PROCEEDINGS COMPTE RENDUS

ASSOCIATION OF FACULTIES OF PHARMACY OF CANADA

ASSOCIATION DES FACULTÉS DE PHARMACIE DU CANADA

2003

INCLUDING THE

SIXTIETH ANNUAL MEETING

MAY 29 – JUNE 1, 2003

MONTRÉAL, QUÉBEC

PROCEEDINGS

OF THE

ASSOCIATION OF FACULTIES OF PHARMACY OF CANADA

ASSOCIATION DES FACULTÉS DE PHARMACIE DU CANADA

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ASSOCIATION OF FACULTIES OF PHARMACY OF CANADA
MISSION STATEMENT

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

GOALS

1. To foster excellence in pharmaceutical education.

(a) To stimulate and provide an opportunity for exchange of information, ideas and discussion among pharmaceutical educators.
(b) To encourage quality education in pharmacy by assuming an advisory role for development of policies and standards.
(c) To recognize innovations in pharmaceutical education.

2. To foster excellence in scholarly activities

(a) To provide members with opportunities for the exchange of information, ideas and discussion on scholarly activities.
(b) To recognize excellence in graduate studies.
(c) To recognize innovation in scholarship
(d) To recognize achievements in undergraduate research.

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

(a) To recognize significant contributions and achievements of other organizations or individuals towards the mission of AFPC.
(b) To promote the achievements of our members to the wider pharmacy and health care community.
(c) To represent the broad interest of our members to external organizations.
(d) To gather and report statistical and descriptive data in order to provide information about the state of academic pharmacy in Canada.

Glossary For Mission Statement

For the purpose of this Mission Statement:

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

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

AFPC CONSTITUENT FACULTIES 2002 - 2003

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

AFPC OFFICERS 2002 - 2003

Executive

President	Lavern Vercaigne, (Manitoba)
President Elect	Susan Mansour (Dalhousie)
Past President	Fred Rémillard (Saskatchewan)
Deans' Rep.	Rita Caldwell (Dalhousie)
Executive Director	Jim Blackburn

Council

Simon Albon (British Columbia)
Zubin Austin (Toronto)
Sheila Kelcher (Alberta)
Jean Lefebvre (Laval)
Sylvie Marleau (Montréal)
Mike Namaka (Manitoba)
Yvonne Shevchuk (Saskatchewan)
Lili Wang (Memorial)
Anne Marie Whelan (Dalhousie)

AFPC REPRESENTATIVES TO AFFILIATE ORGANIZATIONS

Association of Deans of Pharmacy of Canada – Rita Caldwell (Dalhousie)
Academic Board Member, Canadian Pharmacists Assoc. – Linda Suveges (Saskatchewan)
Canadian Council for the Accreditation of Pharmacy Programs
– Sylvie Marleau (Montréal), Jake Thiessen (Toronto)
Canadian Council for Continuing Education in Pharmacy – Marc Desgagné (Laval)
Pharmacy Examining Board of Canada
- Monique Richer (Montréal)/Louise Mallet & Linda Suveges (Sask.)
Representative to United States Pharmacopieal Convention – Colin Briggs (Manitoba)

Committee Chairs and Other Positions

Awards Committee - Sylvie Marleau (Montréal)
Bylaws Committee - Fred Rémillard (Saskatchewan)
Education Committee – Zubin Austin (Toronto)
Nominations Committee - Fred Rémillard (Saskatchewan)
Pharmaceutical Research - Mike Namaka (Manitoba)
Conference Planning Committee – Jacques Turgeon (Montréal)
Communications Committee Chair – Simon Albon (UBC),
Editor, AFPC Communications – Rebecca Law, (Memorial)
Representative to CPhA Human Resources Task Force – Lavern Vercaigne (Manitoba)
Task Force on Experiential Education – Fred Rémillard (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

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

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

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

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

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

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

AFPC HONORED LIFE MEMBERS

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

*** Deceased**

ANNUAL MEETINGS AND OFFICERS

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

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
			PRESIDENT	**VICE PRESIDENT**		
1976(33)	Saskatoon	G.E. Hartnett	J.W. Steele	W.E. Alexander	K.W. Hindmarsh	C.J.8riggs
		PAST PRESIDENT				
1977(34)	Charlottetown	J.W. Steele	W.F. Alexander	K.W. Hindmarsh	F.W. Teare	C.J.8riggs
1978(35)	Victoria	W.E. Alexander	K.W. Hindmarsh	F.W. Teare	W.A. Parker	C.J.8riggs
					EXEC. DIRECTOR	
1979(36)	Sarnia	K.W. Hindmarsh	F.W. Teare	R.E. Moskalyk	J.A. Wood****	E.M. Hawes
1980(37)	Calgary	F.W. Teare	R.E. Moskalyk	C.J.Briggs	J.A. Wood	E.M. Hawes
1981(38)	Winnipeg	R.E. Moskalyk	C.J.Briggs	M. Mezei	J.A. Wood	E.M. Hawes
1982(39)	Ottawa	C.J. Briggs	M. Mezei	J.L. Summers	J.A. Wood	K.M. McErlane
1983(40)	Montréal	M. Mezei	J.L. Summers	R. Tawashi	A.M. Goodeve	K.M. McErlane
1984(41)	Vancouver	J.L. Summers	R. Tawashi	J. Gagné	A.M. Goodeve	K.M. McErlane
1985(42)	Halifax	R. Tawashi	J. Gagné	J.Bachynsky	A.M. Goodeve	K.M. McErlane
1986(43)	Québec	J. Gagné	J.Bachynsky	K. Simons	K.M. McErlane	H.M.Burt
1987(44)	Jasper	J.Bachynsky	K. Simons	F. Chandler	K.M. McErlane	H.M.Burt
1988(45)	Saint John	K. Simons	F. Chandler	S.M. Wallace	K.M. McErlane	H.M.Burt
1989(46)	Portland	F. Chandler	S.M. Wallace	P.Beaulac	K.M. McErlane	H.M.Burt
1990(47)	Regina	S.M. Wallace	P.Beaulac	H.M.Burt	K.M. McErlane	M. Greer
1991(48)	St. John's	P.Beaulac	H.M.Burt	M. Spino	K.M. McErlane	M. Greer
1992(49)	Winnipeg	P. Beaulac	H.M. Burt	M. Greer	K. Moody	J. Louvelle
1993(50)	Vancouver	H.M. Burt	M. Greer	R. Coutts	K. Moody	J. Louvelle
1994(51)	Charlottetown	H.M. Burt	M. Greer	R. Coutts	K. Moody	J.l. Glennie
1995(52)	Montréal	M. Greer	R. Coutts	J.L Blackburn	K. Moody	J.L. Glennie
1996(53)	Calgary	M. Greer	R. Coutts	J.L Blackburn	K.A. Ready	C.J. Turner
1997(54)	Vancouver	R. Coutts	J.L Blackburn	D. Perrier	K.A. Ready	C.J. Turner/K.A. Ready
1998(55)	St. John's	J. L. Blackburn	D. Perrier	C.J. Turner/1. Sketris	K.A. Ready	K.A. Ready
1999 (56)	Québec City	D. Perrier	I. Sketris	D. Hill	K. Ready/J. Blackburn	
2000 (57)	Saskatoon	I. Sketris	D. Hill	D. Fielding	J.L. Blackburn	
2001 (58)	Ottawa	D. Hill	D. Fielding	A.J. Rémillard	J.L. Blackburn	
2002 (59)	Winnipeg	D. Fielding	A.J. Rémillard	L. Vercaigne	J.L. Blackburn	
2003 (60)	Montréal	A. J. Rémillard	L. Vercaigne	S. Mansour	J.L. Blackburn	

* This office ceased to exist after the 1978 meeting.
-This office was assumed by A.M. Goodeve in the Spring of 1967 due to the sudden illness of K.M. James. -Officers of the new organization, AFPC, assumed their offices on January 1, 1970, after a mail ballot.
The officers of 1968-69 served in the interim after the 1969 meeting. **** J.A. Wood was Executive Director from 1977-1982.

