAD, eNOS and Bcl2 was increased to 150-170% of control while PI3K expression remained lower than control (72%). Exposure of HUV-EC-C cells to D-lactate levels present in diabetic patients resulted in time-dependent changes in several critical antiapoptotic genes. Whether changes in the expression of these genes disturb the tightly controlled balance between the pro- and antiapoptotic proteins and eventually lead to excessive apoptosis and endothelial dysfunction in diabetes needs further investigation.

# FAC-3 Dietary supplementation with phytosterol and ascorbic acid reduces mass accumulation in high fat-fed mice

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**Objectives:** Previous studies have found that mice fed a high fat diet and a supplement comprised of a plant extract linked to ascorbic acid resulted in reduced mass accumulation. However, to date, no mechanism has been identified. This study investigated the potential mechanisms by examining the effect of phytosterol (PS) and ascorbic acid (AA) supplementation in high fat-fed mice. **Methods:** Animals were fed a high-fat (HF) diet with

or without supplements of 1% w/w AA, PS, or PSAA thereof for 18 weeks; mass, food and water intake were assessed weekly for the first 12 weeks. Resting metabolic rate (RMR), maximal oxygen consumption (VO2 max), food transit time, fecal output were measured and plasma and fecal lipids, cholesterol, triglycerides and non-esterified fatty acids were assessed. To characterize the acute effect of the diets on food transit time and fecal output, agematched mice were exposed to the diets for 72 hours. Results: Mice fed a HF diet supplemented with PSAA showed a reduction in mass accumulation over the 18 week study when compared to all other groups. No difference in food intake, water intake, RMR, or VO2 max was observed between any of the experimental diets and control. After chronic exposure to supplements, the PS and PSAA groups exhibited an increased passage rate and decreased fecal output after a 72 hour exposure to a HF diet. Conclusion: Supplementation with either PS or AA did not result in a reduction of mass accumulation; however, when the diet contains both supplements, a significant decrease in mass accumulation occurred. This could not be attributed to differences in food intake or metabolic rate between the groups. When exposed to a HF diet, the PS groups exhibited a decrease in food transit time and fecal output, suggesting potential changes to gut morphology, in response to dietary PS, which may alter AA absorption and potentiate mass loss in the PSAA group.

## FAC-4 Homocysteine induces bone morphogenetic protein-13 expression in rat liver

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Objectives: Homocysteine is a metabolic product of essential amino acid-methionine. It has been documented that elevated level of homocysteine named hyperhomocysteinemia may be involved in development of liver diseases. However, it is unclear what role of homocysteine in this process. Moreover, bone morphogenetic proteins (BMPs) are the members of TGFbeta superfamily. BMPs play an important role in cell proliferation, differentiation and apoptosis. It has been documented that BMP13, also known as growth and differentiation factor (GDF) 6 or cartilage derived morphogenetic protein (CDMP) 2, stimulates cell proliferation and production of collagen in patellar tendon fibroblasts, which means BMP13 is involved in the cell proliferation and matrix remodeling process. Methods: Male SD rats were fed with normal control diet or high methionine diet, rat liver was harvested at 4, 8 and 12 weeks after respectively. RNA was extracted and RT-PCR was performed. BMP13 mRNA expression was detected on these liver samples. Results: There was no difference of BMP13 mRNA abundance in the liver of rats between

normal control diet and high methionine diet at 4 and 8 weeks. However, BMP13 mRNA abundance was significantly reduced in the liver of rats after 12 weeks' high methionine diet as compared with that in the liver of normal control diet. **Conclusions**: long term high methionine diet can cause reduction of BMP13 in the liver as well as induce hyperhomocysteinemia. The reduction of BMP13 in the liver may contribute to the liver injury induced by high methionine diet.

# FAC-5 Chemical tailoring of micelle forming poly(ethylene oxide)-b-poly(ε-caprolactone-g-spermine) block copolymers for siRNA delivery

Arash Falamarzian<sup>1</sup>, Xiao-bing Xiong<sup>1</sup>, Ommoleila Molavi<sup>3</sup>, Afsaneh Lavasanifar<sup>1,2</sup>. <sup>1</sup>Faculty of Pharmacy and Pharmaceutical sciences, <sup>2</sup>Department of Chemical and Material engineering, <sup>3</sup>Cross Cancer Institute, University of Alberta, Edmonton, Canada

Objective: The aim of this study is to develop methoxy poly(ethylene oxide)-b-poly( $\varepsilon$ -caprolactone-g-spermine) MePEO-b-P(CL-g-SP) containing stearyl and cholesteryl substituents on spermine, and assess the efficacy of micelles formed from this structure to suppress the expression of signal transducer and activator of transcription 3 (STAT3) oncoprotein, when bound to STAT3 siRNA, in cancer cells. Methods: MePEO-b-P(CL-g-SP) block copolymers with spermine side groups on the PCL block were synthesized and reacted with stearic acid and cholesteryl chloroformate forming MePEO-b-poly( $\varepsilon$ caprolactone-g-spermine-stearyl) (MePEO-b-P(CL-g-SP-STA) and MePEO-b-poly( $\varepsilon$ -caprolactone-g-sperminecholesteryl) (MePEO-b-P(CL-g-SP-Chol), respectively. Prepared block copolymers were characterized for their molecular weight by <sup>1</sup>H NMR and critical micellar concentration (CMC). The siRNA binding abilities of the MePEO-b-P(CL-g-SP-STA) and MePEO-b-P(CL-g-SP-Chol) copolymers were assessed. The ability of the micelles to transfer siRNA into MDA-435 cells and the intracellular trafficking of siRNA was also investigated by flow cytometry and confocal microscopy, respectively. Finally, STAT3 knockdown by siRNA complexes in MDA-435 cells was assessed. Results: Attachment of Stearyl and cholestryl groups to PEO-b-P(CL-g-SP) increased their rendencey for micelle formation reflected by a decrease in CMC from  $1.14 \pm 0.2$  for MePEO-P(CL-SP) to  $0.86 \pm 0.2$  and 0.59± 0.1, for MePEO-b-P(CL-g-SP-STA) and MePEO-b-P(CLg-SP-Chol micelles, respectively. The binding ability of the synthesized copolymers were not significantly different from each other at high polymer concentrations, but less than that of MePEO-b-P(CL-g-SP) at lower polymer/siRNA weight ratios. Based on flow cytometry and confocal microscopy, siRNA formulated in MePEO-b-P(CL-g-SP-Chol) showed the most efficient cellular uptake through endocytosis by MDA-435 cells. Consistent with the cellular uptake, anti-p-STAT3 siRNA formulated in MePEO-b-P(CLg-SP-Chol) micelles was the most effective formulation in

down regulating p-STAT3 expression. **Conclusions:** Our results showed a positive impact for the incoporoation of cholesterol at 50 % level of substitution in enhancing the stability of siRNA carrier and increasing siRNA transfection in MDA-MB-435 human cancer cells.

# FAC-6 Design, synthesis and structure-activity relationship (SAR) studies of 2,4-disubstituted pyrimidine derivatives: Multi-functional small molecules for the potential treatment of Alzheimer's disease

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Neurodegenerative disorders inflict a heavy burden on society and healthcare. Alzheimer's disease (AD) is a progressive neurological disorder resulting in rapid cognitive dysfunction leading to morbidity and mortality. The pathology of AD is complex with multiple factors contributing to the loss of cholinergic neurotransmission, formation of amyloid-beta (Aβ) plaques and neurofibrillary tangles (NFTs). The end result of these mechanisms is neuronal cell death that initially starts at the cholinergic branch of the central nervous system but eventually spreads out to other regions of the brain. Current anticholinesterase treatment options, such as donepezil (Aricept®) and rivastigmine (Exelon®), are examples of the mono-targeted approach directed at symptom management. However, recent evidence suggests that directing research efforts at developing multi-functional drugs presents an opportunity toward disease-modifying effects that can potentially reverse the rapid progression of AD. Our research efforts utilize simple synthetic methods to generate a library of small organic molecules based on a non-fused, 2,4-disubstituted pyrimidine heterocyclic ring template. By varying the chemical properties of the substituents, a small organic molecule library was developed and we acquired structure-activity relationship (SAR) data for anti-cholinesterase and anti-Aβaggregation activities. In addition, promising candidates were assessed for their potential to chelate metals and inhibit β-secretase (BACE) – other key elements in the amyloid hypothesis. Molecular modeling studies were carried out to investigate the ligand's interactions within the target enzyme. Preliminary data suggests that a 2,4disubstituted pyrimidine ring serves as a suitable template to develop multi-functional small organic molecules for the treatment of AD.

## FAC-7 Evaluation and characterization of Milrinone-loaded PEG-g-PLA nanoparticles intended for pulmonary delivery

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We propose to use a PEG grafted over a PLA backbone polymer to formulate milrinone loaded-nanoparticles for inhalation use. We hypothesize this new nanoparticle formulation will 1) reduce pulmonary absorption rate and systemic peak levels, 2) provide a longer period of contact with the alveolar cells, protecting the active substance from fast degradation/elimination. Methoxy-PEG 2000 Da and Diol-PEG 2000 Da have been grafted over PLA backbones with two grafting densities (1% et 5%) to create respectively PEG1%-g-PLA, PEG5%-g-PLA. Loaded NPs has been prepared by various modifications of the O/W solvent evaporation method: the drug was either dissolved in one solvent, by a co-solvent method, complexed with m-β-CD or milled as a nanosuspension in a non soluble solvent, prior being subjected to emulsification into an external aqueous phase. NPs were characterized for their encapsulation efficiency (EE). NPs were also evaluated for their cytotoxicity on murine macrophage RAW 264.7 and on human epithelial cells Calu-3 using MTT test. Insights into internal structure were taken from thermal analysis and interactions between MIL and m-β-CD was evaluated by <sup>1</sup>H NMR and NOESY. It was shown that none of the blank and Milrinone loaded-NPs caused a decrease in viability of RAW 264.7 and Calu-3 cells in 96 well plates at concentrations of ≤10 mg/mL for blank NPs and ≤0.17 mg/mL for loaded-NPs when measured by MTT test (>100% of viability). <sup>1</sup>H NMR and NOESY studies confirm the inclusion complex between MIL and m-β-CD. It was also concluded that the preparation technique played an important role in the dissolution behavior of the drug. DSC studies also confirm the complete drug amorphization and/or inclusion complexation. Milrinone-loaded PEG-g-PLA nanoparticles using various modifications of O/W solvent evaporation method were successively developed. Further investigations on the solid state characterization of the inclusion complex of MIL with m-β-CD had to be performed in order to fully evaluate the potential of these NPs for pulmonary delivery of milrinone.

### FAC-8 Bioidentical hormones: A systematic review

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**Objectives:** Pharmacists require quality information about bioidentical hormones (BHs) to aid women in understanding what BHs are and in making evidence-based decisions about their use. The objectives of this project were to 1) define "bioidentical hormone", 2)

identify BH products available in Canada, and 3) conduct a systematic review (SR) of the evidence of safety and efficacy of BHs in the treatment of menopause-related vasomotor symptoms. Methods: Objective 1: Systematic searches of the literature and internet were conducted to identify definitions of BHs. Definitions were compiled, similarities and differences tabulated, and a working definition created. Objective 2: A list of Canadian products containing BHs (according to the working definition) approved for menopause was assembled from the Health Canada Drug Product Database, eCPS, Pharmacist's Letter and RxFiles. Objective 3: A systematic search of the literature was conducted to identify randomized controlled trials for one BH (progesterone) in managing menopause-related vasomotor symptoms. Identified RCTs underwent relevance assessment by 3 reviewers and consensus was reached for inclusion. Three reviewers assessed the articles for risk of bias, then performed data extraction and analysis where again, consensus was reached. Results: Sixty-two definitions of BHs were analyzed and the following definition created: "Bioidentical hormones are chemical substances that are identical in molecular structure to human hormones." Seven commercial products containing BHs were identified. Four studies were included in the SR of progesterone. Of the four studies, only 1 study found a significant difference in vasomotor symptoms with use of progesterone compared to placebo. Data on safety was reported in half of the trials. Conclusions: The working definition of BHs should facilitate a common nderstanding of the term among the scientific and public communities. The definition and product table provide a framework for the SR of BHs. Preliminary results indicate current evidence does not support the use of progesterone for menopause-related vasomotor symptoms. Funding: Funding for this project was provided by the Pharmacy Endowment Fund. Presentations: Parts of current abstract were previously presented: Trinacty M (on behalf of co-authors T Jurgens and AM Whelan): Bioidentical hormones: a systematic review. Presented March 2, 2011 at the Integrated Health Research Training Partnership Health Trainee Research Day at Dalhousie University. Whelan AM, Jurgens T. Hormone replacement therapy for women in 2010: a focus on bioidentical hormone therapy for vasomotor symptoms. Presented October 16, 2010 at the 46<sup>th</sup> Annual Dalhousie Pharmacy Refresher and PANS Conference (presenters: Whelan & Jurgens) Trinacty M (on behalf of co-authors T Jurgens & AM Whelan): Bioidentical hormones: a systematic review. Presented September 14, 2010 at the Annual Pharmacy Summer Student Research Presentations at the College of Pharmacy, Dalhousie University.

# FAC-9 A Combination Drug Delivery Strategy to Overcome Multi-Drug Resistance in Ovarian Cancer

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The onset of multidrug resistance (MDR) in ovarian cancer is the main causes of treatment failure and low survival rates. Inadequate drug exposure and treatment-free periods due to the current intermittent chemotherapy has been shown to select for cancer cells over-expressing drug efflux transporters, resulting in resistant disease. The present study examines the sustained delivery of the chemotherapeutic agent docetaxel (DTX) alone and in combination with cepharanthine (CEP), a potent drug efflux transporter inhibitor. DTX and CEP were delivered via the intraperitoneal route in a sustained manner using an injectable polymer-lipid formulation (PoLigel-(DTX+CEP)). The physico-chemical properties and in vitro drug release profile of PoLigel-(DTX+CEP) were assessed. The in vitro cytotoxicity, combination index as measured by the Chou and Talalay method and apoptotic response as measured by caspase 3/7 activity were determined in both sensitive (HEYA8 cells) and resistant (HEYA8-MDR cells) ovarian cancer cells. Cellular uptake and efflux of DTX following combination delivery was also quantified. Efficacy studies were conducted in both ovarian cancer models in mice. In vitro, the combination strategy resulted in significantly (p < 0.05) more apoptosis, greater intracellular accumulation of DTX, and lower DTX efflux in ovarian cancer cells showing the MDR phenotype. In vivo, sustained treatment with DTX and CEP showed significantly greater (p < 0.05) tumor inhibition (91 ± 4%) in a murine model of multidrug resistant ovarian cancer compared to sustained DTX treatment (76 ± 6%) and was more than twice as efficacious as intermittent DTX treatment. Overall findings from these studies highlight the impact of sustained delivery of mono and combination therapy in the management of refractory ovarian cancer displaying the MDR phenotype.

# FAC-10 The Intermolecular Disulfide Bonds of UGT1A Splice Products with Active UGT1A Enzymes May Determine their Ability to Inhibit Glucuronidation Activity

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The UDP-glucuronosyltransferases (UGTs) are pivotal membrane proteins of the endoplasmic reticulum (ER) playing a major role in xenobiotic metabolism. Recently, we uncovered novel spliced products derived from the human UGT1A gene, so-called UGT1A\_i2 isoforms. The 45 kDa i2 proteins observed in drug metabolizing tissues lack the transmembrane domain and glucuronic acid transferase activity but are localized in the ER along with active 55 kDa UGT1A\_i1 enzymes. Our previous works using endogenous knockdown and recombinant proteins

support an inhibitory effect of i2 species on UGT1A activity likely through formation of inactive heteromeric i1+i2 assemblies. In this study, we examined whether the formation of intermolecular disulfide bonds is implicated in the oligomerization process between UGT1A splice species. We used microsomal extract from recombinant UGT1A1 i1 and i2 protein and from human cells expressing both types of endogenous splice products. SDS-page analyses revealed protein complexes of high molecular weight under non-reducing conditions, which are not detected upon treatment with a reducing agent, which is consistent with a covalent association between UGT1A products. Co-immunoprecipitation using truncated protein revealed that truncation of the peptide signal and the transmembrane domain of UGT1A1 i1 lead to loss of homo-oligomerization (i1mutant + i1 wild type) but did not affect oligomerization of truncated i1 with its splice form i2. Further point mutations of specific cysteines did not prevent homo- or hetero- oligomerization between UGT1A1 splice species. From these initial experiments, we conclude that intermolecular disulfide bond formation could be involved in formation of inactive oligomers between UGT1A1 i1 and i2, and that domain implicated in homo-oligomerization would be different from the one implicated in hetero-ologomerization. Further studies are ongoing to identify other type of protein interaction and the domains implicated in those interactions. This work has been presented at the 9<sup>th</sup> International ISSX (Istanbul, September 2010), Journée Axe Endocrinologie-Génomique-CRCHUQ-Université Laval (October 2010) and at Journée Pharmacie-Université Laval (april 2011).

#### **Basic Research**

# BR-1 A randomized, double-blinded, placebo-controlled study evaluating the efficacy and safety of nabilone as an adjunctive to gabapentin in managing multiple sclerosis-induced neuropathic pain

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Aims: To determine if nabilone – a synthetic oral cannabinoid - is effective at alleviating symptoms associated with multiple sclerosis (MS) - induced neuropathic pain (NPP) when used as adjunctive treatment to gabapentin. Methods: A randomized, double-blind, parallel, placebo-controlled study involving 15 patients diagnosed with MS-induced NPP was conducted using nabilone as an adjunctive therapy to gabapentin. Eligible participants previously stabilized on ≥1800mg/day of gabapentin received an oral upward titration of nabilone

or matched placebo over 4 weeks, to a target dose of 1 mg twice daily which was then continued for an additional 5 weeks. Major outcome measure was the visual analogue scale (VAS) daily pain rating. Results: Adjusting for baseline VAS pain scores, mixed models were conducted to analyze the effect of time and treatment on VAS pain scores. Linear trend decreases in VAS pain scores for the groups were evaluated. A group\*time interaction was also calculated to establish whether a decrease could simply be attributed to the passage of time. It was found that the reduction in VAS pain scores in the groups were significant (p<.001), and there was, in fact, a significant group\*time interaction (p=0.002) indicating that the decrease in VAS pain scores for the nabilone group was significantly greater than the decrease for the placebo control. Lastly, it was noted that the average VAS at the conclusion of the trial (final 10 days of treatment) was significantly reduced in the nabilone treatment group versus the placebo group (p<.001). Treatment with nabilone was well tolerated, with drowsiness and dizziness the most commonly reported side effects. One individual from the trial (active treatment) withdrew early due to adverse effects. Conclusion: Analyses suggest that nabilone may be an effective and well-tolerated adjunctive agent for the management of MS-induced NPP.

### **BR-2** Epinephrine Autoinjectors: Integrity of the Delivery Systems

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Objectives: Injection of epinephrine (E) from autoinjectors (E-autos), is the recommended first-aid treatment of anaphylaxis in community settings. Some patients at risk for anaphylaxis carry E-autos that are outdated. It has been previously reported that E content and bioavailability in outdated E-autos decreased over time (J Allergy Clin Immunol 2000;105:1025-30). This study was designed to evaluate outdated E-autos for integrity of ejection, physical appearance of E solution, and E dose delivery. Methods: EpiPens 0.3 mg, EpiPens Jr 0.15 mg, and Twinjects 0.3 mg, past expiry date, were donated by patients at risk for anaphylaxis in the community after they had obtained replacement E-autos. Anapens 0.3 mg and 0.15 mg, long past expiry date, were provided by Lincolin Medical for evaluation. Each E-auto was fired into a 4 mL tube, and the residual E solution was extracted. Volumes of fired and extracted E solutions were determined gravimetrically. Extracted E solutions were inspected for color intensity. E content in the extracted solutions was measured by HPLC-UV and the doses ejected were calculated. Results: A total of 52 unused Epipens, Twinjects, and Anapens, 0 to 151 months past the expiry date on the label, were studied. E-autos ejected a mean (±SEM) volume of 0.28±0.01 mL. Of the 52 extracted E

solutions, 46 were discolored. Discoloration intensity increased with increasing number of months past expiry date with a correlation of 0.78. Of the 52 E-autos studied, those 18 months or less past expiry date still contained more than 90% of label E dose (*USP* specification, 90-115%). **Conclusion:** E-autos should be replaced as soon as possible after the expiry date stated on the label, to ensure that patients at risk for anaphylaxis have the recommended E dose available for treatment when required. E-autos less than 18 months after expiry date may still contain an acceptable dose. Loss of doses ejected was mainly due to E degradation. Modifications to stabilize E in solution should result in longer shelf-life.

# **BR-3** Development and *in-vitro* evaluation of Modified Release Multiple Unit Matrix Tablets of Metoprolol Tartrate (MT)

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Objectives: Development and In-vitro evaluation of modified release multiple unit matrix tablets for once rather than two times a day. Methods: Ethyl cellulose was dissolved in acetone by stirring at 500rpm with magnetic stirrer. Accurately weighed amount of MT and Castor oil were dispersed in this solution and stirred at the same rate with magnetic stirrer at a temperature of less than 40C. This mixture was rapidly poured into liquid paraffin. The resultant emulsion was continuously agitated at room temperature using propeller stirrer at 1200rpm for 5 hrs and acetone was removed completely by evaporation. The solidify microsphere(MS) were filtered and washed twice with 200ml n-hexane and dried at room temperature for 12hrs. Final MS were stored in a desiccator. The parameter influences on emulsifier type and drug/polymer ratio ,production yield, encapsulation efficiency, particle size, and surface morphology of the MS was evaluated. Suitable MS were selected and tabletted using different tabletting agents, Ludipress, Cellactose80, Flow-Lac100, Avicel ph101 and excipients Compritol888ATO, KollidonSR. Dissolution studies of MS and tablets were carried out in 0.1 N HCl for 2h followed by study in 6.8 pH phosphate buffer using TypeII USP dissolution test apparatus. Stability studies were carried out at 40C temperature and 75%Relative humidity according to ICH guidelines. Results: Span80 and aluminium tristearate were good emulsifying agents for Ethyl cellulose microspheres. All the physical characteristics of microspheres encapsulation efficiency (78.5-98.5%), Production Yield(85.41-96.8%), mean diameter (398.7-510.1µm) was found to be in acceptable range. As a result, two tablet formulations containing 100mg metoprolol tartrate and using either Compritol888ATO or KollidonSR were designed successfully and maintained drug release for 24h with zero order and Higuchi kinetics, respectively. Comparing the dissolution profile of

freshly prepared batches with the dissolution profile of the tablet stored for the three months, the f1value was found to be less than 50% and f2 value was found to be more than 50%. All the physical characteristics of matrix tablet weight variation (514.5ű0.01mg) Hardness (8.79ű1.2kg), Thickness (5.19ű1.2 mm) was found to be in acceptable range. **Conclusion:** Modified release multiple unit tablet formulations of MT were successfully prepared for once rather than two times a day.

### **BR-4** Analysis of BDNF expression in animal model of MS

Wenjun Zhu, Parvez Vora, Emma Frost, and Mike Namaka

The general objective of this research is to explore the role of brain derived neurotrophic factor (BDNF) in multiple sclerosis (MS). Background: MS is a chronic, inflammatory neurological disease characterized by targeted destruction of myelin in the central nervous system (CNS). Studies indicate that demyelination and oligodendrocyte death is mediated by immune cells and by activated parenchymal CNS cells. Current treatment strategies involving the use of glatiramer acetate (Copaxone) for this disease have recognized the importance of BDNF in MS. Methods: A total of 66 adult female Lewis rats were divided into 3 experimental groups: naïve control, active control and active experimental autoimmune encephalomyelitis (EAE). Naïve control animals did not receive any injections. Active control animals received 2 intraperitoneal injections of pertussis toxin (PT) and injections of Freund's adjuvant (FA) and Mycobacterium Tuberculosis. Active EAE animals received the same PT regimen administered to active controls plus full inoculation with FA and Guinea pig myelin basic protein. Comparative, time dependent analysis (day 0, 3, 6, 9, 12 &15) of BDNF gene and protein expression within dorsal root ganglia (DRG) and spinal cord was conducted using immunohistochemistry (IHC), western blot, ELISA, RT-PCR and Real Time-PCR. The results were analyzed statistically with a one way Anova and Tukey's post-test based on two factors (day and group) using software SPSS 16.0. Results: Antigenic induction involving in an EAE model of MS does induce the BDNF gene and protein expression within the DRG reaching significant peak point at day 12 post-antigenic induction relative to the other experimental groups. The ELISA analysis showed significantly up-regulated BDNF protein expression at day 12 post-antigenic induction group in spinal cord but no pronounced overall BDNF gene expression change in spinal cord using Real time PCR. Conclusions: The up-regulated gene expression of BDNF within DRG and subsequent increased protein expression within spinal cord may represent a key element to trigger re-myelination and neuroprotection in the CNS, following antigenic immune activation known to occur during an MS attack.

# **BR-5** Activation of CB2 cannabinoid receptors suppresses cardiac myocyte hypertrophy

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Objectives - Endocannabinoids are bioactive lipids that include amides, esters and ethers of long chain polyunsaturated fatty acids. We previously showed that activation of the endocannabinoid system suppresses cardiac hypertrophy. However, despite significant interest in the endocannabinoid system as a therapeutic target to treat numerous disorders (for example, metabolic syndrome, inflammatory and neuropathic pain, or multiple sclerosis), medicinal use of cannabinoids is limited by psychoactive side effects mediated by neuronal CB1 cannabinoid receptors. Thus, the objective of this study was to determine if selective activation of CB2 receptors is sufficient to prevent cardiac hypertrophy. Methods – The effects of CB receptor ligands on endothelin-1-induced hypertrophy were determined using cultured neonatal rat myocytes. Hypertrophic indicators included myocyte size enlargement, protein synthesis by [3H]-leucine incorporation, and fetal gene expression by brain natriuretic peptide (BNP) gene promoter activity. Results - R-methanandamide, a CB receptor ligand, prevented indicators of cardiac myocyte hypertrophy elicited by endothelin-1, including cell size augmentation, increased [3H]-leucine incorporation, and activation of the BNP gene promoter. The ability of R-methanandamide to suppress endothelin-1-induced myocyte growth was blocked by a selective CB2 receptor subtype antagonist, whereas suppression of fetal gene activation was blocked by a selective CB1 receptor subtype antagonist. These data suggested that CB2 receptor activation might be sufficient to prevent hypertrophic growth of cardiac myocytes. Accordingly, we determined that JWH-133, a selective CB2 receptor agonist, prevented endothelin-1-induced myocyte hypertrophy. Conclusions - Collectively, these findings suggest that selective agonism of CB2 receptors might prevent cardiac hypertrophy while avoiding CB1mediated psychoactive side effects. Thus, a cannabinoidbased treatment for heart disease remains a viable goal with therapeutic potential. Future studies that further investigate the ability of CB2-selective agonists to inhibit cardiac hypertrophy are therefore warranted.

## **BR-6** Hepatocellular study of repellent DEET, sunscreen oxybenzone and their metabolites *Daryl Fediuk*, Yufei Chen, Frank Burczynski, Xiaochen Gu

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Objective: Concurrent application of repellent DEET and sunscreen oxybenzone (OBZ) enhances their disposition in vivo. This study investigated the viability of rat liver cells from exposure to DEET, OBZ and their subsequent metabolites. Methods: Rat hepatoma cell line 1548 was exposed to i) DEET and OBZ, ii) two metabolites of DEET, N,N-diethyl-m-hydroxymethylbenzamide (DHMB) and Nethyl-m-toluamide (ET), and iii) three metabolites of OBZ, 2,4-dihydroxybenzophenone (DHB), 2,2'-dihydroxy-4methoxybenzophenone (DHMB) and 2,3,4-trihydroxybenzophenone (THB), at pre-determined concentrations of 0.1 μg/ml, 1 μg/ml and 10 μg/ml, applied either alone or in combination. The cells were incubated in their respective media for 24, 48 and 72 hours. After each interval of exposure time, the viability of cells was assessed by diluting the wells with WST-1 reagent and measuring the absorbance of each well at 450 nm with a microplate reader. Results: DEET appeared to be more toxic to liver cells than OBZ. DEET at 10 µg/ml decreased cell viability by 8%, 15% and 17% after 24, 48 and 72 hours of exposure, respectively. OBZ at 10 µg/ml also reduced cell proliferation by 15% and 20% after 48 and 72 hours of exposure, respectively. Combined application of DEET and OBZ did not demonstrate more toxicity than their individual counterparts. ET was the most toxic DEET metabolite; cell viability was reduced by 9% and 34% from exposure to ET at 10 µg/ml after 48 and 72 hours, respectively. DHB appeared to be the most toxic OBZ metabolite; cell viability declined by 24% and 35% from exposure to DHB at 10 µg/ml after 48 and 72 hours, respectively. Combined exposure to all metabolites at 10 μg/ml for 72 hours led to a substantial 48% decrease in cell viabilities. Conclusion: Hepatoma cellular studies indicated toxicity from exposure to DEET, OBZ and their metabolites, in particular at 10  $\mu g/ml$  for 72 hours. Since DEET and oxybenzone mutually enhance their percutaneous permeation, the relationship between longterm exposure to these chemicals and potential hepatotoxicity should be further investigated. Accepted for presentation at 2011 CSPS Annual Symposium from May 24-27, 2011 in Montreal, QC

### **BR-7** Staphylococcus aureus harbouring Enterotoxin A as a possible risk factor for multiple sclerosis exacerbations

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Background: Staphylococcus aureus may produce superantigens that can non-specifically activate CD4b cells to potentially target the myelin basic protein. Objective: This study examined the association between individuals with multiple sclerosis (MS) and colonization with S. aureus harbouring superantigens. Methods: Nasal swabs were collected from non-MS subjects and patients with MS who had not experienced a relapse in the past six months (MS stable group) and who had suffered a relapse within 30 days of study recruitment (MS exacerbation group). S. aureus was isolated from the anterior nares of participants following standard procedures and staphylococcal superantigen genes (sea, seb, and tsst-1) were detected using standard laboratory PCR techniques. Results: The study enrolled 204 patients, 80 in the non-MS and MS stable groups and 44 patients in the MS exacerbation group. Overall, 27.0% of patients were colonized with S. aureus with no significant differences identified between study groups. Amongst individuals colonized with S. aureus, the prevalence of sea was significantly greater in the MS exacerbation versus non-MS study group (p<0.05; odds ratio 7.9; 95% confidence interval 1.2-49.5). Conclusions: The ability to rapidly screen patients for the presence of S. aureus producing sea may serve as a useful marker of a potential MS exacerbation.

### **BR-8** Emerging roles of Methyl CpG binding Protein 2 (MECP2) in myelination of brain

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OBJECTIVE: To investigate myelin specific gene expression levels in the brain of a MeCP2<sup>null</sup> transgenic mouse.