The following pages contain an overview

of the Activities of

the Association of Faculties of Pharmacy of Canada

during the period

July 1, 2002 to June 30, 2003

PART 1.0

AFPC/CCCP ANNUAL CONFERENCE 2003

MONTRÉAL, QUÉBEC

MAY 29 – JUNE 1, 2003

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WORDS OF WELCOME

From **President Lavern Vercaigne:**

On behalf of the AFPC Executive and Council, I am pleased to welcome all of you to the AFPC Annual General Meeting in conjunction with CCCP. Chairperson Jacques Turgeon and the entire program committee have put together an excellent schedule of both educational and social events. I hope you enjoy the speakers, presenters, posters and discussions from the educational workshops highlighting student professionalism and information technology. Please join us at the award and poster presentations to acknowledge the outstanding research work within our Faculties across Canada. I hope you will also join us for the Joint AFPC/CCCP Symposium on Sunday morning showcasing the application of evidence based medicine to pharmacy research and clinical practice.

Please also take the opportunity to enjoy Montréal and the planned social events. I'm looking forward to meeting with old friends and colleagues throughout the weekend and I hope you have the opportunity to do the same! All the best.

Lavern Vercaigne, Pharm D
President, AFPC (2002 – 2003)

From **Jacques Turgeon, Doyen et président, comité organisateur local**

Chers collègues et amis,

C'est avec un immense plaisir que je vous souhaite, au nom du comité organisateur, la bienvenue au congrès de l'Association des Facultés de pharmacie du Canada (AFPC) organisé conjointement avec le Collège canadien de pharmacie clinique (CCCP) et en partenariat avec la Société canadienne des sciences pharmaceutiques (CSPS)

Dear colleagues, my warmest welcome to Montréal to the third joint AFPC-CCCP meeting, organised in partnership with CSPS. A great conference has been planned for you with topics covering all fields

of activity in the pharmacuetical arena. This should provide you with state-of-the-art lectures and opportunities to learn about innovations in teaching, clinical practice and research. The meeting also offers you a good blend of activities that shall promote interactions between your academic, government, industry and clinical colleagues.

This year's program has been developed by a fantastic group of colleagues from the local organizing committee. Thanks to Sylvie Marleau, Claude Mailhot, Pierre Moreau, Marie-Claude Binette, Marie-Claude Vanier and Guylaine Bertrand. Many thanks to Jim Blackburn, to Dr. Glen Pearson and Dr. Elizabeth Vadas. And at last but not least, many, many thanks to Guylaine Rocque from Merck frosst for several hours involved in the preparation of this conference.

As well, I would like to thank the sponsors who have assisted us with this conference. My special thanks to Ginette Bernier from Merck Frosst and France Migneault from Janssen Ortho. Without their support the organization of a quality meeting would be much more difficult.

Once again, on behalf of the organizing committee, I wish you a great meeting! A meeting to remember, Montréal.

Je nous souhaite donc tous une excellente rencontre scientifique.

Sincerely,

Jacques Turgeon, B.Pharm., Ph.D.
Doyen et président, comité organisateur local

Montreal, May 29, 2003

Dear Registrant:

On behalf of the Canadian College of Clinical Pharmacy, I would like to welcome you to the Joint Conference of AFPC and CCCP in Montreal! We are excited to be holding this joint meeting for the third time since 1999, as many issues are common to both groups.

The program committee for both CCCP and AFPC has done an outstanding job in planning a conference, which will integrate interests of both clinicians and the academic community. Leading into the program will be a debate on Thursday night, looking at the ethics of technology and gene therapy for a new millennium. On Friday will be the joint session program for AFPC/CCCP, with the morning focusing on student professionalism and raising awareness. The afternoon will follow with sessions highlighting the promotion of civility in pharmacy education and academic honesty and dishonesty in Canadian pharmacy. On Saturday, the CCCP sessions will concentrate on various therapeutic areas including estrogen therapy, novel antithrombotic options for the management of heparin-induced thrombocytopenia (HIT), controversies in DMARD therapy, and human recombinant activated protein C for the treatment of severe sepsis. In addition, we have added a new session to program entitled *"Significant Papers in Pharmacotherapy";* evidence-based reviews and state-of-the-art, expert analysis of selected original papers recently published which are likely to have a significant impact on the practice of clinical pharmacy in specialty areas will be presented. That evening, the AFPC/CCCP Banquet will be held at the Université de Montréal. The conference will conclude with our annual Evidence Based Medicine Workshop, which is combined with the AFPC Practice Research Forum. There are also satellite breakfast symposiums on both Saturday and Sunday morning.

This year has been a busy one for us on the CCCP executive, from planning the annual conference to continuing with the goals and objectives set up from the strategic planning session a few years ago. We hope to be able to share with you some of these activities, as well as, hear from you at the annual general meeting over lunch on Saturday.

I sincerely that hope you enjoy the program and the opportunity to meet with your colleagues from across the country.

I would like to thank the many people who organized and the sponsors who supported this conference.

I look forward to meeting all of you.

Sincerely yours,

Glen J. Pearson, BScPhm, PharmD, FCSHP
President, Canadian College of Clinical Pharmacy (CCCP)

Association of Faculties of Pharmacy of Canada | AFPC | Association des Facultés de Pharmacie du Canada

Canadian College of Clinical Pharmacy | Collège canadien de pharmacie clinique

PROGRAM COMMITTEE / COMITÉ DU PROGRAMME

Guylaine Bertrand
FACULTY OF PHARMACY
UNIVERSITÉ DE MONTRÉAL

Nadia Benzrihem
FACULTY OF PHARMACY
UNIVERSITÉ DE MONTRÉAL

Marie-Claude Binette
FACULTY OF PHARMACY
UNIVERSITÉ DE MONTRÉAL

Lisa Dolovich
ST. JOSEPH`S HOSPITAL
CENTRE FOR THE EVALUATION OF MEDICINES,
HAMILTON ON

Lyne Lalonde
FACULTY OF PHARMACY
UNIVERSITÉ DE MONTRÉAL

Claude Mailhot
FACULTY OF PHARMACY
UNIVERSITÉ DE MONTRÉAL

Sylvie Marleau
FACULTY OF PHARMACY
UNIVERSITÉ DE MONTRÉAL

Pierre Moreau
FACULTY OF PHARMACY
UNIVERSITÉ DE MONTRÉAL

Marie –Claude Vanier
FACULTY OF PHARMACY
UNIVERSITÉ DE MONTRÉAL

Natalie Kennie
ST. MICHAEL'S HOSPITAL
TORONTO, ON

Shallen Letwin
FRASER VALLEY
HEALTH AUTHORITY
ABBOTSFORD, BC

Glen J. Pearson
UNIVERSITY OF ALBERTA
EDMONTON, AB

Scot Simpson
INSTITUTE OF HEALTH ECONOMICS,
EDMONTON, AB

Nese Yuksel
CAPITAL HEALTH REGION
EDMONTON, AB

Guylaine Rocque
MERCK FROSST CANADA LTD.
KIRKLAND, QUÉBEC

AFPC/CCCP CONFERENCE 2003

STUDENT PROFESSIONALISM: BRIDGING THE GAP BETWEEN KNOWLEDGE AND ETHICS

May 29 – June 1, 2003

Delta Centre-Ville, Montréal

This conference is being held in the same location as the CSPS Conference and everyone is encouraged to register for both meetings. Please refer to the CSPS web site (http:www.ualberta.ca/~csps) for CSPS conference information

THURSDAY, MAY 29

8h30 – 17h00 – AFPC Executive and Council Business Meeting

16h00 – 18h00 Registration

18h00 Conference Opening:
Jacques Turgeon, Doyen, Université de Montréal
Glen Pearson, President, Canadian College of Clinical Pharmacy
Lavern Vercaigne, President, Association of Faculties of Pharmacy of Canada

Pros and Cons: ***"Looking at the ethics of technology and gene therapy for a New Millennium" (Bartha Knoppers and Mylène Deschenes)***

19h00 Dinner (buffet style)

FRIDAY, MAY 30 Joint AFPC/CCCP Program

7h00 – 8h30 AFPC/CCCP Poster Session, Exhibits & Continental Breakfast

8h30 – 12h00 AFPC/CCCP Teachers' Conference Workshop # 1
"Student Professionalism: Raising Awareness"

- **Workshop Leaders:**
- **Robert Beardsley, Ph.D., Professor and Associate Dean, School of Pharmacy, University of Maryland**
- **Dana P. Hammer, Ph,D., R.Ph., Director, Bracken Pharmaceutical Care Learning Center, School of Pharmacy, University of Washington**

10h-10h15: **Coffee break**

12h00 – 13h30 AFPC/CCCP POSTER SESSION WITH APRON LUNCH

13h30 – 15h30 AFPC Teachers' Conference Workshop # 2
"Promoting Civility in Pharmacy Education"

- **Speaker: Bruce A. Berger, Ph.D., Head and Professor of Pharmacy Care Systems, School of Pharmacy, Auburn University**

15h30-15h45: **Coffee break**

15h45-17h00: ***"Academic Honesty and Dishonesty in Canadian Pharmacy: Results of a pilot study"***

- **Speaker: Zubin Austin, BScPhm, MBA, MIS, Ph.D., Assistant Professor, Leslie Dan Faculty of Pharmacy, University of Toronto**

Free evening to enjoy the restaurants and entertainment of North America's most exciting city!

SATURDAY, MAY 31 – AFPC & CCCP HAVE SEPARATE PROGRAMMING

AFPC PROGRAM

Program: Teachers' conference III, AFPC Annual General Meeting (AGM), Award Presentation, AFPC Banquet

8h30-12h00: Teacher's conference theme: ***New technology in teaching. Where are we? Where are we going?***

8h30-9h45: Conference - Title: "The impact of information and communication technology on learning and achievement in higher education"

- **Speaker: Thierry Karsenti, Ph.D., Canada research chair in technology and education, Faculty of Education, Université de Montréal**

9h45-10h00: **Coffee break**

10h00-12h00: Conference - Title: "Applying technology to teaching and learning: experiences from Shenandoah University School of Pharmacy"

- **Speaker: Evan Robinson, Ph.D., R.Ph., Director, Division of Technology in Education, School of Pharmacy, Shenandoah University**

11h30 – 13h45 AFPC ANNUAL GENERAL MEETING & LUNCHEON

14h00 – 17h00 AFPC AWARD RECIPIENTS PRESENTATIONS

Janssen-Ortho Research Award Recipient
Bristol-Myers Squibb National Award of Excellence Recipient
AstraZeneca New Investigator Research Award Recipient
GlaxoSmithKline Graduate Student Research Award Recipient

15h30-15h45: **Coffee break**

CCCP SATURDAY PROGRAM

7h00-8h30 **Breakfast Symposium**

8h30-8h35 **Opening Remarks**

8h35-9h35 ***Keynote Address***
Estrogen Therapy: From Research to Patient Care
Mary Beth O'Connell, PharmD, BCPS, FSHP, FCCP
ACCP President

10h00-10h45 ***New/Novel Antithrombotic Options for the Management of Heparin-Induced Thrombocytopenia***
Tammy Bungard, BSP, PharmD

10h45-11h30 ***Controversies in DMARD Therapy***
Carlo Marra, BSc(Pharm), PharmD, FCSHP

11h30-13h30 **Lunch / Annual General Meeting**

13h30-14h15 ***Drotrecogin alpha (Recombinant Human Activated Protein C) for the Treatment of Sepsis***
Clarence Chant, BScPhm, PharmD, BCPS

14h15-15h00 ***Significant Papers in Pharmacotherapy***

14h15-14h30	*Ambulatory Care*
14h30-14h45	*Pharmacoeconomics*
14h45-15h00	*Cardiology*
15h00-15h15	*Infectious Diseases*
15h15-15h30	*Psychiatry*
15h30-15h45	*Endocrinology*

SATURDAY, MAY 31 EVENING – AFPC/CCCP

18h00 ***BUS TRANSPORTATION FROM HOTEL TO UNIVERSITÉ DE MONTRÉAL***
19h00 AFPC/CCCP BANQUET, ***Hall d'honneur, Université de Montréal***
reception, awards ceremonies,
special entertainment –
19h00-19h30 : Cocktail and Dance Show «Les bons diables» : 30 min (K-500)
19h30-23h30 : Dinner and Talks in the Hall d'honneur (Traiteur : Agnus Dei)

SUNDAY, JUNE 1

8h30 – 12h00 JOINT AFPC/CCCP SYMPOSIUM:
APPLYING EVIDENCE-BASED PRACTICE SKILLS TO RESEARCH ON PHARMACY PRACTICE

Objectives for the plenary:

- To present past and current pharmacy practice research in Canada;
- To appraise these studies using an evidence-based approach;
- To discuss areas of interest for future research.

Objectives for the oral presentations (10 minutes/presentation):

- To share practical experiences on the implementation or evaluation of evidence-based clinical practice (EBCP) of pharmacists in Canada.

Objectives of the concurrent sessions:

- To facilitate integration of EBCP concepts in participants in specific pharmacy fields;
- To provide an overview of how evidence-based skills are taught in Canadian schools of pharmacy.

PROGRAM:
8h30 – 8h40 Introduction
<u>Focus</u>: pharmacy practice research

8h40 – 9h20 Plenary: Applying the principles of evidence-based medicine to pharmacy practice research
Lisa Dolovich PharmD MSc; McMaster University)

9h20 – 10h20 Oral presentations from selected submitted abstracts on the implementation or evaluation of pharmacy practice (5 presentations)

10h20 – 10h40 Break

<u>Focus</u>: evidence based clinical practice
10h40 – 12h00 Concurrent Sessions:
Track 1: Basic scientists workshop

- ***Basic intro to EBCP workshop***
- ***Critical appraisal of an animal study***

<u>Facilitator:</u> Susan Bowles PharmD; Dalhousie University

Track 2: Basic clinical practice faculty workshop

- ***Basic intro to EBCP workshop***
- ***Critical appraisal of a pharmacy practice study***

Facilitators:

Scott Simpson, BSP, PharmD MSc; Institute of Health Economics
Glen J. Pearson, BScPhm, PharmD, FCSHP; University of Alberta

Track 3: Large group presentation

- ***EB teaching: Canadian update***
- ***Invited speakers from selected schools of pharmacy asked to provide an overview of EB teaching in their school.***
- ***Panel discussion***

Speakers:

Daniel Thirion BPharm MSc PharmD BCPS, Université de Montréal
David Gardner PharmD; Dalhousie University

Moderator:

Marie-Claude Vanier; B.Pharm., M.Sc., Université de Montréal

12h00 AFPC New Council Business Meeting

BIOGRAPHIES AND ABSTRACTS OF PRESENTERS

"Looking at the ethics of technology and gene therapy for a new Millenium"

Bartha Maria Knoppers

BARTHA MARIA KNOPPERS, Canada Research Chair in Law and Medicine, is Professor at the Faculté de droit, Université de Montréal, Senior Researcher (C.R.D.P.) and Counsel to the firm of Borden Ladner Gervais. She is a graduate of McMaster University, (B.A.), University of Alberta (M.A.), McGill University (LL.B., B.C.L.), Cambridge University, U.K., (D.L.S.), Sorbonne (Paris I) (Phd.) and was admitted to the Bar of Quebec in 1985.