METHODS: Quantitative RT-PCR: Total RNA was isolated from brains of female MeCP2<sup>null</sup> mice and age-matched wild-type controls. Gene expression in different areas of the brain was performed using SYBRGreen RT-PCR kit. Cell Isolation: Mixed glial cultures were prepared from P0 rat pup cortices. Oligodendrocyte progenitors(OPs) were shaken free of the underlying astrocyte layer and microglials.Western Blot(WB): Cells were lysed, boiled for 4 minutes and loaded on an 8% polyacrylamide gel. Proteins were transferred to PVDH membranes and probed with polyclonal anti-MeCP2 antibody. Bands were visualised using HRP-conjugated secondary antibody.

Immunocytochemistry(IHC): MeCP2 expression was visualised using a FITC conjugated secondary antibody. Images were captured using Image Pro 7.0 via an inverted Olympus IX51 fluorescent microscope with RETIGA 2000RV monochrome camera attached to an imaging station. **RESULTS:** Both, astrocytes and OPs express MeCP2 protein, as confirmed by WB and IHC. Further, the myelinspecific genes, myelin basic protein (MBP), myelin associated glycoprotein (MAG) genes, proteolipid protein (PLP) and NG2 show differential gene expression in MeCP2<sup>null</sup> mouse compared to the wild type in various areas of the brain including forebrain, midbrain and cerebellum. CONCLUSION: The myelin related proteins play very important roles in regulation of OL differentiation and subsequent formation of the myelin sheath. Their expression pattern change as the OLs progress through distinct stages of development. Our results show that the gene expressions of these proteins are dysregulated in transgenic mice lacking functional MeCP2. We hypothesis that MeCP2 regulates a complex series of events, important for normal myelin formation. Understanding the role of MeCP2 in regulation of normal CNS development may eventually lead to earlier diagnosis and preventive measures of various white matter disorders like Multiple Sclerosis (MS).

### **BR-11** Porphyrin Complexation: An Approach in Porphyria Therapy

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**Objectives:** The primary focus of this study is to explore the molecular complexation mechanism of chloroquine binding with protoporphyrin IX (PPIX). As a treatment option for chronic cutaneous porphyrias, in particular, the binding mechanism is poorly understood. Previous studies have focused on the complexation mechanism in aqueous media which is probably inappropriate because of the hydrophobic nature of both molecules. We propose a study of complex formation in vitro between excess chloroquine with PPIX in two hydrophobic media: 50:50 acetone / dichloromethane mixed-solvent system; and aqueous micellar dispersions of the nonionic detergent Triton X-100<sup>R</sup>. **Methods:** Optical absorption difference spectroscopy has been utilized to measure complex formation between PPIX and chloroquine in the above hydrophobic media. Some data was also measured for other PPIX-acceptor molecules for comparison purposes. Both Benesi-Hildebrand and Hill plot analyses were utilized for the determination of the equilibrium dissociation constants (K<sub>D</sub>) of the PPIX complexes with each acceptor. The analysis was carried out for the highly sensitive porphyrin Q-bands in the PPIX visible absorption spectrum. **Results:** Besides chloroquine, other PPIX-acceptor systems included separate experiments with quinine and duroquinone. Duroquinone (with no basic amine) formed a very weak PPIX complex ( $K_D \sim 1.0 \times 10^{-1} M$ ). Quinine also

formed a weak PPIX complex ( $K_D \sim 3.8 \text{ x} 10^{-2} \text{ M}$ ) compared with the significantly stronger PPIX-chloroquine complex  $(K_D = 6.3 \times 10^{-5} M)$ . For the latter complex, the Hill plot analysis gave a theoretical PPIX:chloroquine stoichiometry of 1:1. However, there was evidence that specific molecular conformational adjustments were required for complete complex formation. Conclusions: This study points to the importance of the in vitro measurements in hydrophobic media to determine the binding affinities for the PPIX-acceptor complexes as a measure of each acceptor molecule's potential for efficacy in porphyria therapy. We suggest that stronger PPIX-acceptor molecules will likely be better agents for porphyria therapy, and further studies will focus on a wider range of aromatic acceptor structures that also contain basic amines.

### **BR-12** Establishing a nonalcoholic fatty liver disease cell culture model

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Objectives: Nonalcoholic Fatty liver disease (NAFLD) is increasingly being recognized as a major health burden in Western countries. The principle feature of this disease is excessive lipid accumulation in the form of lipid droplets in hepatocytes. The increased lipid load results in increased production of reactive oxygen species (ROS) and a state of oxidative stress. Establishing a relatively low-cost and efficient NAFLD model is particularly useful in understanding the relationship among lipid metabolism, host defenses, and ROS generation. Methods: Rat hepatoma cells (1548) were treated with oleate and palmitate mixture (2:1) in presence of 3% albumin. Cells were treated with 0, 0.5, 1, 2, and 3 mM of fatty acid mixture for 24 and 48 hrs at 37°C. Cytotoxicity was determined using the WST-1 assay. Intracellular lipid droplets were investigated using optical microscopy and were further stained and quantitated by Nile Red. Dichlorofluorescein (DCF) was used to assess the extent of reactive oxidative species (ROS) in the liver cells. Results: Measuring lipid cytotoxicity using WST-1 showed statistical decreases in cell viability as lipid concentrations were increased. As expected intracellular lipid droplets showed a dose-dependent accumulation with increased concentrations of fatty acids. As lipid droplets increased there was a statistical increase in ROS levels as quantitated by the DCF assay. At 3 mM concentration of the fatty acid mixture, the lipid load was sufficient to damage hepatocytes resulting in cells to detach from the culture plates. Conclusion: An NAFLD cell culture model was established. It revealed the major feature of this disease was lipid droplet accumulation and elevated ROS levels.

This model can be further used as an *in vitro* platform for assessment of therapeutic strategies for NAFLD.

### **BR-13** Bethoxazin is a potent inhibitor of DNA topoisomerase II

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In this study, we have investigated the cytotoxicity and topoisomerase II inhibitory activity of bethoxazin with a view to developing the compound and its analogs as novel anticancer agents. Bethoxazin is an oxathiazine oxide currently used as industrial microbicide. It exhibited growth inhibition of K562 leukemia cells with IC<sub>50</sub> values in the low to submicromolar range, and it also potently inhibited the decatenation activity of DNA topoisomerase IIα. Bethoxazin reacted rapidly with molecules containing free sulfhydryl groups such as glutathione (GSH) and human serum albumin at physiological pH to form covalent adducts that were detectable by mass spectrometry. Sulfhydryl binding was confirmed to be the major route of reaction because bethoxazin was found to be relatively stable toward amino, carboxylate, phenolate, and phosphate groups containing compounds at physiological pH. The results suggested that bethoxazin is electrophilic and may exert its cytotoxicity by reacting with free sulfhydryl groups of biomolecules. Consistent with this view, the inhibitory activity of bethoxazin on topoisomerase II may be due to its ability to react with critical free cysteine sulfhydryl groups on the enzyme. However, the compound had no activity in a topoisomerase II-mediated DNA cleavage assay, indicating that it does not act as a topoisomerase II poison. Bethoxazin had little effects on the cytotoxicity of K562 leukemia cells with lower levels of GSH caused by buthionine sulfoximine treatment. The results suggested that protein/topoisomerase II inhibition by sulfhydryl binding of bethoxazin may be a more likely mechanism of action than cellular GSH depletion. In conclusion, due to its potent cytotoxicity and topoisomerase II inhibitory activity, the development of bethoxazin and its analogs as potential anticancer agents is warranted.

# **BR-14** D-galactosamine induced bone morphogenetic proteins-2/4 expression and LDH release in rat hepatoma cells

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**Background:** Bone morphogenetic proteins-2/4 is a cytokine belonging to transforming growth factor superfamily that was originally identified as proteins capable of inducing ectopic cartilage and bone formation when injected into skeletal muscle. They are considered to

play an important role in tissue engineering throughout the body. In hepatic injury the liver is unable to perform its normal synthetic and metabolic function, leading to acute or chronic liver failure. When fulminating hepatic necrosis occurs, mortality rates have been reported as high as 95%. It has been demonstrated certain BMPs may have positive effects on liver regeneration and several BMPs such as BMP4 and BMP2 may play a role in the liver. However, their function in the liver still remains unclear. Dgalactosamine (D-gal) is a highly selective hepatotoxin frequently used in animal experiments to induce diffuse liver damage resembling hepatic failure. In the current study, we employed D-gal and a rat hepatoma cell line to investigate the expression of BMP2 and BMP4 in D-gal treated rat hepatoma cells. Method: rat hepatoma cells (1548 cells) were cultured in MEM supplemented with 5% FBS and treated with different concentrations of D-gal for different time intervals. Cell injury (LDH and WST-1 assays) was examined. RNA and proteins were extracted for examination of BMPs2/4 expression by RT-PCR and western blot analyses, respectively. Results: D-gal induced LDH release in 1548 cells which increased with increased D-gal concentrations. Similar results were observed when cells were examined using the WST-1 assay. The abundance of BMP2 and BMP4 were increased after treatment of D-gal for 3, 6 and 12 hours and the increase in BMP2 and BMP4 was dose-dependent. Levels of BMP2 and BMP4 mRNA level returned to that of control 24 hours after D-gal treatment even with the higher concentration of D-gal (40mM) used. Conclusion: D-gal could induce both hepatoma cell injury and the expression of BMPs2/4, which indicates a role of BMPs2/4 in liver injury.

### **Education and Teaching Research Abstracts**

### ETR-1 Immunization and Injections Training for Pharmacy Students in Alberta

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Objectives: In Alberta, new Standards of Pharmacist Practice allow pharmacists to administer vaccines and drugs by injection. Pharmacists must complete a post-licensure continuing education (CE) program approved by the Alberta College of Pharmacists (ACP) Council prior to receiving authorization to administer drugs by injection. We describe a program developed to prepare undergraduate pharmacy students to administer vaccines and drugs by injection. Methods: In order for the injections training program to be considered for approval by ACP, the program must enable pharmacists to acquire theoretical knowledge related to the administration of drugs by injection and acquire competent skills to

administer injections. In 2010, the Faculty of Pharmacy submitted a request to ACP to recognize training offered to third year pharmacy students as an approved training program. The following were proposed: • Knowledge competencies were mapped to the undergraduate pharmacy curriculum including knowledge about vaccines. • An additional voluntary knowledge-based exam and practical skills training would be offered to 3rd year pharmacy students. Pharmacists authorized to administered drugs by injection were recruited to evaluate pharmacy students. Each student had to demonstrate competency to prepare and administer a subcutaneous and intramuscular injection. The proposal was approved by ACP at the council meeting in spring 2010. Results: Out of 130 pharmacy students in the third year class, 108 (83%) completed the knowledge based exam and practical skills training in spring 2010. These students are permitted to administer drugs by injection during clinical rotations under the supervision of pharmacists with authorization. The students will be eligible to apply for authorization to administer drugs by injection following graduation and licensure in 2011. Conclusions: Undergraduate pharmacy students with injections training can actively participate in influenza clinics and other injections services during rotations. Following graduation, these individuals will be able to incorporate injection services into their practice in a timely manner. Will be presented as an oral presentation at the CphA annual conference, May 30, 2011.

# ETR-2 Maplestone Collaborative Learning Center (CLC): An academic learning site for interprofessional education – report of a learning partnership

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Objectives: The Maplestone Collaborative Learning Center (CLC), a partnership between Shannex, a family-owned long term care (LTC) provider in the Maritimes, and Dalhousie University, was developed in 2010 to promote a positive change in attitude towards LTC and care of the elderly and set the standard for client-directed, collaborative care in this setting. Through collaboration among health professionals, researchers, educators, learners, clients and their families, the CLC will enhance the preparation of new health professionals for collaborative practice and explore current issues in LTC policy and practice. Methods: At Maplestone Enhanced Care a provincially-licensed LTC facility in Halifax, Shannex has provided space, project planning, staff resources and

formalized partnerships with Dalhousie's Faculty of Health Professions and Department of Family Medicine. Health professional education programs, including the College of Pharmacy, have supported the CLC's development through the provision of faculty time, expertise and learners. Results: In January and February 2011, two fourth year pharmacy students were members of the second interprofessional student team project as part of an advanced pharmacy practice rotation. The students participated in team building activities and worked together with a Maplestone client to develop an interprofessional care plan. The interprofessional student team discussed its experiences and the care plan in a presentation to the client and Maplestone team and recommendations were implemented to continue to provide optimal client care. Conclusions: Maplestone is the first LTC facility in Atlantic Canada to serve as this type of academic environment. Continuing this partnership could lead to expansion to other Shannex facilities, possibly improving the capacity to provide quality interprofessional education clinical learning sites for Dalhousie University health professional students.

### ETR-3 Change in Attitudes and Perspective Among Health Care Learners in a Pilot Interprofessional Training Model in a Primary Care Memory Clinic

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**Objectives:** The primary objective of the this study was to investigate how practice-based inter-professional learning opportunities shift attitudes of health care learners, particularly family medicine residents, social work interns and undergraduate pharmacy students, in a primary care memory clinic. Methods: Twenty-two pharmacy, medical and social work learners were interviewed in discipline specific focus groups to baseline their preconceived ideas and attitudes on working with different disciplines. The learners were then placed into six inter-disciplinary teams and participated in memory clinic assessments. Upon the completion of 6 clinics, the teams of inter disciplinary learners were interviewed using focus groups to capture how their experience differed from earlier preconceptions. Transcripts from the pre and post focus groups were audiotaped and analyzed using thematic coding. Results: Several significant themes emerged to suggest a shift had occurred as a result of the experiential inter-professional training. Pre-conceived attitudes among pharmacy students included confusion about the role of each member of the team, concern of hierarchy (leadership by the medical resident in decision making),

and tasks being discipline specific. Post inter-professional training and experience challenged these earlier attitudes. Leadership and decision-making was fluid and multiple between the disciplines, specific to the patient case. A high appreciation and usage of the skill sets of other learners resulted in the sharing of tasks. Boundaries between discipline roles were blurred versus distinct. Lastly, there was heightened awareness of how interprofessional teamwork created a seamless experience for the patient. Conclusion: Inter-professional education encourages learners from different health disciplines to learn "with, from and about each other." Practice-based inter-professional learning opportunities offers learners "real world" experiences in the provision of collaborative care by inter-professional health care teams. Furthermore, experiential inter-professional learning encourages de-construction of pre-conceived negative ideas and expectations of other disciplines.

## ETR-4 "Happy Together": Integrating Medicinal Chemistry and Pharmacy Practice in Year 1

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**Objective:** This action research study explores recent integration efforts between two required first year courses in a BSc(Pharm) program: a medicinal chemistry course focused on physicochemical properties of drugs and a pharmacy skills laboratory/tutorial course. Specifically, we evaluate an initiative to incorporate a set of chemical structures from a "Top 200" drug list into the design of each course, intended to reinforce the relevance and importance of drug structure and medicinal chemistry principles in a pharmacist's knowledge base. This initiative is an example of curricular integration being facilitated by the Faculty's newly-appointed Program Director and Year Coordinators, contributing to efforts to optimize the program to meet the Blue Print for Pharmacy's vision of "optimal drug therapy outcomes for Canadians through patient-centered care." Methods: A range of qualitative data, including Minutes from Director-Year Coordinator meetings, course materials, and instructor observations and reflections, was used to examine the impact of course integration on the course design, teaching, and learning in each course involved. This integrative effort was characterized using Harden's ladder of integration. Results: This first attempt at integrating medicinal chemistry and pharmacy practice courses is an example of "harmonization" on Harden's ladder. The Program Director and the First Year Coordinator provided a conduit of communication, facilitating the integration process. The inclusion of common drug structures in each course was a source of relevant examples for lectures, examinations, assignments, and case studies. Instructor reflections on inclass discussions indicated enhanced student learning in both courses. **Conclusions:** Establishing processes for ongoing curriculum revision have important implications for curriculum design, particularly horizontal and vertical integration. The integration of medicinal chemistry and pharmacy practice enhances both teaching approaches and student learning. Similar integrative efforts throughout the program are worth pursuing, with the ultimate goal of assisting students develop conceptual frameworks for problem solving that draw upon the full range of their knowledge.

### **ETR-5** Tutor-less Model of Small Group Problem-based Learning in a Large Class

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Objectives: To develop, implement and evaluate a tutorless model of small group problem-based learning (PBL) that includes elements of team-based learning (TBL) in a large class. This tutor-less model was developed in order to address the issues of increased class size while trying to cost contain and simplify schedules and administration. Barriers to the process are identified and solutions offered. Methods: In order to achieve defined entry-to-practice outcomes a series of PBL courses have been incorporated into the four-year pharmacy program at UBC. For the final year of this course, a tutor-less model was developed and implemented. During the tutorial portion of the course, students engage in small group discussions to develop their skills to resolve real-life cases in a team environment. Further, students participate in TBL activities as part of the learning process. These tutorials have been held in a large classroom with up to 16 teams of six students with one instructor available to provide instructions and direction to each group as well as facilitate large class discussions. Results: Achievement of individual student learning of content was evaluated as successful using multiple-choice exams. Team-based learning was also evaluated using the same multiple-choice exam, team assignments and peer evaluations. Regular and ongoing formative assessments supported student engagement and success. Students consistently performed 13% better as teams than as individuals. Students also reported satisfaction with this tutor-less model. Barriers to the process included difficulty procuring appropriate and large enough space for the twice-weekly three-hour time slots necessary for PBL. Conclusions: Implementation of a tutor-less PBL course including TBL methods in the final year of an entry to pharmacy practice program resulted in students achieving the learning outcomes in an interactive and engaging atmosphere. Adherence to a process involving much formative assessment was necessary for the students to feel engaged and empowered. Procurement of appropriate teaching space was challenging, but overcome by using a large lecture theatre that accommodates three times the number of students in the room.

# ETR-6 A spring planting of peer teachers within an early hospital experience elective: Measuring the success of the pilot plot

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Objectives: To describe outcomes of a pilot where fourth year pharmacy (Structured Practical Experience Program -SPEP) students engaged in peer teaching (as co-guides) of second year students during an early hospital experience (EHE) elective course. Methods: Upon EHE conclusion, EHE students, SPEP peer teachers and supervising pharmacist preceptors/guides will be surveyed using an online questionnaire to determine: participation rate; SPEP student time investment; SPEP student-guided learning activities; peer teaching model effectiveness peer teaching model detractors; effect on SPEP students' inclination to future educator role EHE student reflections and SPEP self and preceptor assessments (to date) were reviewed for themes pertaining to peer teaching. Results: Mid-way data from only EHE student reflections and SPEP performance assessments estimate 8 SPEP students guided 9 EHE students which equates to a 17.4% SPEP uptake rate. Forty-six SPEP students were simultaneously present at the 17 hospital sites of 71 EHE students. Overall, 8/238 (3.4%) and 9/114 (7.9%) of total SPEP and EHE enrollees participated. Only 4 of the 8 SPEP students involved had complete performance assessment of this activity documented. The average score for these assessments was "good" (self and preceptor assessment). SPEP students explained and demonstrated a myriad of professional skills and led discussions on the role of the hospital pharmacist. Only 4 EHE student reflections indicate an SPEP student peer taught him or her. In May, 2011, data from remaining assessments, reflections and all survey data will be collected and analysed for the final poster presentation. Conclusions: Preliminary results indicate: SPEP student co-guides performed well in their role Promotion of peer teaching is required to improve uptake Detailed instructions for SPEP student performance assessment and documentation of such are required EHE reflection instructions should prompt participants to consider the effect of 4<sup>th</sup> year student peer teaching.

# ETR-7 Facilitating interprofessional student teaching of ambulatory assistive devices for undergraduate pharmacy students

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**Objectives**: The purpose of this study was to evaluate the integration of an interdisciplinary instructional module for ambulatory assistive devices (canes, crutches, walkers) for

pharmacy students. Methods: This 2 year study involved  $\mathbf{3}^{\mathrm{rd}}$  year pharmacy students enrolled in the Bone and Joint module. In year 1, pharmacy students were divided into groups of 10-12 and given instruction by one graduate physical therapy student. In year 2, pharmacy student groups of 3-4 were assigned to a group of 2-3 physical therapy students. Upon providing consent, pharmacy students completed a pre-post written evaluation to assess knowledge, background, experience, and attitudes toward the pharmacists' role in AAD fitting and counseling. Evaluation also included student feedback, examination scores, assistant feedback, and instructor review. Results: In both cohorts, 236 students participated. A total of 146 (62%) were female, and 77% (n=174) were under 25 years of age. Sixty-one students (25%) reported a previous degree, and 199 (84%) had community pharmacy experience. The first cohort of students (n= 116) scored 3.5 (SD 1.54) out of 10 on the pre-test, and 7.1 (SD 1.27) on the post-test. In second cohort (n=107), students scored 2.7 (SD 1.42) on the prerest, and 6.6 (SD 1.42) on the post-test. A total of 88% (n=207) pharmacy students reported their pre-test level of confidence was 'somewhat' to 'very' uncertain in assisting clients with AAD. After the module, 90% (n=212) felt 'somewhat' to 'very' certain about assisting clients. Physical therapy students reported being pleased with the exercise, and a sense of affirmation in teaching another discipline. Conclusions: An interdisciplinary teaching exercise can successfully improve pharmacy student knowledge and skills and confidence in regards to the use of AAD.

# ETR-8 The parallel presentation of pediatrics and geriatrics in a combined undergraduate pharmacy course

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Objectives: To describe the common features of pediatrics and geriatrics as special populations that can be taught in parallel in a single course. Methods: The second year undergraduate course "Special Populations" was introduced in 2005 as part of the new curriculum. The course title was later changed to "Pediatrics & Geriatrics". The course was structured to allow equal content between both population groups, and to focus on similar topics tailored for that patient population. Themes and common topics were identified by the instructors and are presented descriptively. Results: The course has run for 6 years, with the first portion focusing on geriatrics and the second on pediatrics. The lectures are taught with a common sequence, starting with definitions, justification for each age group as a unique population, and contrasting these groups to a typical adult population. Further didactic content includes medication safety and increased vigilance for these vulnerable populations, toxicology/ pharmacology, and pharmacokinetic/pharmacodynamics

differences. Unique disease states or syndromes are presented, including falls in the elderly, and febrile seizures in pediatrics. Seminar content that is parallel includes the increased use/interaction with social supports, such as home care (geriatrics) and community support (pediatrics). Other seminar topics with parallel content include abuse, unique communication needs, and one joint seminar on cultural competence. Contrasts between the groups are also discussed and include more of a focus on stereotypes and ageism for geriatrics, and economic impact of an increasing geriatric population. In children autism is discussed. **Conclusions:** The topics of pediatrics and geriatrics have a number of common features that readily support the development of a single course.

### ETR-9 Development of an Integrated Evaluation for Assessing Patient Simulations

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**Objectives:** This study describes how we developed an integrated assessment method for patient simulations. Traditionally, communication and patient care skills are taught and evaluated separately. The simulation evaluation focused on product knowledge and problem identification/resolution. Pharmacy practice balances clinical knowledge with communication skills; therefore we intended to create an assessment method which mirrored that. We describe the evolution of an integrated simulation evaluation approach. Methods: Faculty responsible for teaching communication skills and the lab coordinators from first and second year reflected on the assessment criteria for clinical knowledge, patient care process, and communication skills, which were in place since the introduction of a new curriculum in 2004. Collaboratively, components of the care process and communication skills were identified, and integrated based on each section of the evaluation (i.e. opening; medical/medication history and chief complaint; creating and implementing a care plan; follow-up; and closing). A rubric was developed for each section, which incorporated simultaneous assessment of clinical knowledge and communication skills. The intention was to create consistency and transparency of the assessment criteria, while maintaining the facilitators' judgement on the quality of communication skills. Results: Initially, an evaluation form with a five point scale was trialed in first year. This evolved and expanded to the first three years of the program, and includes two documents: Base evaluation form, which is adapted to each simulation's content and learning objectives. Four point marking rubric, which guides assignment of marks to each section of the evaluation. This approach has been formally introduced and reviewed with each class, and has been applied to 27 simulation labs and three OSCE exams. Students and facilitators have reported improved

consistency in the feedback given. These forms have also simplified the training of new facilitators, and added transparency to the expectations for the students.

Conclusions: This universal, yet flexible simulation evaluation approach has been able to unify assessment of students' patient care and communication skills.

### ETR-10 Digital lecture recordings: Patterns of use and value in learning

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Objectives: This study examined pharmacy students' usage and opinions of digital recordings of lectures in the majority of 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> year required courses in the 2010/2011 academic year. The research questions addressed were: 1) What are the patterns of usage of the lecture recordings? and 2) What is the value of lecture recordings to students? Methods: Digital recordings were made of lectures conducted in one classroom where the technology became available in 2010. The recordings included an audio component (the instructor's voice), sequenced with a visual component (normally, the image projected onto one of two presentation screens). Students had access to the recordings through a passwordprotected website. Student accesses to the recordings were documented to assess frequency, duration, and time of day/week/month of viewing. An on-line questionnaire was administered to 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> year students (n=449) to assess their awareness, usage, opinions, and preferences regarding the recordings, and to assess how the recordings supported students' learning and affected in-class attendance, participation, and note-taking. Results: As of March 30, students had accessed 282 recordings 12,459 times, at all hours of the day, with a total viewing time exceeding 9,500 hours, and 200 students (45%) had responded to the questionnaire. Of these, 92% had accessed at least one recording, with the majority accessing between 2 and 20 recordings. Common reasons given for using the recordings included studying for exams (78%), reviewing material missed in class (85%), reviewing difficult concepts (78%), and catching up on material missed due to absence (79%). Having access to the recordings did not appreciably affect attendance, participation, or note-taking in class. 94% of respondents felt the recordings enhanced their learning and 100% favoured continuation of this program, with 56% indicating a mobile version would be useful. Updated results will be reported in June 2011. Conclusions: Students are making appropriate use of digital recordings of lectures and find them a valuable learning resource.

### ETR-12 Before formal pharmacy education: Options for a person aspiring to be a pharmacist in the Maritimes prior to 1911

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Background: Formal pharmacy education in the Maritimes began in September 1911at the Nova Scotia College of Pharmacy (NSCP). This 100 year milestone has stimulated interest in early pharmacy education in the Maritimes. **Objective:** To determine how individuals acquired the knowledge necessary to become a pharmacist in the Maritime Provinces prior to the opening of the Nova Scotia College of Pharmacy in 1911. Methods: The topics of pharmacy education, pharmacy practice, apprenticeship, and registration requirements were searched as they relate to the Maritimes in the timeframe of 1867 through 1911. Meeting minutes and the original Pharmacy Acts from the New Brunswick Pharmaceutical Society (NBPS), the Nova Scotia Pharmaceutical Society (NSPS) and the Prince Edward Island Pharmaceutical Association were searched. As well, early pharmacy journals, pharmacy history texts and material from the Dalhousie University Archives were searched. Additional historical literature related to these topics was found through online searching. Results: Several options were available to individuals wishing to become pharmacists. Apprenticeship under a druggist or dispensing physician was usual practice. It was also possible to attend a college of pharmacy in other parts of Canada or the United States and to take correspondence courses. The Halifax Medical College sporadically offered a Master of Pharmacy course in the late 1800s. With incorporation of provincial pharmacy regulatory bodies, individuals apprenticing were required to pass the examinations and meet the registration requirements of their respective society. NBPS provided instruction in Saint John and NSPS conducted night classes in Halifax and Sydney with the aim of helping individuals pass the examinations and become registered. Conclusion: Knowledge required to become a pharmacist in the Maritimes prior to NSCP could be acquired in several ways. This research provides insight into and appreciation for the early days of pharmacy in the Maritimes.

### ETR-13 Development of an interprofessional simulation involving pharmacy students

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**Objective:** An interprofessional simulation day was organized by the Interdisciplinary Health Education Partnership (IHEP). The IHEP team invited health professions programs and faculties to participate by developing and delivering a simulation to improve competency in interprofessional communication and teamwork. The Faculty of Pharmacy and Pharmaceutical Sciences at the University of Alberta accepted the invitation. The objective was to conceptualize, design and

deliver a simulation, which allowed pharmacy students and other health disciplines to work together to meet the learning objectives of resolving interprofessional conflict and balancing priorities. Methods: A. Simulation Development Process: 1.)Reviewed Canadian Patient Safety Institute's Safety Competencies and Canadian Interprofessional Health Collaborative's Stronger Together documents to determine interprofessional learning objectives. 2.) Developed a clinical scenario incorporating pharmacy technician, nursing, and speech language pathology students focused on interprofessional skills (rather than clinical knowledge). 3.)Discussed scenario with colleagues, both internal and external, to ensure scenario was realistic and plausible. Suggestions for improvement or expansion of the simulation were sought. 4.) Created a debriefing guide and a "debrief of the debrief" guide for the simulation facilitators. 5.) Piloted the interprofessional simulation during the simulation day B. Simulation Pilot: Each student team was engaged in a discussion of their learning in the simulation. Both the simulation and debriefing were videotaped. Students also provided written qualitative feedback on their experiences in the simulation as well as their perceptions of their own learning. Results: This poster presents the simulation that was developed. It also summarizes student feedback regarding their learning in the simulation as well as a preliminary analysis of the interactions between the students. Students reported engagement in the learning process and insight into the complexities of interdisciplinary conflict including the importance of understanding the challenges facing colleagues from other disciplines. Conclusion: The development of an interprofessional simulation involving pharmacy students enabled each student to practice their teamwork skills and reflect on the various roles and challenges faced by each professional.

### Pharmacy Practice Research Abstracts

### **PPR-1** Immunization training: preparing pharmacists for an expanded scope of practice

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**Objectives:** Immunization rates for vaccine preventable diseases are not at optimal levels for many patient populations in Canada. Among the strategies suggested to improve these rates is the training of non-traditional immunization providers to administer vaccines safely and effectively in their practice settings. We report on a competency based program, the Dalhousie University

Continuing Pharmacy Education Immunization and Injection Administration Training Program (IIATP) that was utilized to train pharmacists to become immunizers. Methods: IIATP consists of an online competency based immunization program and a full day certification workshop. Enrollment in IIATP began in the Fall of 2009. In the Spring of 2010, participants were asked to complete a brief anonymous online survey after completion of the program. Results: Of the 231 pharmacists who have enrolled in the program, 228 have successfully completed all components. Eighty-seven pharmacists completed the survey. Most respondents (91.9%) practice in community pharmacy. Over 23% have been authorized to inject medications in their province (New Brunswick). The others are awaiting legislation in their respective provinces. Of the 20 pharmacists authorized to inject, 11 have administered a medication by injection (including vaccines). Over 63% (52) of respondents have reported being actively solicited by their patients on a daily to monthly basis to administer immunizations. Nearly 83% of respondents agree or strongly agree that they feel prepared to administer immunizations. Conclusions: Our results show that the majority of pharmacists who have completed IIATP are ready to expand their scope of practice to include administration of immunizations against vaccine preventable diseases. Poster was previously presented at the 9<sup>th</sup> Canadian Immunization Conference in Quebec City, PQ, December 6 and 7, 2010, but has not been published.

### PPR-2 Knowledge and beliefs about the Emergency Contraceptive Pill: Comparison of survey results between pharmacists and women in Nova Scotia

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Objectives: In 2005, levonorgestrel (Plan B ), an emergency contraceptive pill, became available as a Schedule II product. The objective of this research was to examine Nova Scotia (NS) pharmacists' perceptions about Plan B as compared to women's knowledge and beliefs. Methods: A 25 item paper questionnaire was mailed to pharmacists licensed to practice in NS using a modified Dillman tailored design method. Data was obtained from NS women using a random digit dial 19 item telephone survey. Descriptive statistics were generated for both surveys and results compared. Results: The response rate was 53% (595/1123) for the pharmacists, while 770 women responded to the telephone survey. Of the 451 pharmacists who work in community pharmacy, 93.6% provided Plan B since 2005. Based on their experience, pharmacists believed that only a few (1-25%) women know correct information about pregnancy risk and when Plan B is most effective. However, results from the women surveyed showed that most (51-100%) did know when they are most at risk of pregnancy and when Plan B is most effective. Pharmacists and women, respectively, were both concerned about: lack of privacy in the pharmacy to discuss Plan B (45.2% vs. 67.4%), women being uncomfortable speaking to a male pharmacist about Plan B (37.7% vs. 33.8%), and Plan B costing too much (28.5% vs. 37.6%). Approximately 76% of pharmacists felt that Plan B should be Schedule II, while 49.3% of women felt the same. **Conclusions:** When providing Plan B pharmacists should be aware of their own beliefs and perceptions about women's knowledge that may influence how they approach assessment and counseling. Female pharmacists and private counseling areas should be available in pharmacies to address concerns about speaking with a male pharmacist and lack of privacy in the pharmacy. (some material presented at 2010 Dalhousie Pharmacy Refresher & PANS/NSCP Annual Conference, October 16, 2010.)

#### **PPR-3** The Pharmacists Clinic

Sandy Mok<sup>1</sup>, James McCormack<sup>1</sup>, Alan Low<sup>1</sup>, and Tessa Nicholl <sup>1</sup> <sup>1</sup>Faculty of Pharmaceutical Sciences, University of British Columbia

Objectives: The Pharmacists Clinic (PC) is a pharmacist-run patient-centered consultation clinic to be launched in the Faculty of Pharmaceutical Sciences at UBC. The PC will demonstrate pharmaceutical care, as outlined in the implementation plan for the Blueprint for Pharmacy. This clinic aims to serve as a patient-centered care model for pharmacist-run clinical services and as an experiential training site for entry to practice students, residents, and practicing pharmacists. Methods After preliminary information gathering of physician-referred patients, pharmacists will conduct patient and drug therapy assessments, educate patients regarding the risks and benefits of their drug therapies, while incorporating the philosophy of informed shared decision-making. The clinic will have 5 consult rooms with workstations and some with examination beds. Other rooms include a meeting room for patient and family education, as well as a "Hub" room for professional peer interaction. Evaluation of the operations of the clinic will also be carried out to continually enhance the capacity of the clinic to provide a seamless patient-centered care. In order to serve as a viable model as a pharmacist-run clinic, we are procuring the first pharmacy licence in British Columbia that is without product sales. A pharmacy licence is required to participate in the reimbursement of clinical services offered through Pharmaceutical Services Division of BC. An online documentation tool hosted on OSCAR/MyOSCAR, which is an open-source software used by clinicians across Canada, will assist pharmacists in the documentation and sharing of patient information with the patient and other healthcare providers. Results Besides having unique

experiential opportunity, the clinic will be a training center for students, practicing pharmacists, and other healthcare professionals. As ongoing innovations continue to advance the clinic, there will be increasing opportunities for group education classes for patients, inter-professional education opportunities, and continual delivery of patient-centered care. **Conclusions** The PC will serve as site and a model for patient-centered care and education opportunities for all levels of entry to practice students, practicing pharmacists, as well as other healthcare students and professionals.

### **PPR-4** Why are some people healthy and others not?

Laura MacDonald<sup>1</sup>, Leslie Johnson<sup>2</sup>, *Nancy Kleiman*<sup>3</sup>, Doug Brothwell<sup>4</sup>, Sheryl Sloshower<sup>5</sup>, Moni Fricke<sup>6</sup> (Dental Hygiene, University of Manitoba)<sup>1</sup>, (Occupational Therapy, University of Manitoba)<sup>2</sup>, (Pharmacy, University of Manitoba)<sup>3</sup>, (Dentistry, University of Manitoba)<sup>4</sup>, (Dental Hygiene, University of Manitoba)<sup>5</sup>, (Physiotherapy, University of Manitoba)<sup>6</sup>

**Abstract** Why are some people healthy and others not? Health professional students at the University of Manitoba are better able to answer this question after participating in an interprofessional education and practice (IPE/P) learning event. Now in its 3rd generation and involving over 150 students, this event was created collaboratively by faculty IPE/P champions from five health professional programs. The event requires creating interprofessional student groups, developing a large group interactive session (2 'classroom' hours plus 2 hours outside the classroom) and a learning activity (student group creation of a PowerPoint presentation, developing a marking rubric, and completing an evaluator calibration xercise. Working in interprofessional groups, students walk together in a neighborhood capturing digital images which represent determinants of health. These images are showcased in the PowerPoint presentation that they create, along with group statements about the meaning of the determinants of health to their practice and the impact of collaborative practice in achieving health for all. The IPE/P event is a realistic and transformative learning experience for both students and faculty. Previously presented at the Ontario IPE Convention January, 2011

### **Social Administrative Research Abstracts**

**SAR-1** Use of clozapine in a Canadian outpatient population: a chart-review comparison of prescribing (2005-2010)

Josée-Anne Le Dorze<sup>1</sup>, David Nguyen<sup>1</sup>, Patricia Honcharik<sup>1,2</sup>, Michael Eleff<sup>3</sup>, Silvia Alessi-Severini<sup>1</sup> <sup>1</sup>Faculty of Pharmacy, University of Manitoba, <sup>2</sup>Department of Pharmaceutical Services, Health Sciences Centre, <sup>3</sup>Department of Psychiatry, Faculty of Medicine, University of Manitoba, Winnipeg, Manitoba, Canada

Objectives: Evidence has shown that clozapine is more effective than any other antipsychotic in the treatment of refractory schizophrenia. Clozapine is associated with a 0.8% incidence of potentially life-threatening agranulocytosis, and hematological monitoring is mandatory. Current guidelines recommend that clozapine be prescribed after two trials of chemically-unrelated antipsychotics. Methods: Retrospective chart-review study conducted on all active medical records of outpatients attending psychiatric clinics at the Health Sciences Center Schizophrenia Program (Winnipeg, Manitoba) between 2005 and 2010. Data on demographics, patients' medication history, hospitalizations, doses, and adverse events (AEs) were recorded in two separate datasets (2005 and 2010) and compared. Prescribing in patients newly initiated on clozapine between 2005 and 2010 was evaluated. Results: In 2010 the proportion of patients treated with clozapine had increased to 17% from 13% as recorded in 2005. In 2005 patients' age ranged from 20-62 years (mean +/- SD=38.7 +/- 11.0 years) and 72% were male. In 2010, age ranged from 18-73 years (39.4 ± 11.8) and 68% were male. Most patients in both datasets had tried 3 or more antipsychotics before being switched to clozapine. In patients started on clozapine between 2005 and 2010, 5%, 32% and 64% had tried 1, 2 or ≥3 antipsychotics prior to clozapine initiation, respectively. Average time from diagnosis to clozapine initiation in this population was 4.6 +/- 3.9 years. Initial daily clozapine dose was 376.4 +/- 150.4 mg and 232.8 +/- 106.1 mg in 2005 and 2010, respectively. Maintenance daily doses were similar in 2005 and 2010. No differences in hospitalizations and AEs were observed. Conclusion: Despite recent changes that have relaxed hematological monitoring guidelines, prescribing has not significantly changed since 2005. Clozapine appears to be a last-resort treatment option. Acknowledgments: Josée-Anne Le Dorze and David Nguyen were supported by summer studentship awards from the Faculty of Pharmacy.

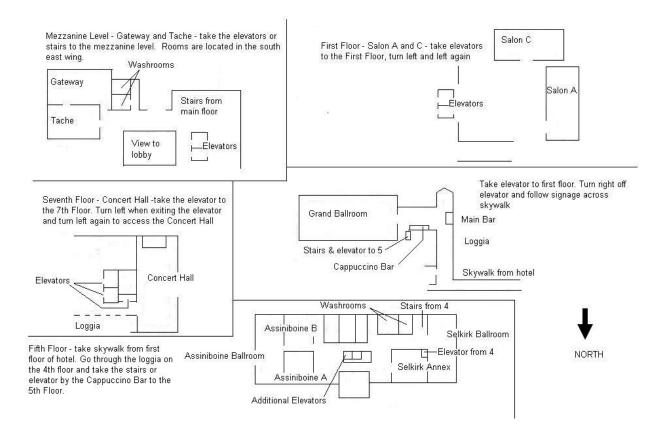
# **SAR-2** Use of clozapine: a chart-review study in a Canadian outpatient population

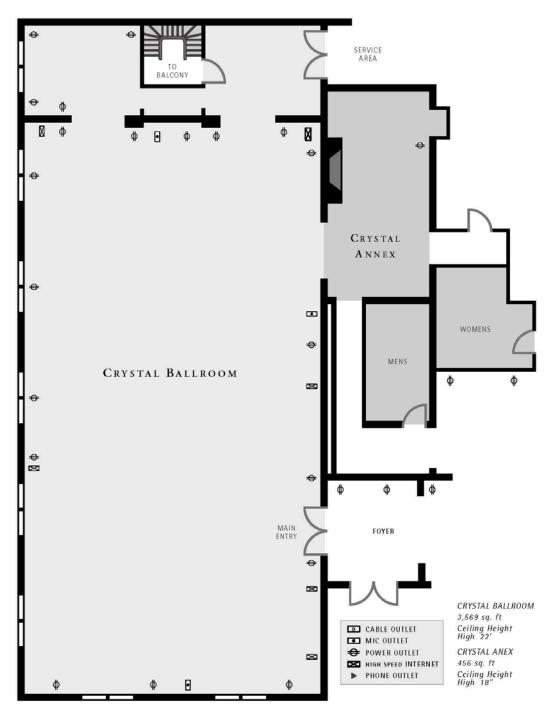
David Nguyen<sup>1</sup>, Josée-Anne Le Dorze<sup>1</sup>, Patricia Honcharik<sup>1,2</sup>, Michael Eleff<sup>3</sup>, Silvia Alessi-Severini<sup>1</sup>
<sup>1</sup>Faculty of Pharmacy, University of Manitoba, <sup>2</sup>Department of Pharmaceutical Services, Health Sciences Centre, <sup>3</sup>Department of Psychiatry, Faculty of Medicine, University of Manitoba, Winnipeg, Manitoba, Canada

**Objectives:** Clozapine has been shown to be more effective than other antipsychotic agents in the treatment of schizophrenia. However, because of the risk of

agranulocytosis, haematological monitoring is mandatory and clozapine is currently recommended as a third-line option. Concerns have been voiced that clozapine might be underutilized. Our study describes patient characteristics, prescription histories and treatment outcomes in an outpatient population treated with clozapine. Methods: Retrospective chart-review study conducted on all active medical records of outpatients attending psychiatric clinics at the Health Sciences Center Schizophrenia Program (Winnipeg, Manitoba). All outpatients receiving clozapine therapy at the time of data collection (May - August 2010) were included. Data on demographics, hospitalizations, and adverse events (AEs) were recorded in an appropriately designed database (Microsoft Excel 2007, Microsoft Corp., Redmond, Washington). Results: Of the 467 patients enrolled in the program at the time of the study, 17% were on clozapine; 60% had been taking clozapine for five years or longer. Age ranged from 18-73 years (mean  $\pm$  11.8 years). Age at time of diagnosis was 23.8±8.4 years in males and 25.1±8.1 years in females. Clozapine was used as monotherapy in 67% of cases. Average number of antipsychotics used before switching to clozapine was 3.3. Median length of therapy prior to clozapine initiation was 8.9 years in males and 7.7 years in females. Residual positive and negative symptoms were observed in 20-30% of patients. The number of hospitalizations significantly decreased after clozapine initiation. Proportion of clozapine patients not experiencing any hospitalization was 56.1%. Most common AEs were sedation and hypersalivation, 9% of patients did not report any AE. Conclusion: Delaying initiation of clozapine beyond two failed trials of antipsychotics may subject patients to lengthy periods of ineffective therapy. Acknowledgments: David Nguyen and Josée-Anne Le Dorze were supported by summer studentship awards from the Faculty of Pharmacy.

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# **PART 2.0**

# MINUTES OF AFPC MEETINGS

2010 - 2011

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#### MINUTES

AFPC Council – Mid Year Meeting February 4-5, 2011 University of Toronto Leslie Dan Faculty of Pharmacy

#### Stakeholder consultation sessions (February 4 – 1300-1500 hours)

1. Health Canada (David Lee – Office of Legislative and Regulatory Modernization, Hieu Vu – Office of Business Transformation)

The two officials from Health Canada were introduced – David Lee and Hieu Vu. Powerpoint slides were distributed for two separate presentations. The following is summary of each presentation and anticipated follow-up activities.

<u>David Lee - Modernizing the Food and Drugs Act and Regulations to Accommodate a Product Lifecycle Approach</u> – The presentation outline covered: overall project objectives, the current system and regulations, change proposals (prohibitions for therapeutic products, authorizations and licences, post market authorities) and the future life-cycle approach. The overview included a discussion about HC consultations about labeling, combinations, diagnostics and rare diseases.

<u>Hieu Vu - Health Products and Food Branch Recruitment</u> – The presentation outline covered: overview of Health Products and Food Branch, HPFB human resource needs, and opportunities and programs within HPFB. HC has a significant human resource need, approximately 250 new staff will be required to implement new legislation and a further 300 to fill positions for staff who are retiring. Recruitment letters have been sent out concerning these needs (pharmacy faculties were sent the letters and they are posted on the HC website). In addition, there are needs for experts for scientific advisory committees and panels. HC has an on-line scientific expert database.

<u>Action / follow-up</u> - Consider future meeting with AFPC chair and HC representatives in Ottawa. Develop joint strategy for human resource areas of high need through bursaries, studentships, interns, work in return contracts, co-funding of faculty positions, cross appointments, experiential rotations / electives, job exchanges. HL to obtain from HC scan document prepared by S. MacLoed and circulate to AFPC. Continue communications with HC.

#### 2. Canadian Pharmacists Association (Jeff Morrison – Canadian Pharmacists Association)

Jeff Morrison'spPowerpoint slides were available for the presentation entitled "Advocacy, Relationship Building 101". The outline for the presentation was as follows: introduction, perception of advocacy and lobbyists, advocacy strategies, relationship building, CPHA advocacy issues / AFPC potential issues, and open discussion – what are AFPC's public policy advocacy objectives?"

#### Business Meeting (Feb 4 - 1500 - 1700 hours, Feb 5 - 0830 - 1700 hours)

#### 1. REMARKS, ROLL CALL AND APPROVAL OF AGENDA (Lalitha)

The business meeting was called to order at approximately 1550 hours. All councilors were present. Frederic was able to attend February 4 only so agenda items requiring his input were discussed. The agenda was approved as circulated.

#### 2. REVIEW AND APPROVAL OF COUNCIL MEETING MINUTES (Lalitha)

The old council June 3 minutes were approved as circulated – Moved – John, Second – Mary, motion passed. The following revisions were suggested to the June 6 minutes. The revised new council June 5 minutes were approved – Moved – Bev, Second – Andrea, motion passed.

#### a. Review of Executive committee minutes

The minutes from the September 17 AFPC Executive Committee meeting were reviewed for information. The minutes from the January 11, 2011 AFPC Executive Committee meeting were circulated via email for information.

#### 3. BUSINESS ARISING FROM MINUTES

#### a. Educational outcomes

#### i. Councilor's reports on implementation

The following progress was reported by councilors.

Alberta – student manuals updated for new EO, course coordinators using new outcomes, assessment committee involved in process

Dalhousie – planning to incorporate EO into syllabi

Montreal – EO integrated into pharm D program, responsibility of Vice Dean

Waterloo – EO shared with staff, used for pilot in experiential, document shared with Provost Manitoba – all faculty aware, plan to implement into educational curriculum next year, mapping of objectives with outcomes

Saskatchewan – complete review of curriculum underway, planning to incorporate EO into syllabi Newfoundland – curriculum committee to start process, plan to use E value software in process British Columbia – mapping occurring through kit, gaps in curriculum to be identified Toronto – implementing E-value software in experiential education, EO included in new curriculum student manual, instructors complete fields using new EO

#### ii. Progress report - levels of performance

A copy of the 1 page amended schedule for Nancy Winslade's work was distributed in advance. H. Lopatka reported that the project is still on schedule for a product to be available for review by AFPC council before the annual meeting. Nancy Winslade's work plan was modified but this will not affect the final deadlines. H. Lopatka will follow-up with NAPRA for a discussion early April 2011 about their concerns relating to the 2010 Educational outcomes and limited feedback for the levels of performance.

#### iii. Local student response from CAPSI article

A copy of the article about AFPC EO appearing in the CAPSI newsletter was distributed in advance. There were no reported contacts with students and councilors in response to the CAPSI article. There was interest in having an article about the outcomes appearing in one of the Rogers pharmacy publications (e.g., pharmacy practice).

<u>Action / follow-up</u> – H. Lopatka will follow-up with Rosalind Stefanac on article re: educational outcomes for the Rogers publications (Pharmacy Practice, Drugstore News). Nancy and / or Daniel are interested in being interviewed.

#### b. Blueprint for pharmacy – progress report (Lalitha / Harold)

The January 2011 report from CPhA was distributed in advance. Lalitha will be attending the next Blueprint advisory meeting. The focus for the Blueprint NCO is to obtain funding for individual projects.

#### 4. **NEW BUSINESS**

#### a. Strategic planning session debrief

The article "A Questions of relevance" was distributed in advance of the meeting. The following comments were provided about the joint strategic planning session.

- Session was useful
- Longer discussion time preferred
- Important to identify details about proposed structure
- Need for 1 page background document (for dissemination)

- Agreed that AFPC councilors need to discuss expectations of AFPC and new directions with respective faculty members

<u>Action / follow-up</u> – Councilors may want to have conversations with their respective faculty members about their expectations and views regarding AFPC (e.g., advocacy, tools). For a summary of current AFPC strategic plan and outcomes achieved in 2010 see pages 2-4 in the document "Discussion Paper for Special ADPC / AFPC Ad Hoc Committee on Governance and Strategic Plans".

#### b. CSHP Statement about pharmacy curricula (Lalitha / Harold)

This agenda item was to discuss the revised statement about pharmacy curricula from CSHP. Individual AFPC members made comments to CSHP about the previous statement. No revised document was received for review in advance of the meeting.

c. Student insurance survey

<u>Action / follow-up</u> – Discussion to occur with NAPRA / pharmacy registrars and Canadian Pharmacy Benefits Group about coverage for students. This may an item to discuss with NAPRA and registrars at their meeting the first week of April. Andrea will check with OCP and Bev with check with CPBG.

d. Canada Health Infoway - Clinicians in training

<u>Action / follow-up</u> – AFPC proposal to be developed. More information required about proposal guidelines. Representative from CHI to be invited to June AFPC Council meeting.

- e. AFPC response to Future of Medical Education Postgraduate Project
- f. Confirmation of dates and times for AFPC council annual meeting (Lalitha / Harold)

#### 5. COMMITTEE REPORTS (written reports to be available)

a. Awards committee (Andrea)

Action / follow-up — Develop criteria for new award for innovative experiential education projects. AFPC Councilors should identify potential special services award candidates. Thank you letters to be sent to awards reviewers (with a copy to their respective Dean). The new AFPC Janssen Award for Innovation in Education should be expedited for 2011 (assuming funding secured).

- b. Bylaws committee (Mike)
- c. Communications committee (Daniel)
  - i. Newsletter survey

<u>Action / follow-up</u> – Adopt recommendations from newsletter survey. Complete French translation of 2010 educational outcomes document.

#### d. CPERC Committee

Harold mentioned that he discussed 2013 plans with CSPS regarding the timing of their annual conference and he mentioned their plan is to hold future conferences in the Toronto area. For the purposes of planning a future joint AFPC / CSPS conference it would have to be in Toronto.

#### i. Winnipeg 2011

The following materials were distributed in advance as handouts: 2<sup>nd</sup> CPERC 2011 written report to AFPC Mid Year meeting, 1 page conference 2011 newsletter article, U of M promotional poster, 3 page preliminary program. Silvia reviewed the preliminary program and highlighted sessions. The opening reception and dinner are on June 5. The June 6 keynote speaker was Dr. John Gilbert and the focus was interprofessional education, and on June 7 Dr. Pierre Moreau and Dr. Victor Yanchick were the feature speakers. There is a pharmacist CE event on June 6 and the awards banquet is on June 7.

With regards to the session on educational outcomes, it was agreed that faculties were at different stages of implementation. Curriculum chairs should be invited to attend to share implementation experiences.

Online registration and abstract submissions will be opened up as soon as possible. The deadline for abstracts will be March 15, 2011. Information will be provided to Rebecca Law for the forthcoming newsletter.

Action / follow-up – The CPERC call for abstracts should be announced ASAP (suggested abstract submission close date March 15, 2011). Curriculum chairs should be encouraged and invited to attend the session about educational outcomes (councilors should make sure their respective curriculum chairs are aware of the session and invitation). If the newsletter is not completed, Rebecca will be asked to add a piece to the newsletter about the call for abstracts.

#### ii. Quebec 2012

Two reports were distributed in advance; a February 2011 3<sup>rd</sup> CPERC (2012) written report, and a draft schedule for the 2012 AFPC conference from Frederic. The dates for the conference are June 5-8, 2012 and the plan is to focus on the Pharm D program.

- e. Education committee (Nese)
- f. Nominating committee (Mike)

Action / follow-up – Email to be sent to Deans re: AFPC Councilors whose terms are coming to an end in June 2011 (Andrea – U of T, Frederic – UL, John – MUN, Daniel – UM). HL to check with ADPC as Lavern's term as acting Dean will be completed by the end of June 2011.

- g. Planning and finance committee (Bev)
  - i. Approval 2011 AFPC Operating budget

Action / follow-up – Identify budget amount for dissemination related activities for program evaluation (HL to find out amount of unused budget for program evaluation). To be added into operating budget (revenue shortfall to come from reserves).

h. Program evaluation committee (Ingrid)

Action / follow-up – AFPC council members to provide feedback to Ingrid about the draft document. Ingrid to circulate to Program Evaluation for comment. After feedback, document to be circulated by HL to ADPC. Silvia to coordinate planning for CPERC Program Evaluation session with Ingrid (e.g., general session and invitational session).

i. Research committee (Frederic / John)

A written report from the research committee was circulated in advance. A commitment will be made to continue updating the research database. The report highlighted that there were 56 posters presented at the 2010 CPERC meeting. The committee report was approved, moved – John, second – Silvia.

j. PEP C (Andrea / Bev)

#### 6. REPORTS OF REPRESENTATIVE TO EXTERNAL GROUPS (where available)

- a. ADPC liaison (Lavern)
  - i. Specialized pharmacy residencies

Action / follow-up – Programs and recognition for specialized residencies to be discussed at June 2011 annual council meeting. Suggested that invitations be provided to Dorothy George, and AACP for this discussion. A background paper may be required for the meeting (Daniel to describe the Quebec situation).

- b. CCAPP
- c. CCCEP

<u>Action / follow-up</u> – Confirm Maria Bystrin as AFPC representative.

- d. Canadian Patient Safety Institutee. CPhA Academic Board Member
- f. Canadian Pharmacy Practice Research Group
- g. PEBC
- h. USP

## 7. COUNCILOR REPORTS

- a. Faculty update and annual reports8. EXECUTIVE DIRECTOR'S REPORT
- 9. ADJOURNMENT

# MINUTES - AFPC ANNUAL COUNCIL MEETING FORT GARRY HOTEL, WINNIPEG, MB SUNDAY, JUNE 5, 2011

**Present:** Lalitha Raman-Wilms (President), Ingrid Price (Incoming President), Mike Namaka (Past President), Lavern Vercaigne (ADPC Liaison), Tessa Nicholl, Nése Yuksel, Bev Allen, Silvia Alessi-Severini, Anson Tang, Andrea Cameron, Frédéric Calon, Dan Thirion, Carla Dillon, Mary MacCara, Harold Lopatka (recorder)

# 1. Opening Remarks

President Lalitha called the meeting to order at 8:30 am.

## 2. Roll Call and Approval of Agenda

President Lalitha called the roll. Carla Dillon was introduced as the new Council member from Memorial. Lalitha acknowledged Nése for her recent national and provincial awards, and Tessa for recent teaching award.

The agenda was approved with the addition of item 8.3 CAPSI-Apotex Ipharmacist Mobile Program. Moved – Bev, Second – Dan.

# 3. Council Meeting Minutes / Executive Committee

The minutes from the February 4-5 mid year council meeting and the May 14 Executive Committee response to the draft CCAPP standards were circulated in advance.

- 3.1 Midyear Council Meeting, Toronto, February 4-5, 2011 Minutes for approval The minutes were approved with the following changes: pg 2 item 3a)i Nése indicated the summary includes updates from the schools for both the old educational outcomes and the new outcomes; pg 8 item 7a)ii change to 3 instead of 4 provinces; pg 8 item 7a)viii change current enrollment figure to 40 instead of 50. Moved Nése, Second Ingrid.
- 3.2 Executive Committee response to CCAPP revised standards for information Harold highlighted the key comments provided by the Executive Committee on the draft standards. Overall Executive felt that the document format was very good, the document is clearly written, and easy to follow. Comments were provided about the interpretation and clarity of select standards and guidelines. Section I comments were made about criteria 3.3, 5.1, and 10.1. Section II comments were made about criteria 12.1, 12.2, and 15.2. Section III comment was on 21.1. Section IV Academic program was considered the most important section to most faculties and generally it was felt this section should consider that Canadian faculties are transitioning from BSc to PharmD. The Section IV comments were on standards 26, 28, 29 and criteria 24.2, 27.3, 28.1, 28.3, 29.2, and 31.1. See May 14 document for specific comments. It was suggested to CCAPP that ACPE guidelines be reviewed to capture elements of transitioning

(when changing degrees) and provide examples. Further consultation will occur and the guidelines will be finalized by summer 2012.

# 4. Business Arising from the Minutes

#### 4.1 Educational Outcomes

#### a. Interim review (2010)

Nése reported that it was still too soon to conduct the interim review of the 2010 educational outcomes. The outcome from the upcoming workshop at CPERC will be used to provide a focus for questions for a future survey.

#### b. Educational Outcomes - Levels of performance (2011)

A copy of the final version of the educational outcomes levels of performance was previously circulated by Harold (see May 11 and June 1 emails). Nése reported that the 1<sup>st</sup> version of the levels of performance might be considered as a work in progress. The value of the levels of performance will be established through their application.

<u>Motion</u> – 1) That the 2011 levels of performance be approved as presented by the Educational Outcomes task force in the May 2011 document "Levels of Performance Expected of Students Graduating from First Professional Degree Programs in Pharmacy in Canada".

2) The 2011 levels of performance will be reviewed in approximately two years, coinciding with the review of the 2010 education outcomes.

Moved – Nése, Second – Lavern, passed.

<u>Action / Follow-up</u> – Post on AFPC website. Make minor revisions to the levels of performance document if required.

#### 4.2 Strategic planning and governance review

A copy of the revised version of the Report to the Special ADPC / AFPC Ad Hoc Committee on Governance and Strategic Plans was circulated in advance (see Harold's June 2 email).

The following points were identified by council as possible issues for review.

- added complexity to concept of annual chair rotation
- will the new structure result in more or less work for the Councils?
- What are the financial ramifications of new structure (e.g., meeting costs, etc)?
- other variables for Board composition to consider in new governance (e.g., West / East board mix, representation by size of faculties)
- further clarify written explanation about advocacy roles (Board and Councils)

<u>Motion</u> – AFPC Council continues to support the direction being proposed for the new **governance model.** Moved – Bev, Second – Tessa.

#### 4.4 CSHP Statement about pharmacy curricula

The CSHP pharmacy curricula statement and information paper was circulated in advance of the meeting (see June 1 email). There was consensus that the CSHP approved statement and paper were improvements over earlier drafts (statements of concern were removed).

#### 4.5 Student insurance

Previous internal AFPC survey showed variations in how individual universities address student insurance e.g., coverage for professional and / or personal liability, mandatory or discretionary, administered by regulatory college or university. There was consensus that the pharmacy regulatory colleges would be the best organizations for students to obtain professional liability insurance. Harold reported on his conversation with Carole Bouchard. NAPRA will keep this issue on their radar screen and Ray Joubert will be taking the lead on this issue.

<u>Action / Follow-up</u> – Develop AFPC statement on topic. Liaise with ADPC on topic. Include paragraph about the topic and issues in next AFPC Newsletter. Communicate with CAPSI (informing about issues and suggested actions). Send letter of support to NAPRA (encouraging NAPRA to complete review and recommendations).

#### 4.6 Canada Health Infoway – clinicians in training (CHI CIT)

A copy of the most recent version of the CHI CIT proposal was circulated in advance (see June 1 email from Harold (proposal dated May 15, 2011 final). Harold reported that we should find out if the proposal was successful by July. If successful the first steps will be to hire a project manager and establish a project steering committee. There was a suggestion that the budgeted amount for French translation be increased.

The project will require subject matter experts from the faculties to serve as advisors and to be seconded to assist with parts of the project. It was suggested that librarians, and IT faculty members be included.

<u>Action / Follow-up</u> — Council members are requested to identify to Harold potential faculty members as content experts, project steering committee members, and expert committee members. The request will also be made through ADPC.

#### 4.7 Specialized pharmacy residencies

A copy of the Canadian Hospital Pharmacy Residency Board (CHPRB) definition of specialized pharmacy practice residencies and an email with historical information attachments about US residencies was circulated in advance (see Harold's June 4 email #4). Janet Teeters, Director Accreditation Services for the American Society of Health-System Pharmacists and Barb Evans, Chair of the CHPRB were connected via phone.

Janet reviewed the continued evolution of US pharmacy residencies including specialized pharmacy residencies. She reported that the types of residencies and the demand for specialized residencies evolved in parallel with the transition to the Pharm D degree as the entry level degree and increasing hospital pharmacy specialization (e.g., critical care, oncology, etc.). There are presently 19 recognized specialties. There is recognition of specialized training through Board of Pharmaceutical Specialties certification. Janet indicated that accrediting a program of specialized pharmacy residencies is costly, labor intensive and that proof of volume (demand) is required before new specialty residencies can be established. The current challenge in the US is to establish more PGY1 residency programs. In the US, residencies are preferred over fellowships and clinical masters degrees are tied to areas such as health systems administration. The stability of residency and fellowship programs is related to funding (residency funding is better than fellowship funding).

Barb reported that CHPRB currently accredits sites which may consider themselves to be providing a specialized residency as a generalized residency program, if requested and if the site meets competency based standards. A recent CHPRB survey indicated only limited demand for PGY2 type residencies and so the standards for these have not yet been developed.

The Canadian situation was discussed. There was agreement that the demand for specialized pharmacy residencies will increase in Canada as the transition to the entry level Pharm D continues in more universities. The anticipated demand for specialized residencies will be the greatest in Quebec because Laval and Montreal have already transitioned to the entry level Pharm D, and because PGY1 type residencies are required for Masters level pharmacists who work in hospitals.