Currently, Chair of the International Ethics Committee of the Human Genome Organization (HUGO), she was a member of the International Bioethics Committee of the United Nations, Educational, Scientific and Cultural Organization (UNESCO) which drafted the *Universal Declaration on the Human Genome and Human Rights* (1993-97). She is Co-Founder of the International Institute of Research in Ethics and Biomedicine (IIREB) and a Co-Director of the Quebec Network of Applied Genetic Medicine (RMGA). In 1999, she became a member of the Canadian Biotechnology Advisory Committee, and in the year 2000 of the Board of Genome Canada and of the Standing Committee on Ethics of the Canadian Institutes of Health Research.

In October 2001 she received a Doctor of Laws *Honoris Causa* from the University of Waterloo and in December 2002 she received a Doctor of Medicine *Honoris Causa* from Université de Paris V (René Descartes). In 2002 was elected *Fellow* of the American Association for the Advancement of Science, named *Officer* of the Order of Canada and received the Queen's Jubilee Medal.

STUDENT PROFESSIONALISM: RAISING AWARENESS

DANA HAMMER, PHD
ROBERT BEARDSLEY, PHD
Montreal, Quebec
May 30, 2003

Abstract

This interactive workshop will define the various components of student professionalism as well as identify the relevant issues facing pharmacy educators and practitioners. The relationships between professional attitudes, beliefs and behaviors to professionalism will be explored along with the possible causes of unprofessional behavior. Attendees will discuss past strategies that have or have not worked to enhance professionalism. Participants will work through actual cases involving professionalism in pharmacy practice and education. They will develop new strategies to enhance professionalism identifying barriers and facilitators to this important process. In addition, participants will design valid assessments to measure the success of these new approaches.

Robert S. Beardsley, Ph.D., is Associate Dean for Student Affairs and is Professor of Pharmacy Practice and Science in the School of Pharmacy, University of Maryland, Baltimore. Dr. Beardsley received a B.S. in Pharmacy from Oregon State University in 1972, and a M.S. and Ph.D. in Pharmacy Administration from the University of Minnesota in 1974 and 1977 respectively.

Dr. Beardsley teaches a graduate course entitled, "Social and Behavioral Aspects of Pharmacy Practice" and three electives in the Doctor of Pharmacy program, "Effective Leadership and Advocacy," "Care of the Terminally Ill" and "Patient Counseling." He is currently advising two Ph.D. students; eight graduate students have received their PhD degrees under his direction. He is co-author of a communication textbook entitled Communication Skills in Pharmacy Practice, now in its 4th edition. He has over 95 manuscripts and abstracts and over $1 million in funded research. Dr. Beardsley was selected as Outstanding Teacher of the Year by three graduating classes for the School of Pharmacy.

Dr. Beardsley currently serves as chair-elect of the Council of Deans for the American Association of Colleges of Pharmacy and serves on the association's Board of Directors. In the past, he has co-chaired of the APhA-AACP Task Force on Professionalism.

Dana Hammer, is the Director of the Bracken Pharmaceutical Care Learning Center and the UW Community/Ambulatory Pharmacy Residency Program for the University of Washington School of Pharmacy. Dr. Hammer received her B.S. in pharmacy from Oregon State University, worked for two years in hospital and community independent pharmacies, then returned to school to earn her Masters and Ph.D. degrees from Purdue University School of Pharmacy. In her graduate coursework, Dr. Hammer focused on education, sociology and psychology as they relate to pharmacy and other health professions'educational needs. Her research involves assessment of students' educational outcomes and professional development. At UW, Dr. Hammer serves on a number of education-related committees as well as on a health sciences schools' interprofessional curriculum and professionalism steering committee. She has served as a faculty member for two AACP Institutes and has presented faculty development workshops on student assessment, professionalism and active learning techniques to faculty at several pharmacy schools and national conferences. She also serves on the editorial boards of the Journal of Pharmacy Teaching and the Journal of the American Pharmacists Association. Dr. Hammer has won several awards for teaching, innovations in teaching and education, and educational research

Bruce A. Berger, PhD, *"Promoting Civility in Pharmacy Education"*

Content Description: The emotional impact of incivilities can be disruptive and devastating to students and faculty. Incivilities in and out of the classroom affect not only the faculty member's self-esteem and self-efficacy, but also can erode a faculty member's sense of trust and safety in an educational setting. Incivilities can cause professors to: lose self-esteem and self-confidence in their

teaching, lose self-confidence in their research efforts, abandon teaching, become indifferent in the classroom, and fear for their safety (the research shows that this is especially true for female faculty). Faculty often struggle with inappropriate behavior on the part of students in and out of the classroom. Often, their inability to confidently handle the situation discourages them from teaching and staying in academia.

Purpose: The primary purpose of the workshop will be to teach faculty how to prevent incivilities, how to respond to incivilities, how to set appropriate boundaries with students, and how to follow appropriate steps/procedures when incivilities occur.

Bruce A. Berger, Ph.D., R.Ph. is Professor and Head of the department of Pharmacy Care Systems at Auburn University. He was awarded an Alumni Professorship in 1996 outstanding teaching, research, and service at Auburn University. He was born in Cleveland, Ohio. Bruce received his BS in Pharmacy from The Ohio State University. After practicing pharmacy for two years he returned to Ohio State and received his Masters and Ph.D. in social and behavioral pharmacy. He taught at Ohio State before moving to West Virginia University in January 1980. After two years at WVU, Bruce moved to Auburn University and has been there since.

His research interests include interpersonal and organizational communication and psychology, and application of these disciplines to the pharmacist's role in *treatment adherence and treatment outcomes*. He is also interested in developing new service roles for the pharmacist. He has written or presented over 500 papers or seminars on these topics. Specifically, Dr. Berger has conducted workshops on leadership, interpersonal effectiveness, managing angry or difficult people, managing change, strategies for improving treatment adherence, and managing resistance to change. He has attracted over two million dollars in funding to support his research and has been a project leader in a reengineering project of a major U.S. drug chain.

He is the recipient of the Johnson & Johnson Award, the Lyman Award and the first American Association of Colleges of Pharmacy's Award of Excellence for his research. He is the 2001 recipient of the Jack L. Beal Post baccalaureate Alumni Award from the Ohio State University.

Bruce has a regular column in ***US Pharmacist***.

In October of 1997 Bruce was named by ***American Druggist*** magazine one of the 50 most influential people in U.S. pharmacy.

Zubin Austin BScPhm, MBA, MIS, PhD, **"Academic Honesty and Dishonesty in Canadian Pharmacy: Results of a Pilot Study"**

The hallmark of professionalism is an underlying ethic of honesty - the public expects professionals to behave with integrity. The development of attitudinal dispositions towards honest behaviour are the subject of debate, especially in the context of health professions. Some have argued that professional socialization occurring during formal, university-based education lays the foundations for attitudes and behaviours related to honesty. If so, this may be of concern to professionals, academics and the public at large if one considers studies throughout the world indicating large (and growing) numbers of university students participating in acts of academic dishonesty.

Within the context of pharmacy education and practice, issues of academic honesty and dishonesty are not extensively discussed, despite certain long-standing traditions. For example, the practice of "big brother/big sister" in many Canadian schools of pharmacy sets the stage for the passing down of laboratory workbooks, old exams and assignments from one

class to another, in the context of professional socialization. In an effort to understand the dimensions of this issue, and the ways in which academic dishonesty may affect professional practice, a pilot study was undertaken at the University of Toronto to identify students' attitudes towards and behaviours regarding academic honesty. In this presentation, results from this study will be discussed and placed in a developmental and socialization framework.

Zubin Austin BScPhm, MBA, MIS, PhD is a pharmacist, and an Assistant Professor, Leslie Dan Faculty of Pharmacy, University of Toronto with research interests in the area of pharmacy education. He is a recipient of the AFPC Bristol Myers-Squibb Excellence in Education Award.

"The impact of information and communication technology on learning and achievement in higher education"

Thierry Karsenti, M.A., M.Ed., Ph.D.
Canada Research Chair in Information and Communication Technology (ICT) in Education
Professor, Faculty of Education, Université de Montréal (Québec, Canada)

The purpose of this presentation is to outline what we know about the impact of information and communication technology on learning and achievement in higher education. There is strong debate taking place in North America in which some argue that ICTs do not impact on students' learning and achievement, whereas others suggest that technology is a panacea for the challenges university professors and instructors are faced with when teaching. Though research on the impact of ICTs in higher education is still in its infancy, I strongly believe that both these views place too much emphasis on technology. What is most important – and more and more solid work and rigorous research results emerge to support this view – is how ICTs are integrated to improve or facilitate teaching and learning.

Thierry Karsenti, M.A., M.Ed., Ph.D. est titulaire de la Chaire de recherche du Canada sur les technologies de l'information et de la communication (TIC) en éducation. Il est également professeur agrégé à l'Université de Montréal où il occupe un poste en intégration des technologies de l'information et de la communication dans la formation des maîtres. Ses réalisations et innovations technopédagogiques ont été reconnues tant sur le plan provincial que national. Il a ainsi obtenu le premier prix au concours du ***Prix du ministre de l'Éducation*** (1998-1999 et 1999-2000), le ***Prix Hommage 2001*** du Gouvernement du Québec avec une équipe de l'Université du Québec à Hull, le ***Prix d'Excellence en Conception Pédagogique*** de l'Association Canadienne d'Éducation à distance (2000), le ***Prix PEDAGOGICA-RESCOL*** pour l'innovation pédagogique en intégration des TIC (2000). Notons aussi qu'en octobre 2000, il s'est mérité le ***Prix quinquennal d'Excellence en enseignement***. Il se distingue également par la contribution de ses activités de recherche à la qualité de la pédagogie universitaire. Ses intérêts de recherche portent sur l'intégration pédagogique des nouvelles technologies, les pratiques pédagogiques des enseignants, et la motivation.

Thierry Karsenti is the Canada Research Chair holder on information and communication technologies (ICTs) in education. He is also a professor at *Université de Montréal*, in the field of information and communication technologies and their integration in teacher training. His technopedagogical achievements and innovations have been recognized at both the provincial and national

levels. He was awarded first place in the ***Prix du ministre de l'Éducation*** contest (1998-1999 et 1999-2000), and along with a team from *Université du Québec à Hull*, received the ***Prix Hommage 2001*** from the Quebec government. As well, he was awarded the ***Prix d'Excellence en Conception Pédagogique*** by the Canadian Association of Distance Education (2000) and the ***Prix PEDAGOGICA-RESCOL*** for pedagogical innovation in the integration of ICTs (2000). In October 2000, he won the ***Prix quinquennal d'Excellence en enseignement***. He has also been recognized for his contributions, through research activities, to the quality of university pedagogy. His research interests center upon the pedagogical integration of new technologies, teaching practices and motivation.

"Applying Technology to Teaching and Learning: Experiences from Shenandoah University School of Pharmacy"

Evan T. Robinson, R.Ph., Ph.D., Shenandoah University School of Pharmacy

The School of Pharmacy at Shenandoah University opened in 1996 and the first class to graduate was the class of 2000. From the beginning the intent was to integrate technology into the teaching and learning experiences within the School of Pharmacy. This presentation will cover what has been accomplished, what has changed, and some of the lessons learned from which other programs could benefit.

Evan T. Robinson is currently the Director of Technology in Education at Shenandoah University School of Pharmacy. He received his B.S. degree in Pharmacy and M.S. in Pharmacy Administration from St. Louis College of Pharmacy. He received his Ph.D. in Pharmacy Administration from Auburn University, the Department of Pharmacy Care Systems.

Evan assumed the role of Director of the Division of Technology on Education at Shenandoah University School of Pharmacy in January 1998. Since joining Shenandoah University his responsibilities have included: overseeing an Internet-based non-traditional doctor of pharmacy program started in September 1998 with a steady-state enrollment of 120 students and 175 graduates; evaluating onsite and offsite applications of technology for teaching and learning; the development and administration of certificate and continuing pharmaceutical education programs and; teaching within the school of pharmacy.

Please note that the presentations for many of the speakers can be found on the AFPC web page at http://afpc.info/news/abstracts.html .

MAJOR AWARD WINNERS, 2003

AFPC/Janssen-Ortho Pharmaceutical Research Award, Dr. Edward E. Knaus, Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta.

Dr. Knaus is a Professor in the Faculty of Pharmacy and Pharmaceutical Sciences at the University of Alberta. His research interests are in the design, synthesis and pharmacological evaluation of heterocyclic compounds for use as COX-2 inhibitors, and calcium channel agonists and antagonists. He also collaborates in a study to synthesize and evaluate non-invasive diagnostic agents in cancer and potential therapeutic agents for oncology and virology. He has more than 300 peer-reviewed publications and more than 65 postdoctoral fellows and graduate students have benefited from his training. Dr. Knaus was a winner of this award in 1986 and to win this award again is testament to his continuing excellence in research in the pharmaceutical sciences.

AFPC/AstraZeneca New Investigator Research Award, Jean-Christophe Leroux, Faculté de Pharmacie, Université de Montréal.

Dr Jean Christophe Leroux is Associate Professor in the Faculty of Pharmacy of the Université de Montréal and in 2001 was awarded a prestigious Canada Research Chair in Controlled Delivery. Dr. Leroux's research expertise is to develop pH and temperature sensitive dosage forms for targeted drug delivery. Polymeric micelles, liposomes, hydrogels and cationic polymeric micelles are intended for the delivery of lipophilic anticancer drugs and macromolecular compounds including genetic materials. More than 20 graduate students and postdoctoral fellows have worked under his supervision and major publications number more than 45.

AFPC/GlaxoSmithKline Graduate Student Research Award, Huy H. Dao, Faculté de Pharmacie, Université de Montréal.

Huy Hao Dao is a PhD student in the Faculty of Pharmacy, of the Université de Montréal. His supervisor is Associate Professor, Dr. Pierre Moreau. The title of his presentation was "Pharmacological prevention and regression of arterial remodeling in a rat model of isolated systolic hypertension". A portion of this work appeared in the Journal of Hypertension, 2002, **20**: 1597-1606.

AFPC/Bristol-Myers Squibb National Award for Excellence in Education, Simon Albon, Faculty of Pharmaceutical Sciences, University of British Columbia.

Simon Albon is a Senior Instructor in the Faculty of Pharmaceutical Sciences of the University of British Columbia. Simon's research interests include development of progressive learning strategies, teaching tools and the measurement of educational outcomes. Areas of focus have been in learning technologies, peer teaching, and teaching support groups. Highlights of his accomplishments include computer-assisted instruction modules and web course materials for a lecture/laboratory course in pharmaceutical analysis. Current efforts focus on a web-based learning center for the Faculty and hybrid media resources. Simon has been recognized by the University of British Columbia with several major awards for his efforts in teaching and student development.