A long range national approach to specialized pharmacy residencies is important as other Universities will come on stream with the entry level Pharm D. Opportunities to explore this subject further might be possible through the 2014 Health Accord renewal process. A conversation will be initiated with CSHP about specialized pharmacy residencies. Lalitha will draft a letter to invite CSHP to participate in the discussion.

<u>Action / follow-up</u> – Harold will report to ADPC about the AFPC Council review and discussion.

## 5. Committee Reports

#### **5.1** Awards Committee

A copy of the awards committee report was circulated in advance (see June 3 email from Harold). Andrea thanked Mary, Harold and the reviewers for their contributions in 2011. Andrea highlighted the following sections of the report: 2011 awards process and winners, the contribution of reviewers and recommendations for consideration. The recommendations were reviewed: 1a) all graduate student posters eligible for Whit Matthews award, 1b) establish new \$500 undergraduate best poster award, 2) individual or team based awards considered for Janssen award, 3) affirmation of 2011 process for ties or close scores, 4) add one member to Awards committee (could be non faculty member), 5) find additional French reviewer. The award committee recommendations were approved. Moved – Andrea, Second – Frédéric.

<u>Action / Follow-up</u> – Correspond with Deans about reviewer contributions. Acknowledge reviewers through AFPC (e.g., newsletter, website). Revisions to 2012 awards book.

#### 5.2 Bylaws Committee

The bylaws committee report was circulated in advance (see June 1 email from Harold). The report was approved including the bylaw revision to change the location of the head office from Vancouver to Edmonton. Moved – Mike, Second – Mary.

<u>Action / Follow-up</u> – Notify appropriate federal agencies of the bylaw change.

#### **5.3** Communications Committee

The communications report was presented as a verbal report by Dan. A written copy of the report is attached to the minutes. Dan highlighted the following communication committee activities: translation of educational outcomes; newsletter and newsletter survey; research and teaching

databases; and website management. There were discrepancies in the translations of the educational outcomes and the work will have to be redone. Given the high priority, there was agreement the translation work proceed (if required the costs will be funded from reserves or charged to 2012). The teaching database update will be deferred until 2012 (because of funding – to be budgeted in 2012). Website improvements will be addressed in the CHI CIT proposal (assuming the proposal is accepted). The report was approved, Moved – Dan, second – Bev.

#### **5.4** Conference Planning Committee 2011

Silvia provided a brief verbal report.

#### **5.5** Conference 2012

A copy of the CPERC conference written report was circulated in advance (see June 4 email from Harold). The dates are June 5-8, 2012 and the venue is the Hôtel Château Laurier. Frédéric reported the next priority is to come up with a title for the conference.

#### 5.6 Conference 2013 / Joint with CSPS

Harold reported that CSPS is holding their 2013 conference in Vancouver. As the AFPC conference was held there in 2010, a joint conference with AFPC will not occur in 2014. The potential for hosting the 2013 AFPC conference in Waterloo will be reviewed by Nancy Waite and Dave Edwards. The major limitation may be finding a hotel. As a back up plan, St. John's (Memorial) will be considered. Carla will review the possibilities.

<u>Action / follow-up</u> – Harold will check with Nancy / Dave about progress being made for Waterloo to hold 2013 conference.

#### **5.7** Education Committee

A copy of the Education committee report was distributed in advance (see Harold's June 1 email #2). Nése reported the committee met via teleconference April 18. Highlighted areas include the 2011 and 2012 CPERC, educational outcomes and teaching databases. See AFPC agenda item 4.1 a) and 4.1 b) for discussion about educational outcomes and levels of performance.

#### **5.8** Nominating Committee

The nominations committee report was circulated in advance (see June 1 email from Harold). Mike thanked Dan for accepting the President elect position. New council members from University of Toronto, Laval University and University of Montreal have not been confirmed. The report was approved. Moved – Mike, Second - Dan.

#### **Lunch Presentation – Medication Reconciliation**

Marg Coquhoun joined the meeting via teleconference. The *Safer Heatlhcare Now* ISMP presentation slides on Medication Reconciliation were distributed in advance (see Harold's June 3 email #3). Marg highlighted the Canadian Medication Incident Reporting and Prevention System (CMIRPS) and the Canadian medication reconciliation campaign.

#### 5.9 PEP Canada Update

A short version of the PEPC report was circulated in advance (see June 3 email from Harold). The minutes from the June 4 PEPC meeting are attached. Andrea highlighted the following topics from the June 4 PEPC meeting: structure - Andrea to become Chair/Ann Thompson to Vice Chair; site agreements; criminal reports checks; AFPC PEP research project award; national preceptor award; national strategy for preceptor training; and common student assessment tools.

AFPC council was supportive of the directions being taken by PEPC. The report was approved, Moved – Andrea, Second - Anson.

#### **5.10** Planning and Finance Committee

The finance committee report, 2010 Auditors report and 2011 Operating Budget were circulated in advance (see Harold's June 1 email #2). An operating budget deficit occurred in 2010 and for 2011 a balanced budget approach was the priority. The following Executive Committee motion was presented.

<u>Motion</u> – The Association of Faculties of Pharmacy of Canada December 31, 2010 financial statements prepared by our auditor and labeled "draft discussion purposes only" be approved by AFPC Executive Council.

The following recommendation was presented in the planning and finance committee report.

<u>Recommendation</u> – The AFPC Planning and Finance Committee recommends the acceptance of the report of the Planning and Finance Committee and the motion approved via email by the AFPC Council Executive Committee to accept the audited Financial Statements for year ending December 31, 2010 for presentation to the membership at the AGM for final approval.

Above Motion and Recommendation – Moved – Bev, second – Lavern, Passed.

The following motion was passed at the February 2011 AFPC mid year meeting.

Motion (accepted at the February 2011 AFPC Mid year meeting) – The Planning and Finance Committee recommends that the AFPC council accept the proposed 2011 AFPC Operating Budget Forecast along with any modifications addressed during the February 2011, Mid Year meeting.

It was noted that a budget expense allocation of \$6500 was approved for 2011 to support dissemination of the AFPC Program Evaluation Guide. The \$10,000 from reserves will be used to offset this expense.

<u>Action / follow-up</u> – Harold to find an AFPC faculty member with experience in financial statements and budget to serve on the planning and finance committee.

#### **5.11 Program Evaluation Committee**

Ingrid highlighted that the program evaluation tools were posted on the UBC website. Access to these tools can be obtained through Ingrid.

#### **5.12** Research Committee

A copy of the research committee report was circulated in advance (see June 4 email from Harold). Frédéric highlighted the following topics: poster judging, research committee terms of reference, and the AFPC research data base. The report was approved, Moved – Frédéric, Second – Dan.

# 6. Reports of Representatives to External Groups

#### **6.1 ADPC** Representative

A verbal report was provided by Lavern. A written copy of the ADPC liaison report is attached to the minutes. Lavern reported on ADPC's support for the new governance model, ADPC's continuing support of the Blueprint for Pharmacy, ADPC meetings held with external organizations and the ADPC monitoring of the current pharmacist manpower situation.

AFPC council members expressed their perspectives and concerns about the rapidly changing manpower situation. The recent increases in the numbers of international pharmacy graduates (IPGs) who are applying to write PEBC exams was discussed (50% increase in 1 year). It was recognized that the manpower situation is changing more in some provinces (e.g., Ontario) compared to others (e.g., Quebec). ADPC has met with a number of federal groups involved in immigration of foreign trained pharmacists. Students complete a graduating or exit survey at the Alberta, Manitoba, Memorial, Toronto and Saskatchewan. It was suggested that these surveys be collected with the intent that a standardized national survey be developed.

<u>Action / follow-up</u> – Collect copies of student exit surveys used by faculties. Consider developing standardized AFPC exit survey. Coordinate concept of standardized exit survey with ADPC.

#### **6.2** Blueprint Steering Committee

A written copy of the Blueprint report was circulated in advance of the meeting (see Harold's June 4 email #4). Lalitha reported on the following Blueprint for Pharmacy highlights: financial status, key project highlights and organizational issues.

#### 6.3 CCAPP

A written copy of the CCAPP written report prepared by Susan Mansour/Carmen Vézina was distributed in advance of the meeting (see Harold's June 4 email #4). Highlighted areas include accreditation activities and standards.

#### 6.4 CCCEP

A copy of a written report was received from Maria Bystrin, CCCEP representative. Unfortunately it was missed in the distribution of reports and a copy will be circulated.

- **6.5 Canadian Patient Safety Institute** No report available.
- **6.6 CPhA Academic Board Member** No report available for the meeting. A report was made available after the meeting and a copy will be circulated.

#### 6.7 Canadian Pharmacy Practice Research Group

There was no report available.

<u>Action / follow-up</u> — Harold will follow-up if Lisa Guirguis or David Blackburn could report back on CPPRG on behalf of AFPC.

#### 6.8 PEBC

A copy of the PEBC liaison written report and newsletter was circulated in advance (see Harold's June 1 email #2). Lavern Vercaigne highlighted PEBC activities and summary statistics for 2010.

#### **6.9** USP – No report available.

# 7. Executive Director's Report

A copy of the Executive Director's report was distributed in advance (see Harold's June 3 email #3). Harold briefly highlighted the financial planning, governance review and upcoming opportunity associated with the CHI CIT grant. An in-camera session followed.

#### 8. Other Business

#### 8.1 Greetings from AFPC to the AACP meeting in San Antonio

As it past years, it was confirmed that the outgoing AFPC president, Lalitha, would give the AFPC greetings at the San Antonio 2011 meeting.

#### 8.2 Centralized criminal records check and drug screening

The need and timing for a student criminal record check varies amongst universities. AACP provides a centralized criminal records program for students in the US. There may be a potential for a similar approach in Canada.

<u>Action / Follow-up</u> – Harold will review AACP program and assess potential for similar approach in Canada.

#### 8.3 CAPSI-Apotex iPharmacist Mobile Program

Copies of information (Apotex proposal) received at the CAPSI meeting held at CPhA were distributed in advance (see June 1 email #2 from Harold). Harold summarized the May 29 meeting. As no AFPC council members were available, a number of ADPC members attended the session. CAPSI and Apotex were in the process of completing an agreement where by CAPSI would receive from Apotex 10 iPad and iPharmacist for each faculty in Canada.

While it was understood that this arrangement was between CAPSI and Apotex, AFPC council members were concerned about the agreement. First, other electronic platforms exist for point of care tools. Many universities have arrangements for these tools to be accessible to the students. In addition the universities have formal agreements with vendors regarding the use of these tools. Second, a number of universities have policies that do not allow for faculty members to receive gifts. This agreement may not be allowed in several universities. Third, several of the skills labs in the larger pharmacy faculties are in the 100-200 size. The logistics for administering the small number of iPads would be challenging. Finally, the Apotex agreement is a back door approach into the universities to promote the use of iPharmacist.

Council members preferred that Apotex work through the individual universities.

<u>Action / follow-up</u> – Harold to communicate with Jillian Grocholsky (CAPSI president) about AFPC concerns. The AFPC concerns will be discussed with ADPC.

# 9. Adjournment

President Lalitha adjourned the meeting at 4:50 pm.

# MINUTES, AFPC ANNUAL GENERAL MEETING FORT GARRY HOTEL, WINNIPEG, MB MONDAY, JUNE 6, 2011, 12:00 Noon – 2:00 PM

**Present:** See attached list of registered AFPC members.

## 1. Opening Remarks and Introduction of Council

President Lalitha Raman-Wilms introduced the 2010-11 AFPC Council members: Mike Namaka (Manitoba – past president), Ingrid Price (British Columbia - incoming president), Lavern Vercaigne (ADPC liaison), Tessa Nicholl (British Columbia), Nése Yuksel (Alberta), Bev Allen (Saskatchewan), Silvia Alessi-Severini (Manitoba), Anson Tang (Waterloo – acting councilor), Nancy Waite (Waterloo), Andrea Cameron (Toronto), Dan Thirion (Montreal – new president elect), Frédéric Calon (Laval), Mary MacCara (Dalhousie), Carla Dillon (Memorial – new council Member), Harold Lopatka (Executive Director). John Hawboldt (Memorial – councilor) was not in attendance.

# 2. Approval of Agenda

<u>Motion</u> – To approve the June 6 2011 agenda as circulated. Moved – Ingrid Price, Second – Bev Allen, passed.

# 3. Acceptance of 2010Annual General Meeting Minutes, June 3, 2010 in Richmond.

<u>Motion</u> – To approve the minutes from the June 3, 2010 AFPC Annual General Meeting. Moved – Nancy Waite, second – Nése Yuksel, passed.

John Pugsley asked about agenda item 7.7 (if PEPC had explored funding opportunities relating to the use of new experiential models for international graduates). Further follow-up will occur through Harold Lopatka, Andrea Cameron (PEPC) and John Pugsley.

## 4. Greetings from AACP President, Rodney Carter.

Rodney Carter, current President AACP, was introduced by Lalitha Raman-Wilms. Rodney provided greetings on behalf of the AACP Board, Lucinda Maine and AACP members. He highlighted the current cross linkages between AACP and AFPC, the track record of organizational cooperation, acknowledged AFPC members work on interprofessional education, and joint international activities on the Global Alliance for Pharmacy Education. The following AACP initiatives were highlighted: the accreditation management system, development of curriculum competencies, and use of simulation for experiential hours. The 2011 AACP conference is in San Antonio.

#### 5. President's Address - Lalitha Raman-Wilms

Lalitha Raman-Wilms presented her annual President's report (a written copy of the report will be posted in the AFPC proceedings). The following were highlighted as 2010/11 achievements: transition in leadership, development of proposed new governance model, establishment of new AFPC Janssen innovation in education award, completion of levels of performance (educational outcomes), and release of program evaluation guide. Challenges for 2011/12 include: revise AFPC website and 2012 conference in Quebec.

#### 6. Memorial to deceased members in 2010-2011

A minute of silence was observed for AFPC deceased members; Bernie Riedel and all others who passed away during the year.

# 7. AFPC Committee Reports

Lalitha Raman-Wilms indicated that AFPC committee reports were presented in three groupings to facilitate approvals. The committee reports were projected using audio-visual equipment to the members in attendance.

# 7.1 Standing Committee Reports (Group 1)

#### a. Awards

Andrea Cameron (awards committee chair) presented a verbal report (with a written copy of the report to be posted in the 2011 AFPC proceedings). Highlighted areas include 2011 awards, reviewers and recommendations / issues for consideration.

#### **b.** Communications

Daniel Thirion (communications committee chair) presented a verbal report (with a written copy of the report to be posted in the 2011 AFPC proceedings). Highlighted areas include translation of educational outcomes, AFPC newsletter and survey, AFPC research and teaching databases, and website management.

#### c. Research

Frédéric Calon (research committee chair) presented a verbal report (with a written copy of the report and the revised committee terms of reference to be posted in the 2011 AFPC proceedings). Highlighted areas include conference poster judging, and the revised committee terms of reference.

#### d. Conference planning

Silvia Alessi-Severini (2011 conference planning committee chair) presented a brief verbal report on the 2011 conference.

Frédéric Calon (2012 conference planning committee chair) presented a verbal report (with a written copy of the report to be posted in the 2011 AFPC proceedings). The conference dates are June 5-8, 2012 and the venue is Château Laurier in Quebec. The title for the conference is pending.

<u>Motion</u>: Approval of the 2011 AFPC committee annual reports (Awards, Communications, Research, 2012 Conference Planning). Moved - Frédéric Calon, second – Nése Yuksel, passed.

## **7.2** Standing Committee Reports (Group 2)

#### a. Bylaws

Mike Namaka (bylaws committee chair) presented a verbal report (with a written copy of the report to be posted in the 2011 AFPC proceedings).

<u>Motion</u> – Approval of the 2011 AFPC Bylaw committee report and the AFPC bylaw change (change in location of head office from Vancouver to Edmonton). Moved – Mike Namaka, second, Linda Hensman, motion passed.

#### b. Nominations

Mike Namaka (nominations committee chair) presented a verbal report (with a written copy of the report to be posted in the 2011 AFPC proceedings). Daniel Thirion was nominated to the position of President Elect. Carla Dillon was nominated as MUN councilor. Confirmations councilors at University of Toronto, University of Montreal and Laval University Councilors are not confirmed.

<u>Motion</u> – Approval of 2011 AFPC Nomination Committee report and nominations. Moved – Nése Yuksel, Moved – Mike Namaka, second – Linda Hensman, motion passed.

#### c. Education Committee Report

Nése Yuksel (education committee chair) presented a verbal report (with a written copy of the report to be posted in the 2011 AFPC proceedings). Highlighted areas include the 2011 and 2012 CPERC, educational outcomes and teaching databases.

<u>Motions</u> – 1) The 2011 levels of performance (for the educational outcomes) be approved as presented by the Educational Outcomes Task Force in the May 2011 document "Levels of Performance Expected of Students Graduating from First Professional Degree Programs in Pharmacy in Canada".

- 2) The 2011 levels of performance will be reviewed in approximately 2 years coinciding with the review of the 2010 AFPC educational outcomes.
- 3) Approval of 2011 AFPC Education Committee Report. Moved – Nése Yuksel, Second – Terri Schindel, motion passed.

#### d. Planning and Finance Committee

Bev Allen (planning and finance committee chair) presented a verbal report (with a written copy of the report to be posted in the 2011 AFPC proceedings). Copies of the 2010 auditor's report were distributed in advance to members through AFPC councilors and additional copies were distributed in the meeting room. There was an excess of expenditures over revenues (deficit) in the 2010 operating budget. For 2011 a balanced budget approach was the priority. Harold Lopatka reviewed the 2010 auditor's report and the 2011 annual operating budget.

<u>Motions</u> – 1) That the audited financial statements for the Association of Faculties of Pharmacy of Canada for the year ending December 31, 2010, accepted and recommended by AFPC Council, be approved by membership.

- 2) That the proposed operating budget for the year ending December 31, 2011, accepted and recommended by the AFPC Council at the Mid-Year meeting February 2011, be approved by membership.
- 3) Approval of the 2011 AFPC Planning and Finance committee report. Moved Bev Allen, Second Linda Hensman, motion passed.

## **7.3 Other Committee Reports**

#### a. PEP Canada

Andrea Cameron (PEPC chair) presented a verbal report (with a written copy of the report to be posted in the 2011 AFPC proceedings). Highlights were presented from the recent meeting and teleconference: Ann Thompson (vice chair), site agreements, criminal records checks, research project award, national preceptor award, national preceptor training, and common student assessment tools.

#### **b. Program Evaluation Committee**

Ingrid Price (Program evaluation committee chair) presented a verbal report. The completion of the AFPC program evaluation guide was the highlight in 2011.

<u>Motion</u>: Approval the 2011 AFPC committee annual reports (PEP Canada, Program Evaluation). Moved – Ingrid Price, second – Yvonne Shevchuk, passed.

# 8. Reports from Special Committees and Delegates

#### 8.1 Association of Deans of Pharmacy of Canada (ADPC)

Lavern Vercaigne (ADPC Liaison) presented a verbal report (with a written copy of the report to be posted in the 2011 AFPC proceedings). Highlighted areas include strategic planning, Blueprint for pharmacy, meetings with external stakeholders, CSHP pharmacy curricula statement, specialized pharmacy residencies, and manpower issues.

Wayne Hindmarsh asked whether the topic of pharmacy innovation was identified in the meeting related to Canada's innovation agenda. Lavern responded that the discussion was not limited to innovation of pharmaceutical products.

#### **8.2** Blueprint Steering Committee

Lalitha Raman-Wilms (AFPC alternate representative) presented a verbal report (with a written copy of the report to be posted in the 2011 AFPC proceedings). Highlighted areas include financial status, individual key project highlights and operational issues.

#### 8.3 Appointee to CCAPP

Carmen Vézina (AFPC representative) presented a verbal report (with a written copy of the report to be posted in the 2011 AFPC proceedings). Highlighted areas include accreditation activities and standards.

Wayne Hindmarsh reported that there will be a 2<sup>nd</sup> round of consultations on the new standards.

#### **8.4** Appointee to CCCEP

A written report was received from Maria Bystrin (AFPC representative), but it was missed in the distribution of reports. A copy of the report will be circulated.

#### **8.5** Canadian Patient Safety Institute (CPSI) – No report.

#### 8.6 Academic Board Member of CPhA

Unfortunately, a verbal report from Rita Caldwell was missed in the agenda. A copy of a written report will be circulated.

#### 8.7 Canadian Pharmacy Practice Research Group (CPPRG) – No report available.

#### 8.8 Pharmacy Examining Board of Canada (PEBC)

Lavern Vercaigne (AFPC representative) presented a verbal report (with a written copy of the report to be posted in the 2011 AFPC proceedings).

John Pugsley commented on the significant increase (>50% increase) in international pharmacist PEBC applications.

#### **8.9** United States Pharmacopoeia – No report available.

## 9. Report of Executive Director

Harold Lopatka presented his annual report (a written copy of the report will be posted in the AFPC proceedings). Harold highlighted the 2011 financial planning priorities, governance review / proposed new governance model and the new opportunities associated with the potential Canada Health Infoway – clinicians in training grant.

# 10. Appointment of Auditor, Wolrige Mahon LLP, Chartered Accountants, Vancouver.

<u>Motion</u> – To refer the decision and approval about an appointment of the auditor for 2011 to AFPC Executive Committee and Council. Moved – Lalitha Raman Wilms, Second – Anne Marie Whelan, motion passed.

#### 11 New Business

#### 11.1 Strategic planning and governance review

Harold Lopatka presented a summary about the background and proposed new AFPC governance model (copies of the PowerPoint slides and the written report May 19 11 "Report to Special ADPC / AFPC Ad Hoc Committee on Governance and Strategic Plans – Proposed New AFPC Governance Model" were distributed in advance of the meeting through AFPC Councilors and additional copies were distributed in the meeting room). The highlights were the rational and structure for the new governance model, summary of differences between current and proposed structure, expected benefits and values, and critical time frames for planning and implementation.

John Pugsley suggested that the new governance model be reviewed in the context of the forthcoming Bill C40 legislation on non profit organizations. Rodney Carter suggested looking at having elected Board members, the idea of having "at large" council or board members, and capacity to add members (from faculties or external stakeholders). He felt the suggested size of board was reasonable.

# 12. Transfer of Presidency

Incoming President Ingrid Price provided her views about the challenges and opportunities presenting to AFPC during her forthcoming term. She is looking forward to serving academic pharmacy by supporting individuals and Faculties through activities regarding implementing the new AFPC educational outcomes as well as curriculum mapping and program evaluation. Ingrid expressed that this is an exciting time in the profession of pharmacy and the education of pharmacists. Further, Ingrid indicated it is an honour to serve as President of AFPC and support academic pharmacy.

# 13. Confirmation of Signing Authority

<u>Motion</u> – Approval of signing authority for Ingrid Price (as incoming president). Moved – Andrea Cameron, Second – Lavern Vercaigne, motion passed.

# 14. Adjournment

Ingrid Price adjourned the meeting at 1:50 pm.

# AFPC Annual General Meeting, Winnipeg, Manitoba, June 6, 2011 List of Attendees

# Full Name Affiliation

Albon, Simon University of British Columbia

Alessi-Severini, Silvia University of Manitoba

Allen, Bev University of Saskatchewan

Anderson, Hope University of Manitoba Ateah, Christine University of Manitoba Brink, Kelly University of Manitoba Bugden, Shawn University of Manitoba Burczynski, Frank University of Manitoba Caldwell, Rita **Dalhousie University** Calon, Frederic Université Laval Cameron, Andrea University of Toronto

Carter, Rodney American Association of Colleges of Pharmacy

Chee, Lean University of Manitoba Cote, Dennis University of Manitoba Davies, Harriet Dalhousie University

Dillon, Carla Memorial University of Newfoundland

Drolet, Benoit Université Laval

Eccott, Lynda University of British Columbia

Edwards, David University of Waterloo

Fleming, Mark Janssen Inc. (Pharmaceutical Companies of Johnson & Johnson)

Frost, Emma University of Manitoba Gong, Yuewen University of Manitoba

Gregoire, Jean-Pierre Université Laval

Grymonpre, Ruby
Gu, Xiaochen
Gukert, Marlene
Hall, Kevin
University of Manitoba
University of Alberta
University of Alberta

Hensman, Linda Memorial University of Newfoundland

Hill, David University of Saskatchewan

Hindmarsh, Wayne Canadian Council for Accreditation of Pharmacy Programs

Ho, Emmanuel
Hughes, Christine
lacovides, Harris
Isenor, Jennifer
University of Manitoba
University of Manitoba
University of Manitoba
University of Manitoba

Jawanda, Jas University of British Columbia

Jensen, Fiona
University of Manitoba
Jha, Sarita
University of Manitoba
Kehrer, James
University of Alberta

Kim-Sing, Angela University of British Columbia

Kleiman, Nancy University of Manitoba Lee, Cheryl University of Manitoba

Lefebvre, Jean Université Laval

Lopatka, Harold Association of Faculties of Pharmacy of Canada

Louizos, Chris University of Manitoba MacCara, Mary **Dalhousie University** MacDonald, Laura University of Manitoba University of Toronto Mann, Henry McIntosh, Alan University of Manitoba Moreau, Pierre Université de Montréal Mulherin, Katrina University of Toronto Namaka, Mike University of Manitoba

Nicholl, Tessa University of British Columbia

Pasay, Darren University of Alberta
Patel, Tejal University of Waterloo

Pearson, Marion University of British Columbia

Petrasko, Kristine University of Manitoba

Pugsley, John The Pharmacy Examining Board of Canada

Raman-Wilms, Lalitha University of Toronto Schindel, Terri University of Alberta

Seet, Tony University of British Columbia Shevchuk, Yvonne University of Saskatchewan

Sibbald, Debra University of Toronto
Simons, Keith University of Manitoba
Slavcev, Roderick University of Waterloo

Suveges, Linda University of Saskatchewan

Swinamer, Jenneth University of Manitoba Tang, Anson University of Waterloo

Tchen, Paulo University of British Columbia

Thirion, Daniel University of Montreal University of Alberta Vercaigne, Lavern University of Manitoba

Vezina, Carmen Université Laval

Waite, Nancy
Wells, Peter
Wener, Pam
Whelan, Anne Marie
University of Waterloo
University of Toronto
University of Manitoba
University

Woloschuk, Donna Winnipeg Regional Health Authority Yanchick, Victor Virginia Commonwealth University

Yuksel, Nese University of Alberta Zelenitsky, Sheryl University of Manitoba

14612-64 Avenue NW, Edmonton, AB T6H 1T8 Phone: 780-868-5530 – Fax: 780-492-1217 – hlopatka@telus.net

# MINUTES - AFPC NEW COUNCIL MEETING FORT GARRY HOTEL, WINNIPEG, MB; SALON C WEDNESDAY, JUNE 8, 2011, 8:00 AM – 12:00 NOON

#### 1. **Opening Remarks**

Welcome to new council member Carla Dillon from MUN and to Pierre Moreau as the ADPC liaison. Congratulations to President Elect Daniel Thirion.

#### 2. Roll Call and Approval of the Agenda

Ingrid conducted the roll call. Three councilors are continuing to represent their Universities while we await new appointments or confirmation of re-appointments: Andrea – University of Toronto, Dan - Université of Montréal, and Frédéric - Laval. Nese was unable to attend the meeting because of the U of A graduation ceremonies.

The agenda was approved with 1 addition – item 5.5, Creation of SIG for IPE SIG

#### **Council Planning Session for Prioritization of AFPC Activities**

Ingrid conducted a planning/brainstorming session to prioritize AFPC activities for 2011-12.

The following were identified as high priority activities for 2011-12

- Governance model implement transitional governance model until June 2012 annual meting
- Revise AFPC Bylaws assuming the implementation of new governance model in 2012
- Educational outcomes French translation
- Canada Health Infoway clinicians in training grant implement in summer 2011
- Website redesign funding will come out of CHI CIT grant
- Best practices in experiential training kick start through retreat application made through Blueprint process

The following were other activities shown in order of priority (Council voting results).

- enhancing communication with faculty members (14 votes)
- curriculum mapping (10 votes)
- support for implementation of educational outcomes (5 votes)
- completion of research and teaching databases (4 votes)
- create special interest groups (1 vote)

The first 3 of these activities were considered of higher priority by council which should be focused on while activities 4 and 5 should be engaged in at a later date.

There was some discussion about the value of including non-council faculty members on committees from time to time. This may relate to the specific activities that committee is engaged in over the year (i.e., ask faculty with specific expertise to become part of the committee)

Considerations regarding asking non-council faculty to become "members-at-large" on AFPC committees:

- What it is we are asking these individuals to do
- Ensure we are engaging individuals in a meaningful way
- Need to create a process for engagement (nomination, selection, etc.) what is an effective and respectful process to engage non-council faculty members?

## 3. Appointments and Charges to Committees

#### 3.1 Awards Committee

Andrea was confirmed as the awards committee chair for 2011-12. Mary will continue on the committee. The key priorities for 2011-12 are to update the awards booklet and to solicit more committee members. Carla and Nancy will identify other potential members.

#### 3.2 Bylaws Committee

Lalitha will be the committee chair for 2011-12. Ingrid and Harold will also be on the committee. The key priority for 2011-12 will be to make bylaw changes in line with the new governance model. There may be a need for additional resources.

#### 3.3 Communications Committee

Dan and Tessa will be committee co-chairs for 2011-12. Silvia will continue on the committee. Key priorities for 2011-12 were to streamline communications, promote the value of AFPC to faculty members (whats in it for me - WIIFM), to identify at least 2 new members (who are not on council), translate the educational outcomes, and identify a process and strategy for the website redesign. The following suggestions were made about communication strategies: AFPC agenda item on faculty meeting agendas, promote AFPC activities through local faculty newsletter, create list serve, video conferencing, Skype calls, local promotion of AFPC by Deans.

#### 3.4 Conference Planning Committee 2012

Frédéric will be the committee chair for 2012. Sylvia will continue on the committee.

#### 3.5 Conference Planning Committee 2013

Depending if Waterloo confirms the conference can be staged, Nancy will be the chair. Dave Edwards will be part of the committee. The possibility of a joint conference was ruled out as CPhA will be in Charlottetown and CSPS will be in Vancouver. St John's (Memorial) will be considered the alternate setting for 2013.

#### 3.6 Education Committee

Ingrid will follow-up with Nese about chairing the committee for 2011-12 (Nese confirmed that she would continue for 2011-12). The priorities for 2011-12 are to recruit new members (e.g.,

Sheryl Zelenitsky – curriculum planning expertise, Simon Albon); and initiate a national strategy re curriculum mapping (e.g., conduct a needs assessment, initiate action based on needs assessment). Nancy and Silvia will continue on the committee. An additional priority is to work with Frédéric on the 2012 conference.

#### 3.7 Executive Committee

Ingrid will chair the committee for 2011-12. Lalitha, Dan, Pierre and Harold will serve on the committee for 2011-12.

#### 3.8 Nominating Committee

Lalitha will chair the committee for 2011-12.

#### 3.9 PEP Canada Special Interest Group

Andrea will chair the committee for 2011-12. Priorities for 2011-12 are to develop a national preceptor award, plan and initiate a national preceptor develop strategy, and develop standardized student assessment forms. PEPC will investigate using Elluminate or WebEx for a future telephone meeting.