Please note that other pictures of award winners and banquet events can be found on the AFPC web page at < http://afpc.info/photogallery/index.html> and a complete list of award winners can be found in the report of the AFPC awards committee for 2003.

POSTER ABSTRACTS

SECTION 1 - TEACHING / LEARNING

A01- DEVELOPMENT OF A FORMALIZED THERAPEUTICS CURRICULUM FOR FAMILY PRACTICE RESIDENTS: DESCRIPTION OF AN EXPLANATORY MODEL

Jana M. Bajcar[1,2,3]M.Sc.Phm. FCSHP, Natalie R. Kennie[1,2]Pharm.D., Karl Iglar[1,3] M.D.
Department of Family and Community Medicine[1], St. Michael's Hospital, and
Leslie Dan Faculty of Pharmacy[2] & Faculty of Medicine, Department of Family and Community Medicine[3], University of Toronto, Toronto, Ontario, Canada

Objectives: To describe an explanatory model that was used by a pharmacist/physician team to design a formalized therapeutics curriculum for family practice residents to develop medication prescribing skills.

Methods: A systematic approach to instructional design was used to create a two-year formalized therapeutics curriculum. The curriculum design team used an iterative and reflective process to define an explanatory model that describes key components and tools that were needed to develop the curriculum.

Results: The model consists of three key components: Needs Assessment Planning, Characterization of Medication Prescribing Skills, and Collaborative Design Process. Needs Assessment Planning requires mixed qualitative and quantitative methods to fully understand the needs of the learners and to define the task of medication prescribing. Characterization of Medication Prescribing Skills requires an analysis of learner tasks to target the instruction. A systematic process for medication prescribing, called "I Can Prescribe a Drug ©" process, was developed to explicitly define learner tasks. Collaborative Design Process involves the selection of content and the design for the session. The content for each session is selected through the use of the "I Can Prescribe a Drug©" process and identification of common and routine medication prescribing issues encountered in the family practice setting. The design of each teaching session was informed by the "I Can Prescribe a Drug©" process and Kolb's Learning Cycle.

Conclusions: An explanatory model was developed that can guide multidisciplinary curriculum design teams to collaboratively and systematically design a formalized therapeutic curriculum to develop medication prescribing skills.

A02- ONE-YEAR FOLLOW UP SURVEY OF PHARMACY GRADUATES DESIGNED TO GATHER FEEDBACK RELATED TO THE CURRICULUM AND THEIR CURRENT PRACTICE.

Lesley A. Lavack, Andrea J. Cameron

Leslie Dan Faculty of Pharmacy, University of Toronto, Toronto

OBJECTIVE: To gather feedback from graduates of our revised curriculum on how the curriculum prepared them for practice and its applicability in their current practice.

METHODS: The 37-item survey requested responses using a 5-point agreement scale and written descriptive comments. All graduates for the years 1998, 1999 and 2000 were mailed surveys 12 months after graduation. A reminder mailing was done at 18 months to increase response rate.

RESULTS: Response rates were 55-61%. Respondents indicated high agreement with statements that at the completion of their program they had the knowledge, skills and values to provide pharmaceutical care (PC). Eighty- one to 88% indicated they currently provide PC in their practice; positive progression toward more PC is seen from time of licensure to survey date. Average satisfaction with the undergraduate program ranged from 3.75 to 4.01; satisfaction with current position averaged 3.83 to 4.00. Practice setting of respondents over survey years was community for 73%, 65% and 86% and institutional for 48%, 49% and 35%. Thirty-nine to 48% work in Structured Practical Experience Program (SPEP) sites.

CONCLUSIONS: The results for most questions remained similar over the 3 years; this strengthens validity of consistent qualitative comments. The 'new' PC-based curriculum, which includes 16 weeks of PC-intensive SPEP rotations, appears to be effectively preparing graduates for contemporary practice and graduates are having an anticipated positive impact on practice. Results for 2001 are currently being compiled. A 5-year post graduation survey is planned.

A03- DEVELOPMENT, IMPLEMENTATION AND EVALUATION OF A PRIOR LEARNING ASSESSMENT PILOT PROGRAM FOR THE INTERNATIONAL PHARMACY GRADUATE PROGRAM

Artemis Diamantouros MEd[1], Michael Galli BA[1], Zubin Austin PhD[1].[1]University of Toronto, Toronto

PURPOSE: To develop, implement and evaluate a pilot study of a competency-based Prior Learning Assessment (PLA) for the International Pharmacy Graduate Program (IPG) at the University of Toronto.METHODS: Canadian pharmacy competency documents were reviewed to identify competencies to be assessed in the Prior Learning Assessment and essential knowledge, skills and values that would allow for determination of the level of competency of candidates in the IPG program were identified. Diagnostic and summative assessment methods were used to assess a variety of pharmacy and linguistic skills and included: written assessments, reading comprehension, oral therapeutics assessment, drug information, calculations and prescription checking stations; verbal prescription stations and OSCE stations. Results from the full day assessment were used to create an Individualized Learning Plan (ILP) for each candidate including feedback from each assessment and recommendations to enhance knowledge and skills.

RESULTS: A total of 30 candidates were assessed. The results indicate that the PLA process is systematic, and assessment outcomes are reliable and valid. A high correlation was found between communicative competency and the ability to identify and resolve patients' drug related problems. Data from this pilot appear to support the notion that cultural competency is part of professional practice in pharmacy, and that assessment of such competency ought to be an important part of the pre-registration and licensure processes for foreign-trained pharmacists.

CONCLUSIONS: Results from the pilot project of PLA indicate that competency-based PLA may be an appropriate method for assessing knowledge, skills and values acquired through both formal and informal learning.

A04-IMPACT OF AN ACADEMIC/COMMUNITY PARTNERSHIP MODEL IN EXPERIENTIAL LEARNING ON STUDENTS' LEARNING OPPORTUNITIES, SKILL DEVELOPMENT AND ATTITUDES TOWARDS PHARMCEUTICAL CARE (PC)

Authors: Rosemin Kassam[a], Gary Poole[b], and John B. Collins[c]
[a]Assistant Professor; Director - Structured Practice Education Programs (SPEP), Faculty of Pharmaceutical Sciences, The University of British Columbia, 2146 East Mall, Vancouver, BC, V6T 1Z3,
[b]Director – Centre for Teaching and Academic Growth, 6326 Agricultural Road, Vancouver, BC, V6T 1Z2,
[c]Adjunct Professor, Department of Educational Studies, 2125 Mail Mall, Vancouver, BC, V6T 1Z4.

Objective: This study was designed to evaluate the benefits of an enhanced PC clerkship program developed as a partnership between the SPEP at the University of British Columbia and a national community pharmacy chain. The objectives of this presentation are to share the extent to which learning opportunities were provided to students, to show the degree of improvement that occurred with various PC skills and to highlight the importance that the students placed on various tasks relating to PC as a result of the new model.