#### 3.10 Planning and Finance Committee

With Bev's retirement there is a need to add someone with expertise in reviewing financial statements and budgets. Harold will follow-up with individuals like Roy Dobson or Jason Perepelkin.

#### 3.11 Program Evaluation Committee

This committee is not an AFPC standing committee (considered a special interest group). Ingrid will continue to chair the committee. Ingrid reflected on her experiences with the development of the program evaluation guide and suggested potential uncertainties with intellectual property and councilor project responsibilities. It was suggested that internal AFPC publication guidelines be developed (through the education committee) for multi-stakeholder projects e.g., program evaluation, educational outcomes.

#### 3.12 Research Committee

Sylvia will chair this committee for 2011-12. As the 2012 conference is in Quebec, the need to have individuals with ability to review French submissions is important. Mary may be added to the committee.

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

The following appointments or assignments were confirmed.

- 4.1 **ADPC Representative** Pierre Moreau
- 4.2 **Blueprint for pharmacy steering committee** Zubin Austin, Lalitha Raman-Wilms
- 4.3 Canadian Council for Accreditation of Pharmacy Programs (CCAPP) Carmen Vezina/Susan Mansour
- 4.4 Canadian Council for Continuing Education in Pharmacy (CCCEP) Maria Bystrin
- 4.5 Canadian Patient Safety Institute Andrea Cameron
- 4.6 Canadian Pharmacy Practice Research Group (CPPRG) To be confirmed through further follow-up (Harold to discuss with Lisa Guirguis or David Blackburn)

- 4.7 **Canadian Society of Hospital Pharmacists Annual Meeting** any AFPC council member who attend and report back.
- 4.8 Communications Editor Rebecca Law
- 4.9 **Pharmacy Examining Board of Canada** Lavern Vercaigne/Anne Marie Whelan
- 4.10 **United States Pharmacopoeia representative** Raimar Löebenberg

#### 5. Business arising from the June5, 2011 Council Meeting and June 7, 2011 AGM

#### 5.1 AFPC New Governance Model – debrief / next steps

Harold reported that the overall feedback received at the AGM was positive. Some minor revisions to the May 19 governance model will be made in follow-up to the collective feedback received at June 2011 AFPC council, ADPC and at the annual general meetings. Council members are encouraged to discuss the revised governance model at their respective faculty meetings. A final draft of the new governance model will be produced in September. Any further comments should be forwarded to Harold.

- **5.2** Educational outcomes review process addressed at June 5 council meeting
- **5.3 Canada Health Infoway Clinicians in Training grant** addressed at June 5 council meeting
- **5.4 Specialized Pharmacy Residencies** task group / discussion paper addressed at June 5 council meeting
- **5.5** Creation of SIG for IPE SIG deleted because low priority as per initial brainstorming session.

#### 6. New Business

#### 6.1 Confirmation of Date and Time for Mid-year Meeting

The PPC meeting is in Toronto, February 4-8, 2012. Harold will investigate the costs of holding the meeting in an alternate location e.g., western Canada, airport hotel.

#### 6.2 Confirmation of Date and Time for 2012 Conference

Quebec City, June 5-8, 2012, Hôtel Château Laurier

#### 6.3 Confirmation of Date and Time for 2013 Conference

The Waterloo location and timing to be confirmed with Nancy. Alternate dates may be considered.

#### 7. Adjournment

The meeting was adjourned at 11:50 am. Moved – Frédéric, Second – Dan.

# **PART 3.0**

# REPORTS OF AFPC STANDING COMMITTEES, REPRESENTATIVES AND DELEGATES

2011

# Association of Faculties of Pharmacy of Canada Annual General Meeting June 6th, 2011 Winnipeg, Manitoba President's Report

As I reflect on my term as President, I realize that the opportunity to be on council and learn from the presidential leadership of those before me prepared me well – Mike Namaka this past year, and before that Roy Dobson and Simon Albon. The work that AFPC does is important to academic pharmacy and it continues to be influenced by its council and leaders who give much to this organization.

2010-11 has been a busy year for AFPC. We have successfully made the transition in Executive Directors from Dr. Frank Abbott to Dr. Harold Lopatka. I would like to thank Frank for his continued dedication and service as he made himself available through the transition period. Over the last year, I have had the pleasure of working with Harold as he has successfully taken on the role of the executive director, an important position which provides support to both AFPC and ADPC. With his management experience, Harold brings a different perspective to our work, and we look forward to continuing to work with him.

This has also been a year of change for many Canadian Faculties. Several schools are in the process of moving into new buildings, some are expanding student enrollment, while others are taking on the challenge of a new curriculum. This year will also see two schools celebrating their first graduates from a new program. All of these elements illustrate the activity and innovation within academic pharmacy across Canada.

This is a time of change within our profession and within health care as well. We continue to see changes to the pharmacist's scope of practice, leading pharmacists closer to fulfilling the Blueprint's vision of Optimal drug therapy for Canadians. We are also seeing emergence of new regulated health professions, including pharmacy technicians, with a continued emphasis on team-based care and education.

With this changing landscape, it is important that our organization continues to build closer collaborations with other academic health science groups, such as our counterpart, the Association of Faculties of Medicine of Canada (AFMC), and speak with one voice for academic pharmacy in Canada. We need to become more influential on the national landscape, both within our profession, and with other groups. This will require closer communication and collaboration between the ADPC and AFPC in order to more effectively promote academic pharmacy. One of the areas we have started discussions this year is on a new governance model for both of our associations. Our plan is to continue to work on this over the next year.

In addition to our work on a new governance model, the AFPC also undertook the following projects over the past year;

<u>Education Excellence Award</u>: We are pleased to announce that AFPC has put forward a new award to recognize excellence in innovative educational strategies. The **AFPC-Janssen**Innovation in Education Award, was presented for the first time this year! AFPC continues to work with its many partners who support the Awards program. I would also like to especially

thank all of the award reviewers who have generously given their time to this program. Andrea Cameron, as the Chair of the Awards Committee, has done an outstanding job of administering the awards. Also, this committee continues to benefit from the long-standing experience of its past chair, Mary MacCara.

Expected Levels of Peformance: The Educational Outcomes for a First Professional Degree Program in Pharmacy was approved last June. Over this past year, AFPC has worked to bring forward the **Expected Levels of Performance** document, to accompany the educational outcomes. AFPC's Education Committee will review the levels, in conjunction with the Educational Objectives in two years' time and identify any support required by Faculties in implementing the new outcomes.

<u>Program Evaluation Guide & tools</u>: The AFPC Program Evaluation Task Force completed its work last year under the leadership of Ingrid Price. As a first step, the Program Evaluation Guide and tools are made available through the UBC website for use by all Faculties. We will evaluate how the guide and tools are being used and determine if AFPC can provide further support to Faculties. Please contact Dr. Harold Lopatka or your Faculty's program evaluation representative for details.

AFPC Communication: Over this next year, our plan is to renew the website, and make it more user-friendly. Our newsletter will continue to be published three times a year and I would like to extend a sincere thank you to Rebecca Law, Editor, for continuing to serve as its publisher. A survey conducted this past year confirmed that the newsletter is still an important form of communication for our members.

<u>AFPC Executive</u> met several times this year to provide input on various important documents, including the draft CCAPP Accreditation Standards and Guidelines, and the Future of Postgraduate Medical Education.

Conference Planning 2011 and 2012: AFPC extends a sincere thank you to Silvia Alessi-Severni and the planning committee from the University of Manitoba for their hard work in putting together an outstanding program this year. We also look forward to our conference next year in Quebec City with Fredereic Calon from Laval University as the Chair of the conference planning committee. This 3rd Annual Canadian Pharmacy Education and Research Conference will take place from June 5 to 8, 2012.

In closing, I would like to thank Dr. Harold Lopatka for working closely with the Executive and Council to ensure a smooth transition. I would also like to extend a sincere thank you to AFPC Council for their ongoing support. We have worked well together and our work has seemed easy due to the dedication and enthusiasm of our council members.

As my term finishes, I would like to extend a warm welcome to Ingrid Price as she takes on the leadership for AFPC for next year. I wish her every success in her new role.

Thank you to all of you, our members, who are here at the conference. Over the next couple of days, please take time to enjoy the Forks, reconnect with colleagues and friends, and hope you meet many of our new delegates and students.

Thank you,

Respectfully submitted, Lalitha Raman-Wilms, AFPC President (2010-2011) June  $6^{th}$ , 2011

ADPC Conference, 2011 Annual General Meeting Monday, June 06, 2011 Winnipeg, Manitoba

#### **ADPC Liaison's Report**

The Deans of Pharmacy of Canada have met three times since the last annual General Meeting; in October 2010, a mid-year meeting in February 2011 and the AFPC AGM on June 06, 2011.

Highlights of current issues of interest include:

- 1.) Strategic Planning. The Dean's participated in a strategic planning session in October, 2010 to review the vision and mission of ADPC. It was apparent at this session that there were several similarities between the vision and mission of ADPC and AFPC. This session subsequently lead to discussions regarding the governance structure of the two organizations and the preparation of a "Report to Special ADPC/AFPC Ad hoc Committee on Governance and Strategic Plans: Proposed New AFPC Governance Model." There was some discussion at the June 06, 2011 Deans meeting regarding increasing the board size to 10, which would allow for representation from each faculty or school whether that be a Dean or a faculty member in any given year. The proposed governance model will be shared with AFPC members at this AGM for consideration and discussion.
- 2.) Blueprint for Pharmacy: The Deans of Pharmacy continue to be supportive of the Blueprint for Pharmacy. Meeting discussions included clarifications on responsibilities for project activities, communications and fund raising. ADPC / APFC continue to support this important initiative financially to help keep it moving forward.
- 3.) Meetings with External Stakeholders: Meetings were held with Rx and D to discuss support for research in the Faculties of Pharmacy from across Canada and future meetings are planned with the generic industry. There were 5 requests from individual faculties for funding research projects in 2010, all of which were funded by the Rx and D Health Research Foundation. Other related topics discussed by the Deans included the "Coalition for Action on Innovation Report" and it was felt that a support letter should be drafted to support areas of alignment with ADPC.

ADPC also met with representatives from Health Canada and discussed opportunities for students, new graduates, and Faculty member contributions as the Health Products and Food Branch look to meet human resources needs.

We will also be having discussions with CAPSI in the future to discuss issues regarding corporate donations of electronic devices and determine any expectations for use in pharmacy programs at the local level.

- 4.) ADPC reviewed the CSHP statement of pharmacy curricula and sent feedback to CSHP for consideration. The final CSHP statement "Education: Information Paper on Collaborative Development, Delivery, and Evaluation Pharmacy Curricula (2011) was reviewed at the Dean's meeting on June 06, 2011 for information. A collaborative approach to developing and implementing educational initiatives is welcomed.
- 5.) ADPC conducts a yearly process of obtaining information from each of the 10 faculties of pharmacy in Canada for comparison and budgetary purposes. All 10 schools have submitted their information. The information will be collated in the coming weeks for efficient use.
- 6.) Specialized Pharmacy Residencies: The ADPC asked AFPC to provide input on the need for Specialized Pharmacy Residencies in Canada. This is somewhat being driven by the entry-level Pharm.D. being implemented in Quebec, requiring more discussion on what post-Pharm.D. training might look like in Canada for people that want to pursue additional training.
- 7.) Manpower Issues: The Dean's have been monitoring the current manpower changes that are occurring within Canada (i.e. potential decreasing pharmacy positions available for new graduates in some provinces and increasing requests for International Pharmacy Graduates to write the PEBC exams) and are interested in the impact of these and other changes on opportunities for students when they require internships or seek employment after graduation.

Respectfully submitted, Lavern M. Vercaigne, Pharm.D. For the Association of Deans of Pharmacy of Canada

#### Awards Committee Report AFPC AGM Meeting Sunday, June 5, 2011

Awards Committee Members: Andrea Cameron (Chair), Frédéric Calon, Mary MacCara

#### A. Awards for 2011:

The competition was strong for all faculty and student awards. 14 nominations were received for the AFPC faculty awards and 10 nominations were received for the AFPC student awards

The following are the 2011 AFPC award winners.

#### **Merck Postgraduate Pharmacy Fellowship Award**

Alexandre Melkoumov – Université de Montréal

#### **AFPC-Sanofi-Aventis New Investigator Award**

Benoît Drolet – Université Laval

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

Nancy Waite – University of Waterloo

#### **AFPC-GSK Graduate Student Research Award**

Niladri Chattopadhyay - University of Toronto

#### **AFPC-Pfizer Research Career Award**

Peter Wells - University of Toronto

#### AFPC-Janssen Innovation in Education Award - (Inaugural Year)

Roderick Slavcev - University of Waterloo

The following were the 10 winners for the AFPC - Rx and D Pharmacy Student
Research Poster Award.
☐Arash Falamarzian – University of Alberta
☐ Ian Wong – University of British Columbia
☐Jovana Tomic – University of Saskatchewan
□Lacey Corbett – Memorial University
☐Mélanie Rouleau – Université Laval
☐Melanie Trinacty – Dalhousie University
□Payam Zahedi – University of Toronto
☐Tarek Mohamed – University of Waterloo
□Valery Aoun – Université de Montréal
☐Yining Li – University of Manitoba

#### **AFPC - CFP Pharmacy Practice Research Award**

No nominations received this year

#### **AFPC-Whit Matthews Graduate Student Poster Award**

- Selected at Annual Conference

#### **AFPC Woods-Hughes Special Service Awards**

Two AFPC members are being recognized with the AFPC Woods-Hughes Special Service Award for their exceptional service to AFPC over the years. They are Lavern Vercaigne, University of Manitoba, and Anne Marie Whelan, Dalhousie University

#### Canada's Research-Based Pharmaceutical Companies Industrial Visitation Program – not funded at this time

#### **AFPC Honored Life Membership Nomination** – no nominations in 2011

#### B: Reviewers:

Thirty Faculty from across the country volunteered to be reviewers - their commitment to the evaluation of each assigned submission is sincerely acknowledged; their names, from East to West, are:

Reviewer	University
Carla Dillon	Memorial University of Newfoundland
Lili Wang	Memorial University of Newfoundland
Tannis Jurgens	Dalhousie University
Mary MacCara	Dalhousie University
Pollen Yeung	Dalhousie University
Olivier Barbier	Université Laval
Frederic Calon	Université Laval
Therese Di Paolo	Université Laval
Chantale Simard	Université Laval
Gregoire Leclair	Université de Montréal
Heather Boon	University of Toronto
Lisa McCarthy	University of Toronto
Michael Beazely	University of Waterloo
Cynthia Richard	University of Waterloo
Roderick Slavcev	University of Waterloo

Xiaochen Gu	University of Manitoba
Yuewan Gong	University of Manitoba
Emmanuel Ho	University of Manitoba
Kristine Petrasko	University of Manitoba
Jan Alcorn	University of Saskatchewan
Ildiko Badea	University of Saskatchewan
David Blackburn	University of Saskatchewan
Anas El-Aneed	University of Saskatchewan
Ed Krol	University of Saskatchewan
Ayman El-Kadi	University of Alberta
Michelle Foisy	University of Alberta
Kamaljit Kaur	University of Alberta
Lars Oliver Klotz	University of Alberta
Jon Seubert	University of Alberta
Urs Hafeli	University of British Columbia

#### C. Recommendations/Issues for consideration:

- 1. Whit Matthews Award
- a) eligibility critieria currently includes:
- -'at time of abstract submission, graduate students must indicate that they wish to enter the competition for the AFPC Whit Matthews Award'
- recommend delete this so that all graduate posters are automatically entered.
- b) Clarify eligibility of undergraduate submissions for Whit Matthews Award; or should a new 'undergraduate' award be developed?
- 2. Janssen Award recommend broaden criteria to explicitly enable submissions from one or more faculty for same submission (i.e. team)
- 3. Selection process in cases where tie or very close score on initial review.
- 4. Expand membership on Awards Committee by one member
- 5. Seek additional faculty reviewers able to review in French.

Respectfully submitted, Andrea Cameron Jun 2, 2011

#### AFPC By-Laws Committee Report – June 1, 2011

Submitted by Mike Namaka, Harold Lopatka

The current bylaws (approved May 31, 2007) can be accessed at the web address http://www.afpc.info/downloads/1/Bylaws\_2007\_05.pdf.

One by-law change is proposed for 2011. The change is associated with the change in Executive Director and the home office location. Further by-law changes will be required in 2012 if the changes to the governance model are accepted.

#### 2011 AFPC By-Law Change - Location of Head Office (page 5)

#### Current

#### "6.0 HEAD OFFICE

The head office of the AFPC shall be in the City of Vancouver in the province of British Columbia, and at such place therein as the AFPC may determine by resolution from time to time."

#### Proposed (changes are in red)

#### "6.0 HEAD OFFICE

The head office of the AFPC shall be in the City of Edmonton in the province of Alberta, and at such place therein as the AFPC may determine by resolution from time to time."

<u>Motion</u>: The above proposed by-law change be approved as presented.

# 3rd CPERC (2012) Report AFPC ANNUAL COUNCIL MEETING June 2011

**Dates:** June 5-8, 2012

Venue: Hôtel Château Laurier, Québec, QC

#### Local Planning Committee:

Frederic Calon (Chair),

Benoit Drolet, Carmen Vézina, Olivier Barbier, Chantale Simard, Chantal Guillemette, Jean Lefebvre, Jean-Pierre Grégoire.

#### **Activities:**

- 1) Dates: June 5-8 were selected as the best dates to avoid overlaps.
- 2) Venue: Château Laurier.
- 3) A draft conference program plan was produced and presented at the MidYear meeting in Toronto. The chairman of each individual session was recently determined, and contacting the speakers should start in June 2011.
- 4) Sponsorship will be actively sought. Our new dean, Jean Lefebvre, and Harold will work together on that, along with other members of our faculty.
- 5) An administrative assistant, Eric Couture, will work with us.

Respectfully submitted:

Frédéric Calon Chair, 2012 CPERC

#### **Association of Faculties of Pharmacy of Canada**

Annual General Meeting June 5, 2011 Winnipeg

#### **Communications Committee Report**

Membership: Dan Thirion, Chair as of June 2010 (University of Montreal)
Rebecca Law (Memorial University of Newfoundland)
Silvia Alessi-Severini (University of Manitoba)
Frederick Calon (Laval University)

#### **Committee Activities:**

#### 1) Translation of the Educational Outcomes

A graduate student of pharmacy translated the Educational Outcomes in a draft document. Revision of this document is required, as quality does not reflect the original version. It is proposed that revision be done by a professional translator and corrected by a pharmacist. Significant costs will ensue to achieve this level of quality.

#### 2) AFPC Newsletter and Newsletter Survey:

The newsletter continues to be published three times per year (January/February, April/May, September/October). AFPC councilors in each Faculty provide newsletter submissions to Rebecca Law, the newsletter editor, for publication. On a rotating basis (approximately once every three years) each Faculty is asked to provide a "Spotlight" for the newsletter highlighting specific activities within the Faculty.

A survey on the newsletter was conducted in January of 2011. Results were presented in the mid-year meeting report. Overall, satisfaction with the newsletter is good. Information on the AFPC conference is the highest perceived pertinent article followed by general faculty news, faculty spotlight and the education corner. Following discussion with Rebecca Law, no major changes will be made. She suggests submitting the most pertinent information to maintain the length of the newsletter to a reasonable amount. Considerations for selecting pertinent information should be discussed. CAPSI contributions and student roles and contributions in education can be considered.

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

#### 3) AFPC Research and Teaching Databases

The responsibility of the teaching database is shared with the education committee. Sylvie Marleau (University of Montreal) has taken the lead on creating and finalizing the teaching database. Approximately one third of the teaching database has been completed with the help of graduate students. The next steps for implementing and maintaining both databases is presented in the education committee report. The communication committee is responsible for website management for this aspect.

#### 4) Website Management Company

The current website requires modifications to meet expected quality and standards. Also, costs with the current provider are becoming excessive. The move to a new website company has been put on hold given the activities required from the current website in regards to the conference.

Respectfully submitted,

Dan Thirion, Communications Committee Chair

#### AFPC Education Committee Report AFPC Annual General Meeting Fort Garry Hotel Winnipeg, MB Sunday, June 5, 2011

Members: Nese Yuksel (chair), Silvia Alessi-Severini, Frederic Calon, Tessa Nicholl, and Ingrid Price

#### **Activities:**

- 1. One meeting was held in Edmonton with Harold Lopatka and Silvia on November 16, 2010 to discuss the upcoming CPERC 2011.
- One teleconferences were held during the year (April 18, 2011) to discuss the following topics: CPERC 2011 in Winnipeg, CPERC 2012 in Quebec City, AFPC Educational Outcomes, and Future Meetings

#### **Summary of discussions:**

#### 1. Canadian Pharmacy Education and Research Conference (CPERC), Winnipeg, 2011 Update

The theme of the 2nd Annual CPERC in Winnipeg is "Pharmacy at the Forks: Education and Research Coming Together" to be held June 5-7, 2011. All sessions will be at the Fort Garry Hotel in Winnipeg. Silvia Alessi-Severini is the current chair. Sessions for this year include:

- Interprofessional Education keynote John Gilbert, and panel discussion
- Education outcomes, curriculum mapping and program evaluation workshop
- Integrating basic science into new curricula
- Experiential education

CE sessions have also been planned for the evening of Monday, June 6. These sessions will be accredited (by MPhA).

The Education Committee would like to congratulate Silvia and the host committee in Winnipeg for all of their work and dedication in planning CPERC 2011! It looks like an excellent program.

#### 2. Canadian Pharmacy Education and Research Conference, Quebec City 2012 Update

Planning is underway for CPERC 2012. Frederic Calon is the local conference chair. Topics planned include sessions on the Entry Level PharmD experience in both Quebec City and Montreal, hospital pharmacy training (Quebec experience with the combined residency/Masters), training the next generation of academics and European experience with undergraduate pharmacy education. We are looking forward to an exciting conference in Quebec City in 2012.

#### 3. AFPC Education Outcomes Update:

The 2010 Education Outcomes was approved at the AFPC Annual General Meeting on June 3<sup>rd</sup>, 2010. Information on the final approval of the AFPC Education Outcomes was sent to all faculty and stakeholders. A brief article on the AFPC education outcomes was published in the Fall of 2010 CAPSIL for pharmacy students. Thank you to Harold for taking the lead and drafting the initial draft.

The AFPC Educational Outcomes was approved with an interim review at one year and final review in 3 years. A preliminary scan on the use of the 2010 AFPC Education Outcomes by faculties was completed by councillors for the AFPC Midyear meeting. Faculties are in various stages of implementing the new AFPC Education Outcomes, with most faculties just starting to look at the integration.

The Education Committee discussed the need to have a formal one year interim review completed before the next AFPC Council Meeting. It was suggested that we wait until after CPERC to complete the interim review. A session on the Education Outcomes will be presented at CPERC, with opportunities for small group discussion and sharing between faculties. This session will help us in focusing on the types of questions we should include in survey (ie for example what support programs would like in adopting the new AFPC educational outcomes).

The final draft of the May 2011 Levels of Performance has been completed and will be reviewed by council at the annual Council meeting on June 5. Earlier drafts of this document have been widely circulated to faculty and stakeholders for feedback.

The Education Committee would like to thank Nancy Winslade and the Education Outcomes Task Group members (Nancy Waite, Terri Schindel, Tom Brown, Claude Mailhot) for all of their work on the 2010 Education Outcomes, as well as the 2011 Levels of Performance.

#### 4. Teaching Database:

The revised teaching database was being compiled by Sylvie Marleau. At this time 3.5 universities have been completed. The following proposal for ongoing maintenance (once database is completed) was presented at the 2011 AFPC Council Midyear Meeting:

- 1. AFPC councillors will be responsible for ensuring the information is complete for their faculties.
- 2. A request will be made annually for AFPC councillors to review and update the teaching and research databases (ie staffing changes, etc). For example it can be decided that we will update in September of every year.
- 3. The call for requests will be made by the Education Committee.
- 4. The Communications Committee will be responsible for managing the database and making the appropriate changes.

At the AFPC Council Midyear meeting it was agreed to defer the project for database completion until the website has been upgraded.

The Education Committee would like to thank Sylvie Marleau for her commitment and work with this initiative.

Respectfully submitted:

Nese Yuksel Chair, Education Committee

# Levels of Performance Expected of Students Graduating from First Professional Degree Programs in Pharmacy in Canada

A Supporting Document to the 2010 Educational Outcomes for a First Professional Degree Programs in Pharmacy

# Association of Faculties of Pharmacy of Canada Educational Outcomes Task Force

Tom Brown, University of Toronto

Claude Mailhot, University of Montreal

Terri Schindel, University of Alberta

Nancy Waite, University of Waterloo

Nancy Winslade, Consultant in Health Professions Education and Assessment

May 2011

#### Background

In June 2010, the Association of Faculties of Pharmacy of Canada (AFPC) approved the revised *Educational Outcomes for First Professional Degree Programs in Pharmacy in Canada (i)*, which define what faculty expect students to be able to do upon completion of their first professional degree program in pharmacy. These educational outcomes are based on ensuring that students can fulfill the multiple roles expected of them upon completion of a university-based health sciences program, including the ability to meet society's and patient's needs for pharmaceutical care and services.

As a supporting document to these educational outcomes, the Task Force was mandated to prepare more specific descriptions of the level of performance expected for each of the educational outcomes. The intention of these descriptions was to provide a more detailed and clear understanding of the expectations of students at the time of graduation. Faculty feedback had confirmed that clarity would be facilitated by creating descriptions at three levels of performance: the level which would be considered as below that required to graduate; the level at which students would be expected to perform upon graduation, and: an above expected level of performance that students could use as a goal for continuing professional development both during their education and into their early years of practice. The Task Force clarifies that the levels are <u>not</u> meant to differentiate in any manner between a B.Sc.Phm. and an entry-level Pharm.D. program. Nor are the levels meant to refer to the average performance expected of students. Faculty and Deans also requested that the levels emphasize the clinical judgement, proficiency and confidence required of pharmacy students to enable them to take appropriate responsibility for their decisions and recommendations.

#### **Format**

The format followed by the AFPC Task Force on Educational Outcomes when defining the level of performance expected of students at the time of graduation differs from the format used in the 1998 Levels document. The original version of the levels provided extremely detailed lists of performance criteria and examples for each element for every educational outcome. In reviewing this format, the Task Force considered the comments from AFPC Council regarding the specific intended uses of the levels. These included use for program evaluation, curricular mapping and planning, guidance in the development of bridging and continuing education programs, and development of instructional and assessment material. Although a number of faculty referred to the potential use of the levels for development of student assessments, it is emphasized that the levels document is <u>not</u> meant to be used directly for student evaluation. Instead, it is intended that faculty could use the levels as the basis for the development of specific assessment tools.

To ensure that the levels document provided the most appropriate support to faculty, the Task Force sought feedback from the AFPC Council and the Association of Deans of Pharmacy of Canada (ADPC). Discussion focused on the advantages and disadvantages, and appropriateness, of preparing lengthy, detailed lists of performance criteria. Reference was made to best practices in student assessment which are supporting an increasing use of global assessments and a movement away from reliance on detailed checklists of behaviours (i-v). In particular, widely evaluated and accepted assessment tools such as the American Board of Medicine's mini-CEX (v) and the Longitudinal Evaluation of Performance (v) rely on global assessments of performance. It was also emphasized by the Task Force that the effective use of such global assessments require faculty to receive appropriate training and to rely on their experience and judgement. Such reliance on judgement allows assessment of less tangible, more subjective outcomes. Concerns about subjectivity and inter-rater reliability were also addressed, with discussion as to how these can be appropriately managed through increased opportunities for assessment by a range of faculty. Again, reference was made to the mini-CEX, and the related pharmacy-specific versions of this assessment that have been created by the University of Montreal, Faculty of Pharmacy.

<sup>\*</sup> These comments were provided to the Task Force in 2009 by Faculties as part of their review of the draft educational outcomes.

Based on these best practices, and in recognition of the need to create a manageable document, the Task Force proposed an approach to the levels that focuses on more global descriptions of the performance expected of students, emphasizing the confidence, commitment, proficiency and clinical judgement required of students. Support was obtained in February 2010 from AFPC Council and ADPC for this approach. Therefore the Task Force developed, for each educational outcome, a global statement of the three levels of performance. It is clarified that each level builds upon the lower level, meaning that students who perform at the 'above expected level' would also be expected to fulfill the 'at expected' level of performance. These descriptions are followed by a series of examples of behaviours for each level of performance. To facilitate linkages between the educational outcome elements and the levels of performance, the Task Force aimed to create at least one example for each educational outcome element. For clarity, it is again emphasized that these are examples only and are not exhaustive. Furthermore, all of the examples bear similar importance and are not weighted in any manner.

#### **Medication Therapy Experts**

The goal of First Professional Degree Programs in Pharmacy (FPDPP) in Canada is to graduate Medication Therapy Experts. This requires students to have a strong foundation in the biomedical, pharmaceutical, behavioural, social and administrative sciences and to integrate this knowledge with skills and attitudes from all seven educational outcomes. Via this integration, students are educated to meet the competencies required of Canadian pharmacists as described by the profession (v). These competencies include roles relating to care and services for individual patients as well as roles emphasizing the responsibilities to populations of patients, to communities and to the profession itself. In addition, students who at graduation are **Medication Therapy Experts** are educated to fulfill roles beyond those required of pharmacists, acknowledging that the goal of university education extends beyond solely preparing students for pharmacy practice. These include, for example, preparation for entry into graduate education.

The level of performance expected of students as **Medication Therapy Experts** is described by the following overarching statements:

As Medication Therapy Experts, at the time of graduation pharmacy students are appropriately confident and capable of meeting the medication-related needs of both patients and populations. They are prepared to enter into graduate studies or fulfill their professional responsibilities via pharmacy practice. They have a commitment to care for, and care about, patients; a fundamental knowledge of medications, the pharmaceutical, biomedical, sociobehavioural and clinical sciences, and health-systems; the motivation, professionalism, confidence and clinical judgement to apply this knowledge appropriately and effectively, and: an attitude that enables them to work with others while making, acting upon and taking responsibility for scientifically-sound decisions.<sup>†</sup>

The following provide the levels of performance for each of the educational outcomes. For reference, the AFPC-approved educational outcomes and contexts are provided and readers are referred to the full description of these approved outcomes for further detail (**Error! Bookmark not defined.**). These outcomes and contexts are 'greyed' in the following document as these have been approved by AFPC Council and are not, at the present time, being considered for revision.

121

<sup>†</sup> Modified from reference Error! Bookmark not defined..

#### **Care Provider**

As *Care Providers* pharmacy graduates use their knowledge, skills and professional judgement to provide pharmaceutical care and to facilitate management of patient's medication and overall health needs.

#### Range of Contexts in Which Fulfilment of the Outcome is Expected

Graduates from FPDPP in Canada fulfill this educational outcome in all sites where licensed pharmacists provide patient care either as an integral component of the dispensing of medications, or as a professional service provided independently from the dispensing of medications.

This means that graduates:

- i. **possess** the core knowledge, skills and attitudes required of pharmacists to:
  - manage the medication therapy of patients who require the pharmacist's participation in their care:
  - manage the medication therapy of patients who are willing and able to accept the responsibilities required by this care;
  - manage the medication therapy of patients with common medication-therapy problems and patients who require urgent care<sup>‡</sup>;
  - provide basic first aid and CPR;
  - administer injections in accordance with laws and regulations;
  - provide care in accordance with accepted frameworks that expand the pharmacist's scope of practice (e.g. medical directives);
  - recommend appropriate sources of support<sup>§</sup> for patients experiencing common difficulties in daily living ;
  - advise patients on common, current health promotion programs, and:
- ii. **are able to acquire** the knowledge and skills required to manage patients with uncommon or highly complex medication-related needs, or;
- iii. are able to appropriately refer patients for the management of medication therapy needs that fall beyond their individual scope of practice, and:
- iv. are able to appropriately triage patients to other primary care providers for needs that fall outside the scope of practice of pharmacists.

Difficulties with, for example, transportation, activities of daily living, emotional, spiritual needs.

Urgent medication therapy needs are those that require urgent care by the pharmacist or urgent referral to primary care providers (e.g. via ambulance or referral to ER).

Graduates are **not** expected to possess knowledge of specific community resources: they must only know that such services / resources may exist and be able to direct the patient regarding who to contact.

Performance Indicators		
Below Expected Performance	Performance Expected Upon Completion of the Undergraduate Program	Above Expected Performance
Students demonstrate deficiencies or inconsistencies in their ability or commitment to fulfilling their professional obligations to care for patients.	Students consistently demonstrate appropriate confidence, commitment, proficiency and clinical judgement while fulfilling their professional obligations to care for patients.  Students take appropriate responsibility for optimizing patient's medication therapies and managing their medication-therapy problems.  Students use their clinical judgement to make patient-centred, evidence-based decisions in a confident manner.  Students accurately and effectively triage patients to appropriate care providers with due consideration for efficient use of health resources.	Students fulfill their professional obligations to care for patients in a flexible and efficient manner, responding easily to changing patient needs.  Students confidently and competently provide care to patients with uncommon or specialized medication-related problems.

Examples		
Students will not meet this performance indicator at an expected level if they, for	Students will meet this performance indicator at an expected level if they, for	Students will exceed the expected level of performance on this indicator if they, for
example:	example:	example:
focus on technical or distributive functions rather than prioritizing	effectively and appropriately prioritize patient care when faced	confidently provide a wide range of primary health care services.
patient care.	with multiple professional responsibilities.	of primary reality date services.
are unclear of their professional	maintain appropriate boundaries	confidently and effectively
role or perform it inconsistently or	with patients, peers and other	articulate the expanding role of
inflexibly.	care providers, confidently and accurately articulating their roles	their profession, and consistently fulfill expanded roles while
	and responsibilities in a	providing patient-centred care.
	professional manner.	
adopt paternalistic or uncaring	effectively develop and maintain	determine and develop the
roles with patients, or place their	professional, patient-centred	professional relationship most
personal values in preference to	relationships with patients and	appropriate for complex patients
the patient's values.	their health care providers.	or those with complex care needs.
complete patient assessments in	complete patient assessments in	effectively modify their patient
a formulaic, minimally flexible or	a thorough, yet efficient,	assessment approaches to
unstructured manner.	professional manner,	provide appropriate care to
	appropriately incorporating	patients with uncommon or
	expanded activities when	complex needs.

	necessary.	routinely and appropriately incorporate expanded activities
		into their patient assessments.
lack confidence, or are inappropriately over confident, in their decision-making ability when providing patient care.	demonstrate appropriate confidence in their evidence-based decision-making and recommendations when providing patient care.	
demonstrate critical gaps in knowledge, skills or attitudes required to care for patients with common medication therapy problems.	demonstrate mastery of required knowledge and skills, resulting in their ability to effectively manage patients with common medication-therapy problems.	consistently formulate sound decisions in appropriate time frames, even on matters of complexity or where limited evidence exists, appropriately analyzing available data and using their knowledge base to make sound clinical recommendations.
demonstrate critical inability to apply their knowledge / skills effectively to identify patients' medication-therapy problems.	consistently identify patient's common and / or critical medication-therapy problems in an efficient, accurate manner.	anticipate and effectively manage challenges to identifying a patient's medication-therapy problems.
provide care or services beyond their scope of practice.  do not recognize patients who	consistently identify patients who require referral and make referrals to the appropriate care providers.	have an appropriate understanding of the roles / responsibilities of a wide range of health care providers and can
require referral, or refer patients to an inappropriate care provider.  are unable to rationalize the need for referral.	provide an appropriate, efficient rationale for the referral, and provide patients with appropriate referral notes.	appropriately refer patients to these providers.
develop patient therapeutic and monitoring plans that are incomplete, non-specific, unrealistic or do not foster autonomy of the patient or the incorporation of self-care.	consistently develop accurate, efficient patient therapeutic and monitoring plans that incorporate best practices and that respect the autonomy of the patient and incorporate the principles of self-care as appropriate.	integrate the therapeutic and monitoring plans for multiple medication-therapy problems to support efficient patient self-care.  efficiently formulate appropriate management plans including plans that address complex, poorly defined or controversial issues.
minimize attempts to ensure team and patient agreement with and understanding of therapeutic and monitoring plans.	consistently gain team and patient agreement with and ensure understanding of therapeutic and monitoring plans.	demonstrate ease and confidence when gaining agreement with and implementing patient management plans
do not provide follow-up or provide it in an inconsistent manner, demonstrating lack of understanding of or commitment to their responsibility to provide such follow-up.	consistently fulfill their commitment to provide follow-up care to patients.	develop and implement systems that integrate and streamline patient follow-up.
complete documentation that is either too limited or too lengthy.	consistently support continuity of care by appropriately documenting patient and care information in a clear manner.	create clear, concise documentation that maximizes team member's understanding and consistently supports continuity of care.

#### Communicator

As **Communicators** pharmacy graduates communicate with diverse audiences, using a variety of strategies that take into account the situation, intended outcomes of the communication and the target audience.

#### Range of Contexts in Which Fulfilment of the Outcome is Expected

Graduates from FPDPP in Canada communicate effectively with patients to whom they are providing care, including those presenting communication challenges, and with peers and other health care professionals in both individual and group settings.

Below Expected Performance	Performance Expected Upon Completion of the Undergraduate Program	Above Expected Performance
Students demonstrate inconsistencies or deficiencies in their ability or commitment to communicating, verbally, nonverbally and in writing, in a professional, timely, efficient, flexible manner.	Students demonstrate appropriate confidence in and ability to effectively manage challenging communication situations.  • Within a practice environment, students effectively communicate (verbally, non- verbally and in writing) to provide patient-centred, collaborative care and to ensure safe and effective distribution of medications.  • Within an education environment, students effectively support learning, using appropriate instructional methodologies that are tailored to the audience.	Students manage challenging communication situations with ease and in an efficient, professional manner. Students have a range of techniques that they use appropriately and flexibly to manage situations of conflict, including patient or interprofessional conflict, ethical dilemmas, or sensitive professional situations.
Students will not meet this performance indicator at an expected level if they, for example:	Students will meet this performance indicator at an expected level if they, for example:	Students will exceed the expected level of performance on this indicator if they, for example:
use their communication skills in a formulaic manner or unstructured manner, resulting in inefficient use of time and potentially ineffective interventions.	effectively use appropriate communication techniques to fulfill their professional responsibilities in a timely manner.  appropriately respond to and	demonstrate an ease of communication that enables patients and other health care providers to rapidly develop trust and confidence in their professionalism and competence as a health care provider.

		T
	respect differences in culture, language and health literacy.	
respond ineffectively to challenging situations by, for example, becoming angry, defensive or neglecting their professional responsibility to resolve the situation.	adapt their communications to effectively address challenging communication situations such as dealing with conflict, anger, confusion or errors and discussing sensitive issues or severe conditions.	demonstrate confidence and proficiency in effectively managing situations presenting communications challenges such as conflict, anger, confusion or errors, and discussing sensitive issues or severe conditions.
complete documentation that has errors, uses non-traditional short forms or misrepresents their actions or the actions of others.  create written communications that are unclear, with missing or confusing rationalization.	consistently ensure that documentation is clear, error free and consistent with best practices for patient safety.	consistently ensure that documentation is clear, concise, accurate, and in the appropriate format and amount of depth based on the clinical situation being managed.
appear unprepared or disorganized when presenting information, and do not abide by appropriate time frames.  are unable to respond effectively to basic questions regarding presented information.	are capable and appropriately confident presenting information in a timely, professional and effective manner.  respond effectively to audience questions.	use non-traditional or innovative approaches to engage the audience and maximize participation, translation and integration of learning.
use communication technologies in a manner that detracts from audience learning.	effectively and appropriately use communication technologies to support audience learning.	use communication technologies in an innovative manner to enhance learning.

#### Collaborator

As **Collaborators** pharmacy graduates work collaboratively with teams to provide effective, quality health care and to fulfill their professional obligations to the community and society at large.

#### Range of Contexts in Which Fulfilment of the Outcome is Expected

Graduates from FPDPP in Canada collaborate effectively with:

- the patient and the full range of health care professionals on the patient care team;
- co-workers, and:
- professional groups / associations.

Below Expected Performance	Performance Expected Upon Completion of the Undergraduate Program	Above Expected Performance
Students fail to interact with the intra and inter-professional team in a manner that achieves appropriate outcomes, including patient care.	Students develop appropriate intra and inter-professional relationships and work effectively in partnership with a range of team members to achieve negotiated, agreed-upon objectives.	Students actively and consistently endeavour to develop new intra and interprofessional relationships and networks for diverse purposes including patient care, while recognizing and capitalizing upon the opportunities presented for professional advocacy.
Students will not meet this performance indicator at an expected level if they, for example:	Students will meet this performance indicator at an expected level if they, for example:	Students will exceed the expected level of performance on this indicator if they, for example:
routinely demonstrate behaviours or attitudes that undermine interprofessional relationships.	consistently demonstrate basic interpersonal skills required for harmonious, effective professional relationships including effectively managing inter-professional conflict.	effectively and efficiently manage inter-professional conflict in a manner that increases the successful management of both patient's needs and opportunities for professional advocacy.
are unable to show leadership abilities when it is appropriate or required.	effectively adapt their role in the team, utilizing leadership abilities consistent with the pharmacist's role as a medication therapy expert, the team's objectives and their personal experience and expertise.	show initiative in creating and leading inter-professional teams.  are recognized as leaders by others in the inter-professional team.
are unclear or defensive when articulating their role relative to other health care providers.	consistently explain their roles and responsibilities in a confident, constructive, effective manner.	assist the team in clarifying relative roles and responsibilities to ensure effective achievement of objectives

undertake activities or provide care the is more appropriately provided by other team members	demonstrate appropriate flexibility in the activities undertaken or care provided as consistent with the scope of practice of other team members	develop and maintain collaborative relationships with a network of care providers, resulting in efficient, effective collaborative care
are not aware of or are not committed to their obligation to collaborate with the patient and his/her care providers in order to provide follow-up of care.	routinely collaborate and communicate with care providers to ensure safe and optimal patient care.	have formalized processes / procedures for collaborative care.

#### Manager

As *Managers* pharmacy graduates use management skills in their daily practice to optimize the care of patients, to ensure the safe and effective distribution of medications, and to make efficient use of health resources.

#### Range of Contexts in Which Fulfilment of the Outcome is Expected

Graduates from FPDPP in Canada manage their individual practice and staff for whom they are directly responsible to ensure that their patients are provided the care, services and medications required to meet their medication therapy needs. They support sustainable practices that address patient needs and changing professional roles<sup>††</sup>.

**Above Expected Performance** 

provided or support the provision of new professional services.

evaluate the work environment to

identify strengths and

Below Expected Performance Performance Expected Upon

·	Completion of the Undergraduate Program	·
Students do not accept responsibility for managing personnel, do not appreciate the influence of workflow / human resources management on the quality of team work, or appear un-motivated or incapable of fulfilling this role.  Within a practice environment,	Students ensure both the safe distribution of medications and the provision of the care / professional services required for safe and effective medication use.  Students effectively manage their personal practice environment and recognize the	Students are appropriately confident in their ability to take charge of the work environment, optimizing delegation of tasks and work flow. Within a practice environment, students ensure safe and effective distribution while focussing on providing expanded professional services appropriate to patient need.
students place undue focus on the distribution aspects of the dispensing process, or accept responsibility for primarily technical tasks relative to provision of professional services.	importance of efficiency in the workplace.	appropriate to patient need.
Students will not meet this	Students will meet this	Students will exceed the
performance indicator at an expected level if they, for example:	performance indicator at an expected level if they, for example:	expected level of performance on this indicator if they, for example:
are challenged to set appropriate priorities or work within reasonable time frames.	effectively and appropriately manage their personal practice, including managing their own	consistently identify and implement improvements in workflow or practices that
Teasonable time mames.	time and personnel under their	improve the quality of care

assume roles that disrupt the

efficiency and safety of the

direct supervision, to ensure

patients receive optimal care.

responsible for the dispensing of

ensure that, when they are

For clarity, it is emphasized that the graduates are <u>not</u> expected to be able to be managers of a pharmacy upon completion of the FPDPP.

medication distribution system.	medications, all medications compounded, dispensed or sold are appropriate, accurate, effective and safe, and are provided in a manner consistent with all legal requirements.  ensure, while they are responsible for dispensing of medications, the safety and quality of the drug distribution system.	weaknesses in the operations, and advocate for changes when needed.
are unclear on their appropriate role in managing medication distribution, either performing tasks that are more appropriately delegated, or permitting pharmacist's professional services to be provided by technical or untrained staff.	consistently ensure that dispensing occurs only in conjunction with provision of required patient care (see educational outcomes 1.3 to 1.6).	can efficiently manage situations where conflicts in roles of pharmacy staff arise, engendering respect while ensuring adherence to legislation, Human Rights, standards of practice, codes of ethics and best practices are followed.
minimize the importance of errors, do not assume responsibility, or place patients at risk by not disclosing errors.	effectively manage adverse drug events, errors, and incidents in a fair manner consistent with current best practices, including disclosure, professional apology and formal reporting.	ensure that post-event analysis occurs with the goal of managing processes / policies / systems to prevent similar adverse drug events, errors or incidents in the future, and initiate documentation of these processes.
disregard unsafe practices via either not recognizing them as unsafe or not recognizing their responsibility to manage unsafe practices.	routinely evaluate their own practice, recognizing unsafe or less than optimal procedures / practices and accept responsibility for rectifying these situations.	seek out and lead formal practice analyses for the purposes of patient safety, quality assurance, and practice improvement.
disregard activities required to maintain the financial health or sustainability of the practice, such as not providing professional services (e.g. MedsCheck or pharmaceutical opinions) or inappropriately or incompletely billing for professional services.	consistently recognize the importance of financial sustainability by providing and billing for an appropriate balance of reimbursable services.	seek out and develop new models or sources of revenue for professional services that contribute to the financial sustainability of the practice.

#### **Advocate**

As **Advocates** pharmacy graduates use their expertise and influence to advance the health and well-being of individual patients, communities, and populations, and to support pharmacist's professional roles.

#### Range of Contexts in Which Fulfilment of the Outcome is Expected

Graduates from FPDPP in Canada advocate on behalf of individual patients, local patient groups and the profession of pharmacy, at an individual, organizational / institutional, and government level.

Performance Expected Upon

**Above Expected Performance** 

**Below Expected Performance** 

	Completion of the Undergraduate Program	Above Expected Performance
Students consistently meet patient's needs for accurate and safe medication supply yet display minimal or little acknowledgement of their professional responsibility to assist patients with their management of other health needs or with supporting their maintenance of health.  Students maintain a focus on their individual practice without evidence of understanding or being committed to the advancement of the profession.	Students effectively support patient access to the health and associated resources that patients require to prevent disease and promote their health and well-being.  For the profession, students maintain an involvement with organizations or activities that support the advancement of the profession and patient care.	Students actively seek opportunities to promote access to health and associated resources for patients, proactively identifying their needs and independently implementing strategies to meet these needs.  Students are identified as leaders in the community and profession as it relates to the development of new professional services.
Students will not meet this performance indicator at an expected level if they, for example:	Students will meet this performance indicator at an expected level if they, for example:	Students will exceed the expected level of performance on this indicator if they, for example:
•	•	•
are unaware of, provide	consistently provide accurate and	
minimum response to or inappropriately refer patients who face challenges gaining access to required resources.	consistently provide accurate and clear guidance to patients regarding availability and appropriate use of local health care services	consistently seek out connections and opportunities to develop a reference network to efficiently facilitate patient navigation through the health care system.
minimum response to or inappropriately refer patients who face challenges gaining access	clear guidance to patients regarding availability and appropriate use of <u>local</u> health	connections and opportunities to develop a reference network to efficiently facilitate patient navigation through the health

related to medication or health	policies or practices.	advocacy strategies to
policies or practices.		accomplish required changes.
focus on the distribution of medications and provision of only basic professional services required for safe dispensing of medications.  are unaware of or minimize their responsibility for promoting patient health and wellness.	routinely incorporate into their practice the provision of professional services that aim to promote the health, reduce health risks and maintain the safety of individual patients.	consistently seek out current information on health promotion and patient safety initiatives, actively incorporating activities related to these goals in their daily practice.
are unaware of the importance of, or are unreceptive to, their involvement in addressing professional issues.	consistently respond to requests for professional advocacy, appropriately balancing their involvement in advocacy with their other professional responsibilities.	actively participate in efforts to address professional issues by effectively and routinely functioning as a representative of the profession for political or policy purposes.

#### Scholar

As **Scholars** pharmacy graduates have and can apply the core knowledge and skills required to be a medication therapy expert, and are able to master, generate, interpret and disseminate pharmaceutical and pharmacy practice knowledge.

#### Range of Contexts in Which Fulfilment of the Outcome is Expected

Graduates from FPDPP in Canada use their knowledge and skills:

- for clinical reasoning and decision-making required during daily pharmacy practice;
- to provide drug information and recommendations to inform practices and health policy at an individual and organizational / institutional level;
- to educate the following regarding medications and appropriate medication use, including the pharmacist's role:
  - o individual and groups of patients, peers, pharmacy and allied health care professional students, interns and residents, allied other health care professionals;
  - o individual medical specialists and;
- to initiate or collaborate on projects related to problems identified during daily pharmacy practice including projects related to drug utilization and continuous quality improvement.

Below Expected Performance	Performance Expected Upon Completion of the	Above Expected Performance
	Undergraduate Program	
Students do not demonstrate the required depth or breadth of core knowledge or skills or are unable to apply this knowledge consistently and effectively while performing their professional roles.	Students appropriately, consistently and confidently use their professional judgement when making evidence-based decisions, providing drug information and facilitating learning, relying aptly on a blend of their core knowledge, experience and critically-appraised, literature-based evidence.	While maintaining their abilities to fulfill all of their professional responsibilities, students demonstrate advanced proficiency in research or teaching.
Students will not meet this performance indicator at an expected level if they, for example:	Students will meet this performance indicator at an expected level if they, for example:	Students will exceed the expected level of performance on this indicator if they, for example:
	T	T
have consistent or critical deficiencies in their core knowledge and are unable to provide accurate explanations or rationale for decisions / recommendations / solutions to medication-related issues.	have a thorough understanding of core knowledge and an ability to apply this knowledge and associated skills to effectively manage medication-related issues.	have a mastery of both core and a specialized area of proficiency
II	consistently and accurately	1

recommendations / solutions.	
accurately and consistently	routinely incorporate reflection on
identify when their knowledge	their quality of care provided and
and experience is insufficient to	care processes followed to detect
manage a situation, and	deviations from expected
appropriately seek strategies to	outcomes, and openly seek
resolve the situation.	opportunities and resources to
	improve this care and care
consistently recognize when a	processes.
situation is deviating from an	
expected course (e.g. not going	
	are increasingly efficient in their
	accessing and critical reviewing of
	relevant literature, and are able to
	make appropriate
	recommendations related to
	ambiguous medication-related
literature into practice.	issues and those where evidence is
and the state of the second state of the secon	limited or contradictory.
	are recognized as exemplary
	practitioners and role models for
	students.
	are flexible in modifying their presentations and presentation
	style according to the feedback
	being received from the audience.
	consistently contribute to the
	creation of new pharmacy-related
	knowledge through active
	participation in research.
• •	participation in robotion
	accurately and consistently identify when their knowledge and experience is insufficient to manage a situation, and appropriately seek strategies to resolve the situation.

#### Professional (vi, vii, viii)

As **Professionals** pharmacy graduates honour their roles as self-regulated professionals through both individual patient care and fulfillment of their professional obligations to the profession, the community and society at large.

#### Range of Contexts in Which Fulfilment of the Outcome is Expected

**Performance Expected Upon** 

**Above Expected Performance** 

Graduates from FPDPP in Canada conduct themselves professionally in all situations where they are reasonably perceived to be a representative of the profession of pharmacy.

**Below Expected Performance** 

Below Expected Performance	Completion of the Undergraduate Program	Above Expected Performance
Students do not recognize their responsibility of acting professionally. They do not recognize that their behaviours reflect on the profession including when they are not in their formal work environment.	Students fulfill the full range of roles required of a self-regulated health professional. They consistently act in a professional manner. In a practice environment they maintain the patient's best interest as their priority.	Students demonstrate exemplary abilities to maintain a professional demeanour in stressful situations.
Students will not meet this performance indicator at an expected level if they, for example:	Students will meet this performance indicator at an expected level if they, for example:	Students will exceed the expected level of performance on this indicator if they, for example:
violate fundamental ethical principles related to professional accountability or patient autonomy, confidentiality and nonabandonment.  minimize their responsibility for managing ethical dilemmas, either inappropriately referring or dismission the dilemma	consistently provide patient- centred care that is consistent with ethical guidelines governing the health professions.	effectively detect and efficiently resolve situations presenting ethical dilemmas.
undertake to complete only the minimum activities to maintain their competence to practice.  are resistant to feedback on their performance.	demonstrate acceptance of the need for their continual professional growth and learning.  adapt to change within the profession, being receptive to feedback on their performance and accurately recognizing when additional development is required.  consistently determine appropriate strategies for	strongly value the need for continual professional growth and change within the profession, actively seeking feedback on their performance and reflecting on when additional development is required.  can develop new strategies to achieve required learning, depending on the professional development required.

	achieving this learning.	
demonstrate a lack of commitment to the professional role of pharmacists, with focus on maintaining a status quo and limited involvement with professional activities and organizations.	demonstrate a deep understanding of and commitment to the developing role of pharmacists in the Canadian health system.	consistently participate in activities or with organizations that promote the profession.
are unaware of key issues facing the profession, with no or little capacity to plan for practice change or improvement.	identify the key components of an effective practice advancement plan, with focus on plans that are rational and feasible, and based on managing important issues facing the profession.	effectively reflect on practice and develop appropriate practice management plans to improve practice.

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#### **AFPC Nomination Committee Report – June 1, 2011**

Submitted by Mike Namaka, Harold Lopatka

#### President Elect (Executive Position)

Mike Namaka will complete his term as President Elect. Daniel Thirion from the Université de Montréal, Facultié de pharmacie was nominated for the position of President Elect at the February 2011 AFPC Council Mid Year meeting. This position is part of the Executive Committee. The nomination was accepted by Council.

#### Council

The three year terms for three AFPC Councilors (MUN, U of T, Laval) conclude at the June 5 and 6, 2011 Council and General meetings.

The 3 year term concludes for John Hawboldt representing Memorial University of Newfoundland, School of Pharmacy (MUN). Carla Dillon has been nominated as AFPC Councilor to represent MUN for the next 3 year term concluding June 2014.

The 3 year term concludes for Andrea Cameron representing the University of Toronto, Leslie Dan Faculty of Pharmacy. The nomination for an AFPC Councilor to represent U of T for the next 3 year term concluding June 2014 has been delayed.

The 3 year term concludes for Frédéric Calon representing the Université Laval, Faculté de pharmacie. The nomination for an AFPC Councilor to represent Laval for the next 3 year term concluding June 2014 has been delayed until a faculty meeting scheduled for mid June 2011.

Daniel Thirion's move to Executive Committee results in an AFPC Councilor vacancy. The nomination has been delayed for an AFPC councilor to represent the Université de Montréal, Facultié de pharmacie for the remainder of the 1 year term concluding June 2012.

Bev Allen will be retiring at the end of August 2011 as AFPC Councilor representing the University of Saskatchewan, College of Pharmacy and Nutrition. A nomination to replace Bev is expected by the end of August 2011. This nomination will be until June 2012.

<u>Motion</u>: The Executive and Council nominations be accepted as presented.

AFPC Conference, 2011 Annual General Meeting Monday, June 06, 2011 Winnipeg, Manitoba

#### **PEBC Liaisons Report**

Please find attached, a concise summary of recent PEBC activities and summary statistics for 2010. A total of 2442 candidates wrote the Qualifying Examination-Part I (MCQ) in 2010, compared to 1977 in 2009. A total of 2017 candidates took the Qualifying Examination-Part II (OSCE), compared to 1887 in 2009.

There are a growing number of pharmacy technicians participating in the PEBC certification process. There were 378 names added to the Pharmacy Technician Register by examination in 2010 bringing the total to 501 since 2009.

At the 2011Annual Meeting, the PEBC Board approved a strategic plan for 2011-2014. This plan includes a feasibility study on the use of computerized testing in the delivery of PEBC examinations, examination of innovative testing strategies to enhance PEBC examination processes, investigation of electronic scoring of performance examinations at exam test centres, exploration of potential involvement in assessments related to advance practice or specialty certification, and the development of a plan to enhance the use of web-based technology in communicating with candidates and stakeholders.

The attached summary expands on these and other current activities. Thank you to Dr. John Pugsley for preparing and providing the attached PEBC Update.

Respectfully submitted,

Lavern M. Vercaigne, Pharm.D. Anne Marie Whelan, Pharm.D. AFPC Liaisons to PEBC N E W S

## PEBC UPDATE

Vol. 15 No. 1 March 2011

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## 2011 Annual Board Meeting Summary



#### **INSIDE**

Board Appointments
2011 Executive Committee
2010 PEBC Statistics
PEBC By-Laws
Blueprint for Pharmacy Steering
Committee2
Entry-to-Practice Examination
For Pharmacy Technicians2
Committee on Examinations2
Public Relations Committee2
PEBC Strategic Plan 2011-142
Roard Meetings 2

PEBC UPDATE
The Pharmacy Examining
Board of Canada

Contributor: J. Pugsley

The Pharmacy Examining Board of Canada held its 2011 Annual Board Meeting on March 5, 2011 in Toronto. Standing committees met over the 3 days preceding this meeting. The following are highlights of issues addressed and recommendations made by the Board. For further information, you may contact Board appointees, the President, Tena Taylor, or the Registrar-Treasurer, Dr. John Pugsley.

#### **Board Appointments**

New appointments to the Board, taking effect at the close of the Annual Board Meeting are:

## Canadian Society of Hospital Pharmacists:

Mits Miyata

#### Saskatchewan College of Pharmacists

Karen McDermaid

#### **2011 Executive Committee**

President – Tena Taylor Vice-President – Jeff Whissell Past-President – Peter Gdyczynski

#### **Executive Members:**

Shawn Bugden Dr. Anne Marie Whelan

#### 2010 PEBC Statistics

#### **PEBC Pharmacist Register:**

There were 1326 names added to the Pharmacist Register by examination in 2010.

#### **Pharmacist Qualifying Examination:**

A total of 2442 candidates wrote the Qualifying Examination-Part I (MCQ) in 2010, compared to 1977 in 2009. A total of 2017 candidates took the Qualifying Examination-Part II (OSCE), compared to 1887 in 2009.

There were a total of 8 candidates assessed for non-certification purposes.

#### **Pharmacist Evaluating Examination:**

There was an increase in the number of candidates writing this examination -1548 in 2010, compared to 1314 in 2009.

#### **Pharmacist Document Evaluation:**

A total of 1645 applicants in 2010 were ruled acceptable for admission into the Evaluating Examination, compared to 1178 in 2009.

#### **PEBC Pharmacy Technician Register:**

There were 378 names added to the Pharmacy Technician Register by examination in 2010 bringing the total to 501 since 2009.

## Pharmacy Technician Qualifying Examination:

A total of 168 candidates took the Spring 2010 Pilot Pharmacy Technician Qualifying Examination Part I (MCQ) and Part II (OSPE) in Toronto, Hamilton and Edmonton. For the Summer Pharmacy Technician Qualifying Examination, 362 candidate took the Part I (MCQ) and 325 candidates took the Part II (OSPE) in Toronto, London, Hamilton, Ottawa, Vancouver and Edmonton. In 2009, 153 candidates took the Pharmacy Technician Qualifying Examination- Part I (MCQ) and 154 took Part II (OSPE).

### Pharmacy Technician Evaluating Examination:

A total of 1079 candidates wrote the Pharmacy Technician Evaluating Examination in 2010 at centres in Ontario, British Columbia, Alberta, Nova Scotia and Newfoundland compared to 297 in 2009.

#### **PEBC By-Laws**

In 2011, PEBC will review its By-Laws in view of the new Not-For-Profit Act under Bill C4 and will address any necessary changes.

## Blueprint for Pharmacy – Steering Committee

In 2010, J. Pugsley was appointed as PEBC representative on the Blueprint for Pharmacy Steering Committee (BPSC). He has provided regular BPSC reports to the Board and Executive Committee. A blueprint for pharmacy website: www.blueprintforpharmacy.ca has recently been established. A number of resources useful to pharmacists are being added to the website. The Blueprint for Pharmacy Action Item 4.2.3 "Standardized entry-to-practice exam as evidence of a regulated pharmacy technician's competency to practice" has been developed and completed by PEBC.

# Entry-to-Practice Examination for Pharmacy Technicians

A second Pilot Pharmacy Technician Qualifying Examination-Part I (MCQ) and Part II (OSPE) was held in March 2010. Based on the Pilot Pharmacy Technician Qualifying Examination research report and recommendations, changes were made to the August 2010 Qualifying Examination which included: a reduction in the number of multiple choice questions to 170; a reduction in the length of the examination to 4 hours; a reduction in the number of OSPE stations to nine

(four interactive stations, one video station on sterile compounding, one station on non-sterile compounding, and three non-interactive stations). In 2011, the Pharmacy Technician Qualifying Examination may begin to be offered at more locations, as provinces move forward with the regulation of pharmacy technicians.

In 2010, the Pharmacy Technician Evaluating Examination was offered at locations in British Columbia, Alberta, Ontario, Nova Scotia and Newfoundland. In the fall of 2011, the Evaluating Examination will be offered in Manitoba and possibly in other provinces.

#### **Committee on Examinations**

At the March 2011 meeting, the Committee on Examinations supported the need for the establishment of a working group to consider the enhancement of the testing of interand intra-professional collaboration in the Pharmacist and Pharmacy Technician Qualifying Examinations. Research will be conducted in 2011 to determine if the number of stations in the Pharmacist Qualifying Examination-Part II (OSCE) can be reduced without compromising the integrity of the examination.

#### **Public Relations Committee**

At the March 2011 meeting, the Public Relations Committee reviewed and revised the PEBC Communication Strategy Plan, which now includes communication strategies for pharmacy technician candidates and pharmacy technician educators.