Methods: A descriptive, prospective control design was used to evaluate the benefits of an enhanced PC clerkship program using a partnership model between SPEP and one large community pharmacy chain. Employing purposeful selection, eleven preceptors and thirteen students were recruited to participate in the enhanced program. The preceptors were located in seven different pharmacies. The enhanced program consisted of three phases: (a) a one-day workshop with preceptors to discuss the proposed PC practice model and course syllabus; (2) a five-day on-site orientation period to allow the pharmacists to assess their students and (3) an eight-week PC experiential rotation for students at each of the seven community pharmacy sites. The control arm was also purposefully selected. The controls included fourteen community pharmacy sites and twenty-eight students participating in the traditional PC clerkship program. No additional intervention was provided to the control groups, other than the standard communication between the SPEP office and the students/ clerkship sites. All students in the control group split their eight-week experience between two different community pharmacies - four weeks at each site. At the end of their clerkship experiences, students and preceptors in both treatment arms completed a 70-item, five-point Likert-type survey evaluating: (1) the extent to which 23 pharmaceutical care-related learning activities were provided and recognized (α=.92); (2) the degree to which students acknowledged improvements on 17 PC-related skills (α=.94); (3) students' attitudes endorsing the importance of 29 PC-defining activities (α=.93); and (4) the estimated number of patients to whom they provided comprehensive pharmaceutical care.

Results: Usable information was available for 73 individuals: 35 students and 38 preceptors. Compared to students in the traditional PC clerkships, the students in the enhanced program reported more frequent opportunities (M=92 vs. 86) to participate in PC activities, but the difference was not significant; they reported significantly greater improvement (M=72 vs. 58) in their PC skills (F=9.31, p<.004); they reported significantly stronger endorsements (M=124 vs. 115) in their attitudes toward providing and engaging in various key pharmaceutical care activities (F=33.63, p<.0004); and they estimated providing care to more than three times (M=2.7 vs. 10.2) as many patients (F=32.63, p<.0000) during their rotation. Preceptors completed parallel information on their students which generally corroborated the students' self-assessments: Preceptors in the enhanced program estimated significantly more frequent student learning opportunities (M=90 vs. 82, F=5.20, p<.029); they reported significantly greater skills improvement (M=70 vs. 56) for students in the enhanced program (F=14.50, p<.0005); more PC-affirming attitudes (M=122 vs. 118) among their students (although the difference was non-significant); and greater estimated numbers of patients (M=3.1 vs. 15.0) to whom their students provided pharmaceutical care (F=24.76, p<.0000). 2-way ANOVAs showed no treatment-by-control interactions, and generally no differences between students' self-reports and those of their preceptors, except for the finding that preceptors in both the control and treatment arms of the study estimated significantly greater (M=3.2 vs. 7.8) numbers of patients (F=6.38, p<.014) to whom their students provided care than did the students themselves.

Conclusions: This study demonstrated that evidence from both students and preceptors indicate that the enhanced partnership model provided a more effective clerkship experience than did the traditional PC program. Learning opportunities, professional skills and care-delivery attitudes were all improved, generally significantly so.

A05-DEVELOPMENT OF INTRODUCTORY SESSIONS AND AN ASSESSMENT METHOD TO ENHANCE EVIDENCE-BASED CLINICAL PRACTICE SKILLS IN AN ADVANCED THERAPEUTICS COURSE.

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Objectives: To describe the design of introductory sessions and assessment method developed to enhance evidence-based clinical practice skills in the Advanced Therapeutic Course.
Methods: The process involved eight steps:
1) A needs assessment was conducted.
2) Nine learning objectives were developed.
3) An evidence-based practice process (EBPP) was adopted. Six sessions were designed and facilitated using Kolb's Learning Cycle to structure and sequence the sessions.
4. A written exercise, called the Evidence-Based Clinical Question Report (EBCQR), was developed and students were given a formative assignment.
5. A method for assessing the EBCQR was developed and validated.
6. EBCQR guidelines were developed and sample assignments were provided.
7. Students were given an additional formative EBCQR to integrate the exercise into the course.
8. Course tutors were trained to set EBCQR tasks and assess the assignment.
Six PharmD students participated in the pilot study.
Results: The needs assessment identified that a formal evidence-based clinical practice process be incorporated into the course. The following results are highlighted: the EBPP adopted; examples of using the Kolb's Learning Cycle to design the sessions; the EBCQR and assessment method. Students reported that the sessions supported their learning and were aligned with the Critical Appraisal course. The introductory sessions and first formative EBCQR assignment were beneficial in introducing the EBPP as evaluated by student performance.
Conclusions: A formal EBPP and principles of adult learning were used to design introductory sessions and an assessment method to incorporate evidence-based clinical practice skills into the Advanced Therapeutics Course.

A06-THE DEVELOPMENT OF A PILOT TRANSITIONAL TRAINING PROGRAM FOR PHARMACISTS PROVIDING COLLABORATIVE MEDICATION MANAGEMENT SERVICES IN PRIMARY CARE PRACTICES

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Objective: To develop a transitional training program to prepare pharmacists to provide collaborative medication management services in primary care practices.

Methods: The training program was designed to address gaps in knowledge and skills identified in a previous study (Seniors Medication Assessment Research Trial). Outcomes of the training program were aligned with outcome standards used by NAPRA, OCP, and the Faculty of Pharmacy at the University of Toronto. Specific elements of knowledge, skills and values needed by pharmacists to effectively provide care to patients with complex medication issues in a collaborative, multidisciplinary setting were determined. Content validity was assessed by a multidisciplinary group with clinical expertise in primary care practice, professional practice training, and experience with implementing pharmacists' services in family physicians' offices.

Results: The training program, which consists of a 2-day workshop, practice site mentoring, and linkage to experts, will be delivered to 8 community pharmacists with previous experience in providing expanded role services. A variety of educational strategies will be used including: needs assessments, facilitated discussions, reflection exercises, self-directed and group learning exercises, and formative assessment. Using simulated patient cases, pharmacists will practice reviewing family practice medical charts, perform patient assessments, formulate and discuss recommendations with family physicians, and focus on communication and interaction with family physicians. A key component of the workshop will be

a simulated half-day experience in a family practice office to model the "real life" challenges of working in a collaborative care family practice environment.

Conclusions: The development of this training program was a rigorous process to systematically identify and address the learning needs of pharmacists. The program has the potential to enhance the existing knowledge and skills of pharmacists and prepare them to provide collaborative medication management services in a primary care practice.

A07-IMPACT OF PROGRAM CHANGES ON THE PRACTICE OF PHARMACEUTICAL CARE BY RECENT GRADUATES.

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Objective of the study

The faculty of pharmacy evaluated the impact of program changes on pharmaceutical care (PC) practice.

Methods

All 170 pharmacists who completed the new program received a questionnaire. On a scale of 1 to 4, pharmacists reported their level of agreement with 56 statements related to: collection of information; identification of drug related problems; preparation of pharmaceutical opinions; patient counseling; relationship with physician; patient follow-up; general assessment of PC performance; satisfaction with their provision of PC and their preparedness offered by the baccalaureate. The completely and somewhat agree responses are aggregated and reported as a percent of agreement.

Results

Seventy six (45%) questionnaires were completed. Eighty four percent (84%) of pharmacists agree that they collect the appropriate information; 98% properly identify and provide solutions for common drug therapy problems; 80% have the skills and are comfortable preparing pharmaceutical opinions, however only 51% agree that they prepare them frequently; 99% are comfortable and competent with patient counseling. Pharmacists are confident and have a respectful and harmonious relationship with physicians (91%). Patient follow-up received the weakest level of agreement with 75%. Pharmacists are satisfied with their PC performance (90%). There is a strong agreement that the program prepares them well for all the steps of PC (>88%) except for patient follow-up (77%) and relationship with physicians (50%).

Conclusions

Pharmacists trained by the new program perform all steps of pharmaceutical care, are satisfied with the quality of PC provided and strongly agree with the appropriateness of the preparation offered by the program.

A08-BROWN BAG DAY: PROFESSIONNAL INVOLVEMENT OF PHARMACY STUDENTS TOWARD COMMUNITY ELDERLY PATIENTS

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Purpose: To allow 4th year pharmacy students to express their professionnalism to patients in a non curricular activity.
To allow 1st year pharmacy students to observe senior pharmacy students.