The use of the Pharmacy Technician section on the website will continue to be promoted to stakeholders and potential candidates. A digital "question and answer" document regarding the pharmacy technician examinations has been developed. This will be available on the PEBC website. The document has also been circulated to the Canadian Pharmacy Technician Educators Association (CPTEA) for distribution to potential candidates and will also be

posted on the Canadian Association of Pharmacy Technicians (CAPT) website.

An orientation video for the Pharmacy Technician Qualifying Examination will be developed in 2011 and will be available on the PEBC website.

A digital "question and answer" document on the Pharmacist Qualifying Examination has been developed for first and second year pharmacy students to orient them to PEBC. This document has been distributed to students through CAPSI.

PEBC will launch a redesigned website in 2011.

In Miami, in May 2010, PEBC presented two research papers at the 14<sup>th</sup> International Ottawa Conference on the Assessment of Competence in Medicine and the Health Professions. PEBC will be presenting a paper on the development of the PEBC pharmacy technician examinations at the September 2011 Council on Licensure, Enforcement and Regulation conference in Pittsburg.

#### PEBC Strategic Plan 2011-2014

At the Annual Meeting, the Board approved a strategic plan for 2011-2014. This plan includes a feasibility study on the use of computerized testing in the delivery of PEBC examinations, examination of innovative testing strategies to enhance PEBC examination processes, investigation of electronic scoring of performance examinations at exam test centres, exploration of potential involvement in assessments related to advance practice or specialty certification, and the development of a plan to enhance the use of web-based technology in communicating with candidates and stakeholders.

#### **Board Meetings**

The next Board meeting and committee meetings will be held on October 28-29, 2011(Mid-Year Meeting). The date of the next Annual Meeting is tentatively set for March 4, 2012, with Committee Meetings preceding.

#### PEP Canada Report to AFPC/ADPC

#### **Submitted by:**

Harriet Davies, Dalhousie University (Chair) and Andrea Cameron, University of Toronto (Co-Chair) June 2011

<u>Change in Chair/Vice-Chair:</u> Andrea Cameron from the University of Toronto will be the Chair of PEP Canada for the 2011-2012 year. Harriet Davies from Dalhousie University will finish her second term as Vice-Chair and then Chair since the creation of PEP Canada in 2004. A Vice-Chair will be selected by the committee at the June 4, 2011 meeting in Winnipeg.

<u>Teleconference Meeting:</u> PEP Canada held a meeting via teleconference on February 16, 2011. Discussion items included:

- a. Professional Liability Insurance for Pharmacy Students registered in certain provinces.
- b. Workers compensation insurance issues per province; it is important to note that not all provinces extend WCB to students on clinical rotations.
- c. How simulation relates to achieving experienitial education curriculum goals.
- d. Bev Allen announced his retirement from the University of Saskatchewan as Coordinator of SPEP.

<u>CPERC - PEP Canada Meeting Planning</u>: PEP Canada will hold meetings at the 2nd Annual Canadian Pharmacy Education and Research Conference (CPERC) hosted by the University of Manitoba in Winnipeg all day on June 4, 2011. The following PEP Canada members are presenting at CPERC:

*IPE Panel Discussion June 6, 2011:* Kelly Brink, University of Manitoba; Andrea Cameron, University of Toronto; Harriet Davies, Dalhousie University.

Experiential Education Session June 7, 2011: Kelly Brink and Nancy Kleiman, University of Manitoba; and Katrina Mulherin, University of Toronto.

#### **Other Presentations by PEP Canada Members:**

January 2011: "Pharmacy Issues and Controversies Forum – Panel Discussion" Student Practical Experiences – "To Pay or Not to Pay?" Andrea Cameron, from the University of Toronto and Co-chair of PEP Canada and Dr. Nancy Waite from the University of Waterloo were panel participants.

PEP Canada thanks ADPC, AFPC and each member's individual pharmacy programs for the financial support provided to this committee.

#### REPORT OF THE PLANNING & FINANCE COMMITTEE

Submitted to the AFPC AGM, Monday, June 6<sup>th</sup>, 2011

Prepared by B. Allen, Chair

I would like to begin by thanking our Executive Director, Harold Lopatka, for his due diligence in preparing our 2011 operational budget, and for his fiduciary responsibilities in monitoring and managing the financial affairs for AFPC. In my role as Chair of the Planning and Finance Committee, I find it reasonable and fair to say that the financial affairs of AFPC have been managed appropriately and responsibly.

I have had the opportunity to discuss by teleconference the material provided to Executive and Council by our Executive Director, Harold Lopatka prior to our AFPC Council meeting June 5<sup>th</sup> and the AFPC AGM meeting, June 6<sup>th</sup>, 2011. In reviewing this material, our discussion focused on various aspects of the 2011 AFPC Operating Budget forecast as well as the 2010 Draft Financial Statements labeled "For Discussion Purposes", as prepared by our auditor, Wolrige Mahon from Vancouver, BC.

The financial statements for the Audited Fiscal Year ending December 31, 2010 indicate an excess of <u>expenses</u> over revenue of \$42,574.00. This does not reflect the transfer of \$26,847.00 (the value of a term deposit that was not renewed) from our reserve funds. Therefore the Statement of Cash Flow shows a deficiency as it excludes the cash withdrawn from reserves.

We have taken a very close look at presenting a balanced budget and a methodology of how to incorporate fiscal responsibility to meet the needs of the expanding role of AFPC. Membership continues to be the major source for income and discussions with ADPC has provided a new funding model that will increase faculty contribution revenue by 25% for the coming year, 2011. This along with a renewed approach to our Awards Program and funding sponsorship from Rx&D and Janssen to meet our recommendation to be cost neutral, should provide opportunities to achieve a balanced budget.

The auditor's draft financial statements and material provided to Council by our Executive Director, Harold Lopatka, have been reviewed and found acceptable and to be a fair representation of the transactions of AFPC for the year ending December 31, 2010.

The following motions are therefore presented by Council for AFPC membership approval:

#### MOTION #1

That the audited financial statements for the Association of Faculties of Pharmacy of Canada for the year ending December 31, 2010, accepted and recommended by AFPC Council, be approved by the membership.

#### **MOTION #2**

That the proposed 2011 AFPC Operating Budget for the year ending December 31, 2011, accepted and recommended by the AFPC Council at the Mid-Year meeting February 2011, be approved by the membership.

I wish to acknowledge and thank Harold Lopatka for his stewardship in the budgeting and auditing process. Dr.Lopatka has shown intuitive leadership in securing additional funding from membership and resources to provide a revenue neutral position for our annual awards.

Respectfully submitted,

B. E. (Bev) Allen, Chair

June 6<sup>th</sup>, 2011

## ASSOCIATION OF FACULTIES OF PHARMACY OF CANADA

Edmonton, AB

FINANCIAL STATEMENTS

December 31, 2010



#### INDEPENDENT AUDITOR'S REPORT

To the Members of the Association of Faculties of Pharmacy of Canada:

We have audited the accompanying financial statements of the Association of Faculties of Pharmacy of Canada, which comprise the balance sheet as at December 31, 2010, and the statements of revenue, expenditures and changes in net assets, and cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian generally accepted accounting principles, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

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 comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the association's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the association's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements present fairly, in all material respects, the financial position of the Association of Faculties of Pharmacy of Canada as at December 31, 2010, and its financial performance and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles.

Wolige Mahon LLP

**CHARTERED ACCOUNTANTS** 

Vancouver, B.C. May 20, 2011



STATEMENT OF REVENUE, EXPENDITURES AND CHANGES IN NET ASSETS For the year ended December 31, 2010

	2010 \$	2009
Revenue, Schedule 1	153,495	180,266
Expenditures, Schedule 2	196,069	188,192
Deficiency of revenue over expenditures	(42,574)	(7,926)
Net assets, beginning	191,873	199,799
Net assets, ending	149,299	191,873

BALANCE SHEET

December 31, 2010

	2010 \$	2009 \$
Assets		<u> </u>
Current		
Cash	3,510	23,454
Investments (Note 5)	23,432	107,892
Receivables	8,713	10,186
Deposit and prepaid expenses	509	2,000
	36,164	143,532
nvestments (Note 5)	113,135	48,341
	149,299	191,873
Net Assets	149,299	191,873
	149,299	191,873

# STATEMENT OF CASH FLOWS

	2010 \$	2009
Cash flows related to operating activities  Deficiency of revenue over expenditures	(42,574)	(7,926)
Changes in non-cash working capital: Receivables Deposit and prepaid expenses	1,473 1,491	(4,489) (2,000)
Cont flows related to investing activities	(39,610)	(14,415)
Cash flows related to investing activities Redemption (purchase) of term deposit	19,666	(1,312)
Net increase in cash Cash, beginning	(19,944) 23,454	(15,727) 39,181
Cash, ending	3,510	23,454
Supplemental cash flow information: Interest received	5,183	1,313

NOTES

For the year ended December 31, 2010

#### Note 1 General

The Association of Faculties of Pharmacy of Canada is a national association of faculties of pharmacy whose members are committed to the promotion and recognition of excellence in pharmacy education and scholarly activities. The Association is exempt from income tax under Section 149 of the Income Tax Act.

#### Note 2 Significant Accounting Policies

#### Financial Assets and Financial Liabilities

The Association has chosen to apply the Canadian Institute of Chartered Accountants ("CICA") Handbook Section 3862, Financial Instruments Disclosure and Presentation rather than to adopt Sections 3862, Financial Instruments Disclosure and 3863, Financial Instruments Presentation, as allowed by Canadian generally accepted accounting standards for not-for-profit organizations.

The Association accounts for its financial instruments in accordance with Section 3855 of the CICA Handbook, Financial Instruments - Recognition and Measurement. This section requires all financial instruments to be classified into one of the following five categories: held for trading, held-to-maturity investments, loans and receivables, available-for-sale financial assets or other financial liabilities. All financial instruments are measured at fair value except for loans and receivables, held-to-maturity investments and other financial liabilities, which are measured at amortized cost. The section also specifies how financial instrument gains and losses arising from changes in fair value are to be recognized. Depending on the financial instruments' classification, changes in fair value are either recognized in net income or directly in net assets. The Association's designations are as follows:

Cash is designated as held-for-trading and is measured at fair value.

Investments are classified as held-to-maturity and are measured at amortized cost.

Receivables are classified as loans and receivables and are measured at amortized cost.

#### Revenue Recognition

Membership fees are invoiced annually and expire on December 31. Membership fees are recorded once collection is reasonably assured. Annual conference revenues are recognized upon receipt of the registration form when collection is reasonably assured.

The Association follows the deferral method of accounting for award contributions. Restricted contributions are recognized as revenue in the year in which the related expenses are incurred. Unrestricted contributions are recognized as revenue when received or receivable, if the amount to be received can be reasonably estimated and collection is reasonably assured.

Interest income is recognized as revenue when earned. Other miscellaneous income items are recorded once the amount is readily determinable and collectin is reasonably assured.

#### **Use of Estimates**

The preparation of financial statements in conformity with Canadian generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

NOTES

For the year ended December 31, 2010

#### Note 3 Financial Instruments

Items that meet the definition of a financial instrument include cash, investments and receivables. The fair values of these items approximate their carrying values. It is management's opinion that the Association is not exposed to significant interest rate risk, currency risk or credit risk arising from these financial instruments.

#### Note 4 Capital Management

The Association maintains adequate cash to meet current payment obligations and planned program expenditures. Pending actual disbursements for budgeted program expenditures, funds are invested in securities designed to maximize return while minimizing risk and maintaining flexibility. The investment objectives are subject to limitations defined by the Association's Council and are set to provide maximum current income within the approved risk parameters.

The Association considers its capital structure to consist of members' net assets. The Association is not subject to external restrictions on its net assets.

	2010	2000
	2010 \$	2009 \$
	<b>3</b>	Ф
CIBC GIC - January 2, 2010 4.25%	-	17,557
CIBC GIC January 12, 2010 1.10%	-	43,542
CIBC GIC - June 28, 2010 3.45%	-	23,439
CIBC GIC - November 1 2010 3.70%	-	23,354
CIBC GIC - January 12, 2011 0.15%	44,021	-
CIBC GIC - October 28, 2011 6.50%	23,432	23,432
CIBC GIC - June 27, 2012 3.70%	24,909	24,909
CIBC GIC - January 4, 2013 .50%	19,085	-
CIBC GIC - January 28, 2013 2.20%	25,120	
	136,567	156,233
Less: Current portion - maturities within one year	23,432	107,892
	113,135	48,341
	<del></del>	

#### SCHEDULE OF REVENUE

	2010	2009
	\$	\$
Memberships		
Faculty	89,252	88,328
Affiliate	10,800	9,600
Associate	450	525
Awards		
Merck Frosst	15,000	15,000
Sanofi-Aventis	3,000	3,000
Pfizer	2,500	2,371
Canadian Foundation for Pharmacy	2,186	840
Bristol-Meyers Squibb	1,000	1,000
Wal-Mart Canada	-	10,000
GlaxoSmithKline	-	1,894
Other		
Annual conference	23,287	11,877
Interest income	5,045	4,431
Website advertising	725	1,400
Meal recovery	250	-
Education Outcomes Project	-	30,000
	153,495	180,266

### SCHEDULE OF EXPENDITURES

	2010 \$	2009 \$
Meetings		
AACP AGM	4,385	2,534
ADPC travel, Executive director	1,131	2,134
AGM council	27,390	27,233
Blueprint for Pharmacy	474	915
CCCEP	578	578
CSHP travel, President		1,674
Mid-Year council	11,918	13,960
PEP Canada	1,771	916
Operating		
Audit services	2,520	2,415
Bank charges	1,885	208
Canada Revenue Agency	30	30
Certificate framing	689	-
Computer expenses	53	119
Courier	-	72
Database	5,345	-
Executive director - Handover	28,177	-
Executive director-Honorarium	24,733	42,000
Executive director-Travel grant	2,059	1,031
Insurance	1,399	1,471
Internet services	206	545
Miscellaneous	224	1,145
Office supplies	192	400
Postage	198	311
Printing	355	1,137
Receiver General - Gazzette Costs	79	-
Teleconferencing	540	549
Telephone and fax	361	616
Volunteer Canada membership	100	-
Website maintenance	3,498	6,725
Other		
CCAPP membership	9,188	8,925
Educational Outcomes Project	26,880	26,902
Program evaluation	-	3,465
Translation services	-	872

SCHEDULE OF EXPENDITURES

Schedule 2 (continued)

	2010	2009
	<u>\$</u>	
Awards		
AFPC poster awards	1,000	1,000
AFPC travel grants	10,958	9,501
AFPC Whit Matthews	500	500
Bristol-Meyer Squibb	2,539	1,000
Canadian Foundation for Pharmacy	2,102	750
GSK Grad student	2,288	1,804
Merck Frosst fellowship	15,000	15,000
Pfizer	2,968	2,265
Sanofi-Aventis	2,356	2,906
Wal-Mart Canada	<u>-</u>	4,584
	196,069	188,192

# 2010 AFPC Financial Statement with 2009 and 2010 Actual

		2009 Actual	2010 Budget	2010 Actual
INCOME				
MEMBERSHI	PS			
	FACULTY	\$88,328.00	\$89,252.00	\$89,252.00
	AFFILIATE	\$9,600.00	\$10,800.00	\$10,800.00
	ASSOCIATE	\$525.00	\$450.00	\$450.00
	TOTAL MEMBERSHIPS	\$98,453.00	\$100,502.00	\$100,502.00
OTHER INCO	ME			
	ANNUAL CONF	\$11,877.16 *	\$20,000.00	\$23,162.15
	INTEREST	\$4,431.00	\$5,500.00	\$4,500.00
	Web Site Advertising	\$1,400.00	\$1,200.00	\$725.00
	Transfer from reserves	\$0.00	\$30,000.00	\$26,847.12
	Meal Recovery	\$0.00	\$0.00	\$250.00
	TOTAL OTHER INCOME	\$17,708.16	\$56,700.00	\$55,484.27
AWARDS				
	Bristol-Myers Squibb Canadian Foundation for	\$1,000.00	\$2,500.00	\$1,000.00
	Pharmacy	\$839.60	\$2,200.00	\$2,186.00
	GlaxoSmithKline	\$1,893.65	\$2,400.00	\$0.00
	Merck Canada Ltd.	\$15,000.00	\$15,000.00	\$15,000.00
	Pfizer	\$2,371.00	\$2,500.00	\$2,500.00
	Rx&D Industrial Visitation	\$0.00	\$4,000.00	\$0.00
	sanofi-aventis Canada Inc.	\$3,000.00	\$3,000.00	\$3,000.00
	Wal-Mart Canada	\$10,000.00	\$0.00	\$0.00
	TOTAL AWARDS	\$34,104.25	\$31,600.00	\$23,686.00
MISCELLANE	EOUS			
	Educational Outcomes Project	\$30,000.00	\$0.00	
	Total Miscellaneous Income	\$30,000.00	\$0.00	
TOTAL INCO	ME	\$180,265.41	\$188,802.00	\$179,672.27

EXPENSES	•	2009	2010	2010
		Actual	Budget	Actual
Meeting Expe	enses			
	AACP AGM	\$2,533.97	\$4,500.00	\$4,385.42
	ADPC Travel, Ex Dir	\$2,133.50	\$3,000.00	\$1,131.16
	AFPC Mid-year Council Mtg	\$13,960.20	\$12,000.00	\$11,917.50
	AGM Council	\$27,232.99	\$25,000.00	\$27,389.65
	Blueprint for Pharmacy Mtg.	\$915.37	\$1,500.00	\$473.90
	CCCEP	\$577.50	\$600.00	\$577.50
	PEP Canada Annual Mtg	0045.57	<b>#</b> 4 000 00	<b>#</b> 4 <b>77</b> 0 00
	Expenses	\$915.57	\$1,000.00	\$1,770.80
	President travel to CSHP	\$1,674.04	\$0.00	\$0.00
	Total Meeting Expenses	\$49,943.14	\$47,600.00	\$47,645.93
Operating Ex	penses			
	Audit services	\$2,415.00	\$2,500.00	\$2,520.00
	Bank charges	\$208.87	\$200.00	\$263.31
	Bank-Merchant Fees for cc	\$0.00	\$1,200.00	\$1,622.04
	Certificates		\$700.00	\$688.80
	Computer expenses	\$118.57	\$100.00	\$52.60
	Corporations Directorate	\$30.00	\$30.00	\$30.00
	Courier	\$71.73	\$100.00	\$0.00
	DOLI - Insurance	\$1,471.00	\$1,400.00	\$1,399.00
	Exec. Dir. Honor.	\$42,000.00	\$45,000.00	\$24,733.33
	Ex. Dir. Handover		\$7,000.00	\$28,177.49
	E.D. travel grant	\$1,031.32	\$3,000.00	\$2,059.00
	Misc Exp Ex Director	\$73.35	\$100.00	\$224.25
	Office Supplies	\$399.90	\$400.00	\$192.09
	Photocopies	\$0.00	\$100.00	\$0.00
	Postage	\$310.56	\$300.00	\$197.57
	Printing	\$1,137.15	\$650.00	\$355.22
	Secretarial	\$1,071.20	\$7,000.00	\$0.00
	Telephone/fax	\$616.19	\$600.00	\$361.26
	Teleconferencing	\$549.16	\$600.00	\$540.00
	Internet Services	\$545.00	\$600.00	\$206.08
	Web site maint.& develop	\$6,724.59	\$5,000.00	\$3,497.85
	Web site Database		\$2,000.00	\$5,344.68
	Receiver General-Gazette Costs		\$100.00	\$78.75
	Volunteer Canada Membership		\$100.00	\$100.00
	Total - operating	\$58,773.59	\$78,780.00	\$72,643.32

Other Expens	ses			
	CCAPP	\$8,925.00	\$9,187.00	\$9,187.50
	Educational Outcomes Project	\$26,902.30	\$25,000.00	\$26,879.81
	Program Evaluation Costs	\$3,465.00	\$3,000.00	\$0.00
	Translation Services	\$871.80	\$1,000.00	\$0.00
	Total Other Expenses	\$40,164.10	\$38,187.00	\$36,067.31
Awards				
	AFPC student travel grants	\$9,500.79	\$12,000.00	\$10,957.73
	AFPC Best Poster Awards	\$1,000.00	\$1,000.00	\$1,000.00
	AFPC Whit Matthews	\$500.00	\$500.00	\$500.00
	Bristol-Myers Sq. Canadian Foundation for	\$1,000.00	\$2,500.00	\$2,539.30
	Pharmacy	\$750.00	\$2,200.00	\$2,101.75
	GSK grad student	\$1,804.06	\$2,400.00	\$2,287.85
	Merck Frosst Fellowship	\$15,000.00	\$15,000.00	\$15,000.00
	Pfizer	\$2,264.85	\$2,500.00	\$2,967.78
	Rx&D Industrial Visitation	\$0.00	\$4,000.00	\$0.00
	sanofi-aventis	\$2,906.39	\$2,500.00	\$2,355.96
	Wal-Mart Canada	\$4,584.38	\$0.00	\$0.00
	Total Awards Expenses	\$39,310.47	\$44,600.00	\$39,710.37
TOTAL EXPE	INSES	\$188,191.30	\$209,167.00	\$196,066.93
Surplus(Defic	cit)	(\$7,925.89)	(\$20,365.00)	(\$16,394.66)

2011 AFPC OPERATING BUDGET FORECAST
Prepared by Harold Lopatka for February 5, 2011 AFPC Council Mid Year Meeting

## 2011 AFPC Operating Budget Forecast

The following document contains context, forecasting assumptions, and the 2011 AFPC operating budget forecast.

#### **Context:**

The current pharmacy environment is rapidly changing (there is a need for capacity to address items of national and international significance e.g., Blueprint for Pharmacy objectives and deliverables, globalization initiatives). We are at a tipping point where AFPC will be required to provide leadership in the roll out of Blueprint education initiatives and internationally in collaborative activities. At the same time post secondary institutions are undergoing significant budget reductions. AFPC continues to be available as an effective platform for national activities and actions. AFPC core services have not been upgraded for more than six years. There is general agreement that AFPC capacity and core services must be significantly upgraded in 2011 to enable the organization to handle the expected higher demand.

The following summarizes the current information about the AFPC strategic plan (i.e., vision, mission, core businesses, and critical success factors).

<u>Vision?</u> (AFPC Website) – AFPC Mission Statement for Pharmacy Education in Canada – The mission of pharmacy education is to provide programs of excellent quality which by their content and presentation produce graduates who contribute significantly to societal, professional and patient care responsibilities, and who are committed to life-long learning.

<u>Mission 1</u> – (AFPC Website) - 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.

<u>Mission 2</u> – (AFPC mid year strategic planning session) – To advance the interests of academic pharmacy by supporting, promoting and recognizing innovation, excellence and leadership in pharmacy education, research and scholarly activity.

#### **Core Businesses**

The core businesses of AFPC are to:

- ➤ Promote Canadian pharmacy faculties by educating key stakeholders, responding to requests and / or participating in meetings.
- Facilitate opportunities for faculty member information exchange and / or learning through relevant channels (e.g., website, publications, meetings, seminars, workshops and / or conferences.
- Facilitate the development, dissemination and evaluation of educational frameworks, tools and / or position statements.

Recognize excellence in pharmacy education and research through awards and / or grants programs.

#### **Critical Success Factors**

The critical success factors for AFPC to implement the strategic plan are: effective human capital, adequate financial resources, accessibility of information, a means of prioritizing activities, effective use of technology, and effective partnerships.

#### **Forecast Assumptions:**

- 1. No expected service reduction to the current AFPC core services is anticipated in 2011.
- 2. AFPC member volunteering and faculty in-kind contributions will continue to occur for AFPC activities and responsibilities.
- 3. The immediate overall financial objective is to operate in a break even position for 2011. AFPC financial reserves were reduced by \$26,000 in mid 2010 and an additional \$10,000 will be required at the end of 2010. The financial reserve will be reduced from approximately \$156,200 to approximately \$124,200. A long term financial objective is to generate revenue to replace financial reserves used in 2010.

#### 4. Revenue Forecast

- a. The Faculty contribution formula has not been changed in more than 6 years. Optimally the Faculty contribution formula should fund 75-85% of AFPC core services and expenses (meetings, operating and other categories not targeted categories awards and projects). A 25% increase in faculty fees (both basic and prorated fees) has been accepted by ADPC for 2011.
- b. In order to increase revenue from other membership fees it will likely be necessary to create other membership categories. This will require a change in the bylaws and could not be implemented until 2012.
- c. Letters have been sent to a number of pharmaceutical manufacturers to secure sponsorships for unfunded awards and to confirm manufacturers who are currently sponsoring awards. \$17,500 has been set as a budget target for new award sponsorships.
- d. Suggest implementation of balanced budget approach as a "go forward" 2011 strategy for targeted awards and projects (revenues=expenses).

#### 5. Expenditure Forecast

- a. Increased expenditures are projected for meeting expenses, operating expenses, and other expenses.
- b. Key AFPC upgrades include the provision of clerical administrative support (0.4 FTE) and expedited website redesign (new platform required).

# 2011 AFPC BUDGET FORECAST (Mid Year)

	2009 Actual	% Total	2010 Actual Preliminary	% Total	2010 Budget	% Total	2011 Budget Projected	% Total
INCOME							,	
<b>Membership</b> Faculty Other subtotal	\$88,328 \$10,125 \$98,453	55%	\$89,252 \$11,250 \$100,502	56%	\$89,252 \$11,250 \$100,502	53%	\$111,565 \$11,250 \$122,815	55%
Other income Annual conference Misc Transfer from reserve* subtotal	\$11,877 \$5,831 \$0 \$17,708	10%	\$23,162 \$5,475 \$26,847 \$55,484	31%	\$20,000 \$6,700 \$30,000 \$56,700	30%	\$20,000 \$6,500 \$10,000 \$36,500	16%
Awards (targeted) subtotal	\$34,104	19%	\$23,686	13%	\$31,600	17%	\$42,600	19%
Projects (targeted) subtotal	\$30,000	17%	\$0	0%	\$0	0%	\$20,000	9%
TOTAL INCOME	\$180,265	100%	\$179,672	100%	\$188,802	100%	\$221,915	100%
EXPENSES								
Meeting expenses AGM Mid year Other** subtotal	\$27,233 \$13,960 \$8,750 \$49,943	27%	\$27,389 \$11,917 \$8,339 \$47,645	24%	\$25,000 \$12,000 \$10,600 \$47,600	23%	\$27,400 \$12,000 \$10,424 \$49,824	23%
Operating expenses Salary*** Website**** Other subtotal	\$42,000 \$6,724 \$10,049 \$58,773	31%	\$52,911 \$8,843 \$10,889 \$72,643	37%	\$52,000 \$7,000 \$19,700 \$78,700	38%	\$67,250 \$10,000 \$11,433 \$88,683	38%
Other expenses subtotal	\$13,262	7%	\$10,187	5%	\$13,187	6%	\$15,187	6%
Awards (targeted) subtotal	\$39,310	21%	\$39,710	20%	\$44,600	21%	\$40,600	21%
Projects (targeted) subtotal	\$26,902	14%	\$25,880	13%	\$25,000	12%	\$20,000	12%
TOTAL EXPENSES	\$188,190	100%	\$196,065	100%	\$209,087	100%	\$214,294	100%
SURPLUS / DEFICI	-\$7,925	-4%	-\$16,393.00	-8%	-\$20,285	-10%	\$7,621	4%

Explanatory Notes: \*January 2011 \*\* 25% increase, \*\*\* 0.4 FT clerk added, \*\*\*\* redesign

# AFPC Research Committee Report Annual General Meeting Vancouver, June 5, 2010

**Committee Members:** Frederic Calon

#### Conference student research poster judging

This year, the responsibility of the poster judging at the meeting was taken by the research committee. Eleven poster judges were recruited throughout Canada:

Peter Wells pg.wells@utoronto.ca

Benoit Drolet <u>Benoit.Drolet@pha.ulaval.ca</u>

Roderick Slavcev slavcev@uwaterloo.ca

Carmen Vézina

Daniel Thirion

Andrea Cameron

Carmen.Vezina@pha.ulaval.ca

daniel.thirion@umontreal.ca

aj.cameron@utoronto.ca

Wayne Hindmarsh <u>wayne.hindmarsh@utoronto.ca</u>
Marie-Claude Vanier <u>marie-claude.vanier@umontreal.ca</u>

Tessa Nicholl <u>nichollt@mail.ubc.ca</u> Ingrid Price <u>iprice@mail.ubc.ca</u>

Jean Lefebvre <u>Jean.Lefebvre@pha.ulaval.ca</u>
Nese Yuksel <u>nyuksel@pharmacy.ualberta.ca</u>

Backup:

Frédéric Calon <u>frederic.calon@crchul.ulaval.ca</u>

The judging takes place on June 7th, between 12:00 and 14:00 in Winnipeg. Each judge will have 3 or 4 posters to judge. These posters are competing for the AFPC Pharmacy Research Poster Award and/or the Whit Matthews Graduate Student Poster Award. The criteria for evaluation are scientific content, poster presentation, and delivery/ability to answer questions. These criteria are further outlined on an evaluation form, which is the same as last year in Vancouver.

#### Revision research committee terms of reference

At the June 2010 New Council meeting, a few changes were suggested to be made on the Research committee terms of reference. Therefore, the terms of reference were updated accordingly.

#### Research and Teaching Data Directory

See the Education Committee report for updates on the teaching database.

#### **Basic-Science and Practice-Based Research**

As part of its mandate of encouraging research, the Research Committee of AFPC continues to look for new opportunities to assist in the promotion of basic-science and practice-based research.

Respectfully submitted by the co-chairs, Frederic Calon and John Hawboldt.

#### **Blueprint for Pharmacy: Designing the Future Together**

#### **Project Update report for AFPC**

#### June 2011

#### Background:

The Blueprint for Pharmacy is a collaborative initiative, led by the Canadian Pharmacists Association, to develop and achieve a vision for the future of pharmacy in Canada; this vision for the profession is: "Optimal drug therapy for Canadians through patient centred care".

Pharmacy organizations from across Canada (including AFPC and ADPC) are contributing to the identification of priorities and projects; both organizations have members on the Blueprint Steering (Management) Committee to ensure academic pharmacy is well represented during this process.

#### 1. Financial Status

A fundraising subcommittee has been established to identify potential sources of revenue to fund the work of the Blueprint as well as other Blueprint related projects. Each provincial pharmacy association has agreed to provide \$0.75/pharmacist in the province. In addition, Pfizer Canada has contributed generously to this initiative. Funding from Health Canada has also been secured for certain Blueprint initiatives, particularly those related to international pharmacy graduates.

Member organizations (such as AFPC) continue to contribute to the Blueprint directly (e.g. through supporting travel of AFPC members to Blueprint meetings) and indirectly (e.g. through in-kind contributions of time and expertise to Blueprint initiatives).

#### 2. Key Projects Highlights

The Blueprint has identified many projects of importance and has identified lead organizations (including AFPC and ADPC) to spearhead each initiative. Blueprint staff provide organizational and logistics support to help lead organizations secure funding, write grant applications, etc. to achieve initiative objectives. This year, several major projects have advanced, including:

- a) CPD/CE policy summit to discuss issues related to continuing learning needs of the profession (project lead: CCCEP)
- IPG Gateway project to understand needs of international pharmacy graduates for information related to competency standards and licensure and to provide tools/resources/supports to facilitate attainment of Canadian practice standards (project lead: NAPRA)
- c) CPD Programs for pharmacy technicians in Quebec, to provide on-line learning support for tech-check-tech and other programs designed to enhance the skill set of pharmacy technicians (project lead: Order of Pharmacists of Quebec)
- d) Canadian Language Benchmarks project, to evaluate and validate required English language fluency levels for safe and effective pharmacy practice (lead organizations: NAPRA and the Canadian Centre for Language Benchmarks supported by the University of Toronto)

There are a variety of other projects at various stages of progress; further details are available at the Blueprint website at:

http://www.pharmacists.ca/content/about cpha/whats happening/cpha in action/blueprint.cfm

#### 3. Organizational Issues

- a) Heather Wilson, former project lead of the Blueprint initiative at CPhA has been replaced by Conrad Amenta.
- b) Periodic "Stakeholder Updates" are published and archived on the Blueprint website.
- c) The next full steering committee meeting will be held in mid June. At this meeting, many more initiatives will be discussed and prioritized and further updates regarding fundraising will be provided. A summary of this meeting will be published in the next Stakeholder Update.

Respectfully submitted

Zubin Austin, University of Toronto Lalitha Raman-Wilms, University of Toronto

# 2011 CCAPP report to the AFPC Annual General Meeting June 6<sup>th</sup>, 2011 Winnipeg, Manitoba

#### **Executive of CCAPP (2010-2011):**

President - Susan Mansour, AFPC Appointee President Elect –Ms. Patricia Macgregor, CSHP Appointee Executive Director - Wayne Hindmarsh

The CCAPP Board held its annual general meeting on June 10<sup>th</sup> and 11<sup>th</sup>, 2010 in Saskatoon. The CCAPP Board held also 3 teleconferences on August 23<sup>rd</sup> 2010, November 4<sup>th</sup> 2010 and March 9<sup>th</sup> 2011. Highlights of activities over the last 12 months are as follows:

#### **Accreditation activities**

- **Degree programs.** Dalhousie University and Memorial University were awarded full accreditation status for 2010-2016. One site visit was held in the fall 2010 to University of Alberta.
- **Pharmacy Technician Programs.** Eight site visits for pharmacy technician program applicants were conducted. Five pharmacy technician programs were reviewed for qualifying status; for programs were awarded qualifying status and the accreditation was deferred for one program. Three programs with qualifying Status were reviewed and awarded provisional Status.
- International programs (Degree and Pharmacy Technician). A site visit was again conducted at the College of Pharmacy at Qatar University, Doha, Qatar, in December of 2010. The College of Pharmacy at Qatar University is awarded Provisional Accreditation until December 2011. The pharmacy technician program at Qatar College, Doha, Qatar, was also awarded Provisional Status. CCAPP continues to receive and consider requests to provide accreditation services to international pharmacy programs.

#### **Accreditation Standards**

- **Pharmacy Technician Programs.** Following the review of the 2007 accreditation standards for pharmacy technician programs, the new proposed accreditation standards were sent to stakeholders across the country for feedback and then presented to PTAC committee for final revision. At their meeting on May 17<sup>th</sup>, PTPAC recommended the Standards go to the CCAPP Board for approval. These new accreditation standards should be presented for approval by the CCAPP Board at its coming meeting in June.
- **Degree Programs.** The two AFPC representatives, Susan Mansour and Carmen Vezina, were appointed in June 2010 on the Undergraduate Degree Standards Committee. The Committee met to revise the accreditation standards for the first time in Toronto September 25<sup>th</sup> and 26<sup>th</sup> 2010 and then held 3 teleconferences on December 17<sup>th</sup> 2010, January 19<sup>th</sup> 2011 and February 17<sup>th</sup> 2011. A proposed version of the new accreditation standards was sent to diverse stakeholders for their input. The comments will be reviewed and discussed at the coming Board meeting in June.

Respectfully submitted,

Susan Mansour and Carmen Vezina, AFPC delegates to CCAPP

## **Executive Director 2010/2011 Annual Report**

The current pharmacy environment is rapidly changing.

- Legislative changes Pharmacists expanded scope of practice legislation continues to legitimized in more provinces in Canada. The responsibility for the regulation of pharmacy technicians continues to be transferred to pharmacy / pharmacist regulatory authorities.
- Reimbursement changes Provincial drug plans are reducing levels of payment for pharmacy distribution and dispensing. At the same time plans are instituting new payment models to reimburse for patient care focused pharmacist services.

There is a need for capacity to address educational items of national and international significance e.g., Blueprint for Pharmacy objectives and deliverables, globalization initiatives. We are at a tipping point where AFPC will be required to provide leadership in the roll out of Blueprint education initiatives and internationally in collaborative activities. At the same time post secondary institutions are undergoing significant budget reductions. AFPC continues to be available as an effective platform for national activities and actions.

Highlights from 2010-11 are addressed in the following subsections: Executive Director, AFPC Council / ADPC Dean's group, AFPC committees, CPERC conference, projects, and external relationships.

#### **Executive Director**

The first year of transitioning into the Executive Director position went smoothly. The process occurred in three phases: i) gradual handover of responsibilities from the outgoing Executive Director, ii) operational phase for assessing organizational capacity, and iii) operational phase to initiate adjustments to existing directions and strategies. The following summarizes two new directions and strategies where leadership has been provided.

<u>Financial planning</u> - The AFPC operating budget has been in a deficit position for a number of years (revenues have been declining and expenses going up). A balanced budget (revenues = expenses) approach has was implemented as "go forward strategy". The annual faculty AFPC fee rates were increased 25% for 2011. New sponsors for the 2011 awards were found reducing the amount of unsponsored awards. In addition there has been an increase in sponsorships for the 2011 CPERC conference. The following sponsors are acknowledged: Merck, Rx and D, Pfizer, GlaxoSmithKline, Janssen, Sanofi-Aventis, Canadian Patient Safety Institute, Nycomed, Servier, Rexall, McKesson, Leo Pharma, Bristol Myer Squibb, and Teva.

<u>Governance review</u> – The AFPC governance model has not been a reviewed for some time. An October 2010 ADPC strategic planning session confirmed that considerable overlap exists between AFPC and ADPC challenges and value proposition principles. An ad hoc work group (AFPC and ADPC members) was established to review relationships

and explore alternate governance models. A new governance model was been identified through the review process. The new model has a closer alignment with governance best practice frameworks and has other potential benefits / value (e.g., single voice and entry point, maximizes strengths and opportunities, closer alignment to models in similar organizations). The new model is based on a single association model with a single Board of Governors and two councils. A written report was prepared and the contents will be discussed by AFPC Council, ADPC and at the AFPC annual general meeting. If the proposed new governance model is accepted in principle, it will be implemented on a transitional basis over the next year (by June 2012). Copies of written reports are available upon request.

#### AFPC Council / ADPC Dean's Group

The Council members for 2010-11 were: Tessa Nicholl (British Columbia), Nése Yuksel (Alberta), Bev Allen (Saskatchewan), Silvia Alessi-Severini (Manitoba), Nancy Waite / Anson Tang (Waterloo), Andrea Cameron (Toronto), Frédéric Calon (Laval), Daniel Thirion (Montreal), Mary MacCara (Dalhousie), and John Hawboldt (Memorial). The 2010-11 Executive Committee members were Lalitha Raman-Wilms (President), Ingrid Price (President-Elect), Mike Namaka (Past President) and Lavern Vercaigne (ADPC Liaison). The Council held three meetings: new council meeting in June 2010, mid year meeting in February 2011, and annual council meeting in June 2011. The Executive committee met three times: September 2010, January 2011, and May 2011. A joint AFPC / ADPC meeting was held in February 2011 to review the governance model.

The Dean's group members for 2010-11 were: Bob Sindelar / Helen Burt (British Columbia), James Kehrer (Alberta), David Hill (Saskatchewan), Lavern Vercaigne (Manitoba), Jake Thiessen / Nancy Waite (Waterloo), Henry Mann (Toronto), Jean-Pierre Grégoire (Laval), Pierre Moreau (Montreal), Rita Caldwell (Dalhousie), and Linda Hensman (Memorial). Pierre Moreau was the ADPC President. The Deans held three meetings: annual meeting in October 2010, mid year meeting in February 2011, and interim meeting in June 2011.

#### **AFPC Committees**

The following were committee chairs in 2010-11: Andrea Cameron (awards), Mike Namaka (by-laws and nominations), Daniel Thirion (communications), Silvia Alessi-Severini (conference 2011), Frédéric Calon (conference 2012 and research), Nése Yuksel (education), Bev Allen (finance), Harriet Davies (PEP C), and Ingrid Price (program evaluation). Thank you to all chairs and committee members for their commitment and work. The following are selected highlights from committees.

<u>Awards</u> – Competition for awards was strong with 14 nominations for faculty awards and 10 nominations for student awards. Congratulations to the 2011 award winners. The following were the winners of 2011 major awards.

• Alexandre Melkoumov – Université de Montréal - Merck Post Graduate Pharmacy Fellowship Award

- Benoît Drolet Université Laval Sanofi-Aventis New Investigator Award
- Nancy Waite University of Waterloo Bristol Myers Squibb National Award for Excellence in Education
- Niladri Chattopadhyay University of Toronto GSK Graduate Student Research Award
- Peter Wells University of Toronto Pfizer Research Career Award
- Roderick Slavcev University of Waterloo Janssen Innovation in Education Award

The following were the 10 winners for the AFPC - Rx and D Pharmacy Student Research Poster Award.

- Arash Falamarzian University of Alberta
- Ian Wong University of British Columbia
- Jovana Tomic University of Saskatchewan
- Lacey Corbett Memorial University
- Mélanie Rouleau Université Laval
- Melanie Trinacty Dalhousie University
- Payam Zahedi University of Toronto
- Tarek Mohamed University of Waterloo
- Valery Aoun Université de Montréal
- Yining Li University of Manitoba

Special thanks to the 30 reviewers who assisted in the submission reviews.

In addition, there were 2 awards winners for the AFPC Woods-Hughes Special Service Awards.

- Anne Marie Whelan Dalhousie University
- Lavern Vercaigne University of Manitoba

<u>Communications</u> – There were three editions of the AFPC newsletter published in 2010-11. Also a readership survey was completed. Special thanks to our newsletter editor, Rebecca Law.

<u>Education</u> – This committee has been monitoring the implementation of the 2010 educational outcomes. In addition, through this committee the update of the website research database was completed and the update of the education database initiated.

<u>Pharmacy Experiential Programs (PEP C)</u> – This group conducted a variety of activities including providing feedback to the CSHP Blueprint proposal for experiential education, developing a proposal for a facilitated experiential program planning retreat, and providing feedback on the CSHP statement about pharmacy curricula. In addition the group conducted a survey of Canadian faculties about current practices and proposed plans for experiential programs, reviewed student professional liability insurance, workers compensation issues, the use of simulation for experiential education.

#### **CPERC Conference**

This is the 68<sup>th</sup> Annual General Meeting and 2<sup>nd</sup> Annual CPERC for AFPC. The conference is entitled "Pharmacy at the Forks: Education and Research Coming Together". The conference is being held June 6-7, 2011 at the Fort Garry Hotel in Winnipeg. There are approximately 120 conference registrants. The keynote speaker is Dr. John Gilbert (from the Canadian Interprofessional Health Collaboration) and feature speakers are Dr. Pierre Moreau (University of Montreal) and Dr. Victor Yanchick (Virginia Commonwealth University). In total there are over 25 speakers and panelists who be presenting during 7 sessions. Approximately 40 posters will be presented. This year an evening continuing education session will be provided for Manitoba pharmacists in conjunction with CPERC.

Special thanks to Silvia Alessi-Severini (conference chair), Lavern Vercaigne (Acting Dean) and members of the planning committee for their hard work, commitment and support. The members of the planning committee are Hope Anderson, Kelly Brink, Shawn Bugden, Ruby Grymonpre, Nancy Kleiman, Alan McIntosh, Terri Martin, Mike Namaka, and Sheryl Zelenitsky.

#### **Projects**

<u>Program Evaluation</u> – A working draft of "A Program Evaluation Guide for Canadian Faculties of Pharmacy" was completed (by Ingrid Price) and released for use by individual faculties in March 2011. Additional program evaluation tools are available through the UBC website. The guide is available upon request from H. Lopatka.

<u>Levels of Performance for Educational Outcomes</u> —The levels of performance for educational outcomes were completed. The document produced was entitled "Levels of Performance Expected of Students Graduating from First Professional Degree Programs in Pharmacy in Canada." This project was conducted by Nancy Winslade (consultant) with the assistance of the Educational Outcomes Task Force (Tom Brown, Claude Mailhot, Terri Schindel, Nancy Waite). The report will be accepted at the June 2011 AFPC council meeting. The final version of the report will be disseminated to AFPC members.

#### **External Relationships**

Both AFPC and ADPC attempt to build and / or maintain relationships with other national organizations. The following are selected AFPC / ADPC external relationships.

 <u>National pharmacy organizations</u> – AFPC and ADPC has the following representatives formally appointed to the Blueprint for Pharmacy steering committee (Lalitha Raman-Wilms, Zubin Austin, David Hill, Henry Mann); CCAPP (Susan Mansour, Carmen Vézina), CCCEP (Maria Bystrin), and PEBC (Lavern Vercaigne, Anne Marie Whelan). CPhA board does have an elected representative for academic pharmacy (Rita Caldwell). Relationships with other national pharmacy organizations (e.g., CSPS, CSHP, CAPSI, and NAPRA) continue to occur informally. The following are specific examples of relationships.

- <u>CSHP</u> CSHP developed a statement and information paper on collaborative development, delivery, and evaluation of pharmacy curricula. AFPC and ADPC provided solicited and unsolicited feedback on the documents. In addition, continued collaboration occurs with CSHP about experiential education.
- Pharmacy Blueprint AFPC and ADPC members participate on the Pharmacy Steering Committee. The focus of the Blueprint office has been on fundraising. ADPC continues to provide financial support to assist the Blueprint national coordinating office operations.
- <u>CCAPP</u> AFPC provided feedback to the draft accreditation standards for first professional degree in pharmacy programs.
- <u>CCCEP</u> AFPC was provided feedback on a new accreditation policy and participated in the policy summit.
- Other national organizations AFPC and ADPC have informal relationships with other national organizations (e.g., government, medicine, health organizations). The following are specific examples of these relationships.
  - Government AFPC and ADPC receive regular alerts and messages from Health Canada about regulatory changes. Consultation with Health Canada officials was initiated at the February 2011 mid year meeting. Council and the Deans were briefed and provided comments to representatives about modernizing the Food and Drugs Act and regulations to accommodate a product lifecycle / Health Products and Food Branch recruitment.
  - Academic Medicine Written and verbal feedback was provided to the Future of Medical Education in Canada Postgraduate Project (FMEC). This project has many similarities to the Blueprint for pharmacy project.
  - Canada Health Infoway (CHI) –An AFPC proposal was submitted in response to a call for proposals for national organizations with a mandate for clinicians in training. The proposal scopes out a project to develop and implement a national education module (including learning and teaching aides and tools) and the establishment of an information technology graduate student scholarship. The proposal was titled "Educational program for optimizing the use of pharmacy information and information technology". We anticipate a response in June 2011.
- <u>International organizations</u> AFPC has formal and informal relationships with international organizations.
  - Global Alliance for Pharmacy Education (GAPE) The mission for GAPE is to support partnerships to advance the quality of pharmacy and pharmaceutical education around the world. Current members are AACP, AFPC, Asian Association of Schools of Pharmacy, AMEFFAR (Mexico), Ethiopian Association of Colleges of Pharmacy and Pan American Conference of Pharmaceutical Education. AACP is providing resources for the secretariat for this alliance.

■ <u>USP</u> – AFPC continues to have a representative for USP (Raimar Loebenberg). AFPC is being considered for 2011 as a voting member of the USP Council of Convention (CoC).

Respectfully submitted by Harold Lopatka, Executive Director, June 2, 2011

Harold Lopatha



**Proposed New AFPC Governance Model** 

The following report has been prepared for the review of the current AFPC and ADPC governance. The report is organized into the following subsections: background, expected benefits and value of new governance model, proposed new governance model, and timelines for review process.

# **Background**

The suggestion to review the current AFPC and ADPC governance model arose from discussions at the October 2010 ADPC meeting. Upon reviewing the ADPC strategic plan and comparing it with the AFPC strategic plan the Deans agreed there was a need to examine the current ADPC and AFPC governance model.

A Special joint ADPC / AFPC Ad Hoc Committee was established with members from the two associations. The members of this committee were: Pierre Moreau. Lalitha Raman-Wilms, Lavern Vercaigne, Nancy Waite, Ingrid Price, James Kehrer and Harold Lopatka (resource). H. Lopatka prepared the report entitled "Discussion Paper for Special ADPC / AFPC Ad Hoc Committee on Governance and Strategic Plans". The content included a review of the current AFPC / ADPC governance and strategic framework, a discussion about governance as a foundation for strategic planning, and an appendix (with a brief overview of the AACP governance model and some questions for consideration by the ad hoc committee). The ad hoc committee met one time to review the discussion paper and specific questions contained in the report. The report entitled "Report from the Ad Hoc Committee Review of Responses to Discussion Paper Questions" was prepared from the ad hoc committee review. The report provided results from the SWOT analysis of our current association governance model, committee comments as to whether the model meets current needs, suggested changes required, committee comments about alternative governance model and potential next steps. The analysis showed that on balance, there were a higher number of weaknesses and threats in comparison to strengths and opportunities with the current model. There was consensus by the ad hoc committee that alternate governance models should be examined (e.g., single organization models - AACP, AFMC). The concept of a single organization retaining the AFPC name and governed by a single board of directors was suggested.

The results from the Ad Hoc Committee review were presented to AFPC Council and ADPC at the joint February 2011 meeting. After the presentation and round table discussions, there was wide spread consensus that an alternate governance model should be further explored. Further information about a new governance structure is presented in this report.

# **Expected Benefits and Value of a New Governance Model**

The critical success factors for AFPC to implement a strategic plan are similar to many organizations; effective human capital, adequate financial resources, accessibility of information, a means of prioritizing activities, effective use of

technology and effective partnerships. Also effective leadership and management are required. An article that was reviewed during our review suggested "that association relevance is inextricably tied to identifying the right thing to do and then doing it right". The proposed new governance model creates the necessary structure of a Board to provide leadership in setting strategic directions i.e., doing the right things, and for Councils to provide the management direction i.e., doing things right.

The new governance model is the first step in an ongoing process that will alter AFPC's capability and capacity to generate valued national structures, processes, outputs and outcomes for academic pharmacy in Canada. At this juncture there are two main categories of benefits / or values that are expected from the new governance model.

- 1) Closer alignment with governance best practice frameworks
  - Governance model creates a single Board that represents the two major principals or owners of academic pharmacy (Deans, faculty members)
  - Focuses core governance responsibilities into single structure (leadership, stewardship, monitoring, reporting)
  - Appropriate structure for effective and efficient functioning and governance
- 2) Other potential benefits / value
  - Creates single voice and entry point for academic pharmacy in Canada
  - Potential to maximize strengths and opportunities (integrate planning and decision making, improve communications - bilaterally, reduce differences in perspectives, increase faculty buy-in and engagement, opportunities for collaborations and partnerships, communication opportunities, funding opportunities)
  - Closer alignment to governance models in organizations with similar mandates (AACP, AFMC).

It should be noted that questions have been asked if the new governance model will result in increased operating expenditures. The answer to these questions is that we are not sure. Operating expenses are increasing under the current governance model. The new governance model has the potential to improve efficiencies and while creating and maintaining a new value proposition. For example, under the new structure there will not be a need for an ADPC liaison position and council meeting agendas will focus on more management functions. "Doing the right things" may require that additional costs be recovered. Figure 1 (see appendix) was used in the initial ADPC October 2010 strategic planning session and it illustrates the three key strategy principles that will be considered in this process (including the recovery of costs).

## **Proposed AFPC New Governance Model**

The new governance structure is based on a single association model representing the interest of both AFPC and ADPC with a single Board of Governors and two councils (the Council of Faculties and the Council of Deans) with reporting relationships to the Board. The Council of Faculties will be the current AFPC Council, and the Council of Deans will be the current ADPC Deans group. Figure 2 (see appendix) illustrates the proposed new governance model for AFPC and ADPC.

The following provides specific information about the Board of Governors, Council of Faculties and Council of Deans responsibilities and structure.

#### **Board of Governors**

The affairs of AFPC will be governed by the Board. This includes the following responsibilities.

- Leadership Set the strategic direction for AFPC and put into place leadership to accomplish the strategic direction.
- Stewardship Shepherd fiduciary resources belonging to pharmacy faculties, individual AFPC members and others.
- Monitoring Receive and review measures of performance and hold management accountable for success.
- Reporting Account to the principals; AFPC members, pharmacy faculties, and others on the results of using their capital.

The following provides some specifics about Board functions, composition, term of office, meetings, quorum and subcommittees.

<u>Functions</u> – The main governance functions are strategic planning, financial review, and by-laws. In addition, the board will conduct high level AFPC communications with external stakeholder organizations e.g., partnerships and collaborations.

<u>Composition</u> – The Board will be composed of six individual members; three elected by the Council of Faculties and three elected by the Council of Deans. Three members of the six members will be elected from the Board as executive officers (President, President elect, Past President). The Board members must be current members of one of the Councils. The President position should be rotated annually between the Council of Faculties and the Council of Deans Board members. The Executive Director shall be an ex-officio member of the Board, without a vote.

<u>Term of office</u> – Board members shall hold office for a term of three years and may serve no more than two consecutive terms.

<u>Meetings</u> – The Board should meet at least once a year as designated by the President.

<u>Quorum</u> – A quorum shall consist of four voting Board members (at least four voting members should be present, two from the Council of Faculties and two from the Council of Deans).

<u>Subcommittees</u> – The following will become functions of the Board: Finance, Strategic Planning, and Bylaws. These functions will be addressed by the Board as a whole.

#### **Council of Faculties**

The Council of Faculties represents and supports faculty members in their pursuit of excellence in pharmacy education and scholarly activities in AFPC member colleges and faculties of pharmacy.

The following provides some specifics about Council of Faculties functions, composition, term of office, meetings, quorum and subcommittees.

<u>Functions</u> – The following Council functions will be conducted: conference planning, awards, education, special committees (e.g., program evaluation), other committees (e.g., ad hoc issue specific committees), nominations, communications (e.g., newsletter, website), research and experiential programs. The Council will advise the Board on strategic priorities. These functions will occur through committees or assigned individuals.

<u>Composition</u> – The Council will be composed of ten individual members, one elected or nominated representative from each Canadian faculty or school of pharmacy. Three members of ten members will be elected from the Council as executive officers (Chair, Chair elect, Immediate past chair). The three executive officer members will also be the Council members on the AFPC Board of Governors. The Executive Director shall be an ex-officio member of the Council, without a vote.

<u>Term of office</u> – Council members shall hold office for a term of three years and may serve no more than two consecutive terms.

<u>Meetings</u> – The Council should meet at least once a year as designated by the Chair.

Quorum – A quorum shall consist of five voting Council members.

<u>Subcommittees</u> – The following standing committees currently exist and will be continued; nominating, education, research, awards, communications, and conference planning. The Pharmacy Experiential Programs of Canada (PEPC) currently reports to ADPC and under this new model will report to the Council of Faculties. Presently at least one special Interest committee exists for program evaluation and others might be considered e.g., curriculum development, fund raising, faculty management.

#### **Council of Deans**

The Council of Deans serves as a forum for Deans to exchange information, horizon scanning and provides input, guidance and support for challenges and

opportunities relating to pharmacy education, research and scholarly activities. In addition, the Council of Deans will build relationships through communications with external stakeholders for funding and other partnerships.

The following provides some specifics about Council of Deans functions, composition, term of office, meetings, quorum, and subcommittees.

<u>Functions</u> – The primary Council functions include horizon scanning, guidance / support and funding. The Council will advise the Board on strategic priorities and build relationships with external stakeholders.

<u>Composition</u> – The Council will be composed of the ten individual Deans or Heads from each Canadian faculty or school of pharmacy. Three members of ten members will be elected from the Council as executive officers (Chair, Chair elect, Immediate past chair). The three members will also be the Council members on the AFPC Board of Governors. The Executive Director shall be an ex-officio member of the Council, without a vote.

<u>Term of office</u> – Council members shall hold office for a term that corresponds to their term as Dean or Head.

<u>Meetings</u> – The Council should meet at least once a year as designated by the Chair.

<u>Quorum</u> – A quorum shall consist of five voting Council members. <u>Subcommittees</u> – Ad hoc issue specific committees will be established when required to address specific issues.

# **Summary of Differences - Current Structure and Proposed New Structure**

Current Structure	Proposed New Structure
<ul> <li>Two associations – AFPC and ADPC.</li> </ul>	One association – AFPC.
<ul> <li>Two separate governing entities –         AFPC council and ADPC Deans         group with governance and         management functions.</li> </ul>	<ul> <li>One governing entity – AFPC Board of Governors. Two Councils for direction of management functions related to faculty and deans.</li> </ul>
Duplication and overlap of governance / management functions. AFPC governance / management functions include: finance, strategic planning, by-laws, education, research, conference planning, awards, communications, nominations, and special interest committees. ADPC governance / management functions include:	Transfer of governance functions to Board - strategic planning, finance and by-laws functions. Council of Faculties retains current management functions plus pharmacy experiential programs. Council of Deans retains horizon scanning, guidance / support, and special interest committees. Communications to be a shared

horizon scanning, guidance / support, strategic planning, finance, communications, pharmacy experiential programs and special interest committees.

responsibility according to type and level of communication required.

 AFPC and ADPC linkage through Executive Director and ADPC liaison position.  Council of Faculties and Council of Deans linkage through Board and Executive Director.

#### **Transition Plan**

The transition plan for the change includes three phases.

1. Background research (October 2010-June 2011)

The background research phase for this change is substantially complete. The activities conducted are summarized at the start of this report and in the historical documents provided. The research conducted has provided the evidence and rationale for the governance model described in this report. The end point for this phase is the discussion of the new governance model at the June 2011 AFPC annual general meeting and a majority endorsement for proceeding with the new model.

2. Planning and implementation of new model (June 2011-June 2012)

The planning and implementation phase entails finalizing the new model and initiating a transitional governance model. Based on feedback from council, faculty members and the Deans, the ad hoc committee will finalize the governance model in September 2011. During the period October 2011 – June 2012, a transitional Board of Governors will be established and the Board's new governance responsibilities will start. The composition of the transitional Board should be based on the composition identified for the Board earlier in this document. AFPC Council and ADPC Deans group will continue to meet and conduct the management functions as identified for the Council of Faculties and Council of Deans respectively. The two Councils will meet one time in the transitional phase to review organizational plans and priorities. The transitional Board will conduct strategic planning and financial decision making. The new governance structure will be legitimized at the 2012 annual general meeting through the passage of the new by-laws.

The planning and implementation process will be as transparent as possible and allow faculty members and Deans to discuss and provide further feedback about the new model. Progress reports related to the planning and implementation

phase will be communicated to faculty members (e.g., by AFPC councilor and deans). A continuous quality improvement approach will be used in the implementation process, with improvements being made as the new model is implemented. The principle of flexibility will be maintained throughout the transition process. AFPC by-laws will be revised and be submitted for approval at the 2012 AGM.

3. Evaluation of new model (June 2012-June 2013)

I will be important to assess whether the new governance model achieves the benefits and values identified previously. It is anticipated that by the June 2013 annual general meeting, sufficient experience gained and refinements will have been made have assessed the effectiveness of the governance model.

#### **Timelines for Review Process**

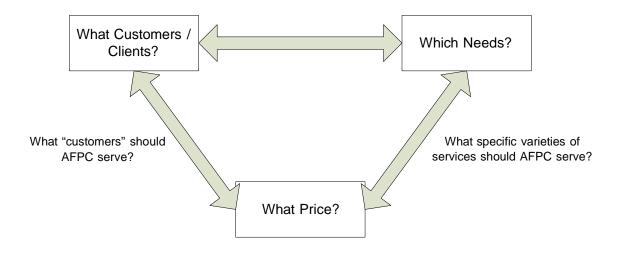
Figure 3 (see appendix) shows the suggested time line for the governance review and the further strategic planning milestones. The following are the major milestones identified over the period October 2010 to June 2013.

- 2010 ADPC Annual meeting strategic planning discussed in earlier background section (see above).
- January 2011 Special ad hoc committee discussed in earlier background section (see above).
- February 2011 Mid Year meetings Joint AFPC / ADPC meeting discussed in earlier background section (see above).
- May 2011 Special ad hoc committee meeting The special ad hoc committee reviewed a draft version of the new governance model. The committee recommendations to ADPC, AFPC and faculty members at AGM endorse in principle.
- June 2011 AFPC Annual General Meeting AFPC members receive copies of the governance review information and the proposed new governance model, and have an opportunity to provide comments.
- <u>September 2011 Special ad hoc committee</u> The committee will review comments from AFPC, AGM, ADPC then finalize the new governance model for transitional implementation.
- October 2011 Implement model on transitional basis The new governance model will be implemented on a transitional basis.
- January / February 2012 Mid Year meeting Transitional Board of Governors / Council of faculties / Council of deans meetings. Councils will meet about management functions. Board of Governors will conduct strategic planning and financial functions. Revised by-laws will be reviewed and approved.
- June 2012 AFPC Annual General Meeting Members will review and approve new by-laws. The Board of Governors strategic plan will be distributed for review and feedback.

- <u>January / February 2013 Mid Year meeting</u> Board of Governors / Council
  of faculties / Council of deans meetings. Councils meet about management
  functions. Board of Governors will conduct strategic planning and financial
  functions. Revised by-laws will be reviewed and approved.
- <u>June 2013 AFPC Annual General Meeting</u> Review and report on progress under new governance model. Progress on the strategic plan activities will be reviewed.

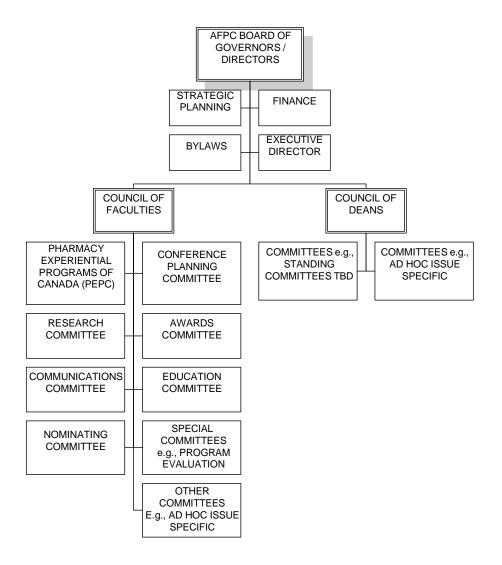
**Appendix** 

# FIGURE 1 - Strategic Principles Defining a Clear Value Proposition for AFPC



How would AFPC recover our costs?

# FIGURE 2 - AFPC PROPOSED NEW GOVERANCE MODEL



# FIGURE 3 – TIMELINE FOR AFPC GOVERNANCE REVIEW / STRATEGIC PLANNING