Methods: **:** During each session, twelve community elderly patients were asked to attend, on a voluntary basis, a 45 to 60 minutes pharmaceutical consultation lead by a 4th year pharmacy students and accompanied by a 1st year pharmacy students. This activity was conducted in the communication lab at the Faculty of pharmacy. Patients were asked to bring all their medications including naturals products and vitamins. The 4th year pharmacy student, completed a pharmaceutical history with the patient. The data was reported on a data collection sheet and then analyzed with the help of a pharmacist or pharmacy resident. Drug related problems were identified, solutions proposed and a pharmacy care plan developed with the patient. The care plan was send, upon authorization, to the patients' community pharmacists.

Results: During the last session, a group of 11 patients aged 74,4 ± 6,8 year came to the activity. Patients were using 9,6 ± 4,6 medications, including prescription drugs (7,5 ± 4,4 agents), OTC medications (1,5 ± 2,0 agents) and natural products

(0.64± 0.92 agents). Students identified 4,8 ± 2,9 drug related problems per patient, identifying an average of 6,8 ±3.3 interventions.

Conclusion: By contributing to a better and safer therapeutic regimen for community elderly patient, this activity allows students to promote the professional role of pharmacist.

A09-THE "CASES IN PHARMACEUTICAL SCIENCES" (CAPS) COURSE AT UBC: YEAR ONE DEVELOPMENT AND DESIGN

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INTRODUCTION: An outcomes-based curriculum in pharmacy education will be implemented in September, 2003. The Cases in Pharmaceutical Sciences (CAPS) course stream is a component of each year of the four-year program. CAPS is a learning-centred series of courses integrating discipline-specific content with the development of skills and values identified in the Faculty's educational outcomes document and recognized as important to the practice of pharmaceutical care.
PURPOSE: To develop and design CAPS I for the first year of the new curriculum.
METHODS: CAPS developers and an advisory board were identified. CAPS developers researched similar programs locally, and across Canada and the US. Following the development of an initial framework, CAPS developers and advisory board members, engaged in an iterative process of brainstorming sessions and full Faculty presentations to refine the CAPS I framework. Cases were developed jointly with first year courses coordinators, CAPS developers and case-writing experts.
RESULTS: CAPS I was successfully created. The course framework includes weekly one-hour large group and two-hour small group activities that promote personal and professional development. Learning opportunities range from case-based learning (both face-to-face or on-line), delivering formal presentations and engaging in large class tutorials, lectures and problem-solving sessions. Formative and summative assessments in the form of assignments, written exams and tutor, peer and self evaluations will be used to evaluate student progress.
CONCLUSIONS: CAPS I framework will represent the prototype for the CAPS course stream and has the potential to help students meet the educational outcomes of the new pharmacy program and the practice of pharmaceutical care.

A10-EVALUATION OF AN INTERDISCIPLINARY, UNDERGRADUATE PAIN EDUCATION PROGRAM FOR HEALTH PROFESSIONAL STUDENTS

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- **Background**: To treat pain effectively, health care team members must share the commitment to utilize available management strategies and to work together. An understanding of each other's roles will help in this process.

Objective: The University of Toronto Centre for the Study of Pain organized an Interfaculty Pain Education Curriculum Committee to develop, implement and evaluate a Pain Education Program (PEP) for students from Health Science Faculties.
Methods: In March 2002, 540 students from six disciplines participated in an integrated 20-hour pain curriculum. Learning occurred through large group presentations, patient panel, small group work and use of standardized patients. Group work was facilitated by 63 practitioners. Students were assessed on their knowledge and beliefs regarding pain assessment and management and on their understanding of interdisciplinary roles through a pre- and post-test. A paired t-test was used to compare matched pre- & post-test student scores. Students also completed a survey for each day to provide feedback on format and content. All evaluation components were approved by the University's Human Subjects Ethics Review Committee.
Results: The average score for correct responses in the pre-test was 27.68/40 and the correct responses to the post-test was 32.99/40. The difference in the mean was 5.29 which was statistically significant. Most responders (85%-95%) agreed or strongly agreed that PEP was relevant and informative.
Conclusion: The PEP was effective in increasing students' knowledge of pain assessment and management and their awareness of related health professional roles. This program is scheduled to be offered again in March 2003.

A11- DEVELOPMENT OF A PHARMACY WEB-BASED CASE-LEARNING APPROACH IN MOTHER-CHILD HOSPITAL

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Purpose : To develop a web-based teaching approach during 4-8 week internships for pharmacy students in B. Pharm. and M.Sc. programs.
Methods: Based on pharmaceutical care plans developed by pharmacists and students, we created a framework and a model to integrate the information obtained in a database for each case. We reviewed the clinical cases selected, added relevant missing information and developed a set of ten questions per case used to challenge the students' knowledge. Cases were transposed to the web using XML as markup language and XSLT and ASP as programming language. Clinical pharmacists were invited to review the material according to their clinical expertise.
Results: A total of 35 cases were developed, representing nine pharmaceutical clinical sectors at Sainte-Justine. The workload to develop the platform was evaluated to 600 hours of pharmacy students (n = 2) and 75 hours of a pharmacist involved in the web-development. On average, cases have 4,5 drug related problems and 8,8 active drugs. All cases are published on in the Intranet of the pharmacy department. The cases are interactive, questions appear in a timely manner and students are expected to answer questions online and submit the written draft to their preceptor. A pre-test of the platform has been conducted with 3 pharmacy students and improvements were done.
Conclusion: There are limited publications about the development a web-based teaching approach using the problem-solving ability. We believe the use of pre-identified key cases is a good clinical tool to internships and insure pharmacy students get exposed to a similar basis, notwithstanding the real case mix observed during their formation.

A12-THE EVOLUTION OF EXPERIENTIAL LEARNING FOR CANADIAN FORCES PHARMACISTS

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Canadian Forces pharmacists are faced with unique challenges related to maintenance of clinical skills. Innovative solutions are required to address the gaps identified.

The concept of maintenance of clinical skills program was initially formalized in 1997 to support operational readiness. The Canadian Forces have also downsized over recent years and moved to a new Health-Care delivery model. Pharmacy officers can no-longer experience tertiary- care services within a Canadian Forces facility and now require to complete rotations in Civilian health care facilities.

Any experiential training program designed required to address both the skills gaps identified and pertinent disease states and therapeutics. These areas were validated from a number of information sources of the Canadian Forces. It was also a priority to ensure care of Canadian Forces members both in-garrison and on deployment, comparable to that in the civilian sector.

The requirements of operational readiness served as the initial driving forces for the concept of the maintenance of clinical skills. Once in place the rotations acted as a catalyst to identify other areas of practice within the clinical skill spectrum.

This has resulted in a number of initiatives such as re-evaluation of the Canadian Forces Pharmacy Residency program, alternate rotation selection for the maintenance of clinical skills and exploration of the options for credentialing for certain disease states. All these initiatives are intended both to support operational readiness and enhance care of CF members.

The intended Outcomes of the program are:

- Increased operational readiness
- Enhanced care of CF members
- Retention of officers
- Development of expertise within the CF

A13-DEVELOPMENT OF A LEARNING MODULE ON CHEMOPROPHYLAXIS FOR OCCUPATIONAL EXPOSURE TO BLOOD-BORNE VIRUSES

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BACKGROUND

In June 2001, the Center for Disease Control and Prevention (CDC) issued new guidelines for management of occupational exposures to hepatitis B, hepatitis C, and HIV. Although the new recommendations for drug therapy do not differ dramatically, more information is now provided about individual risk assessment and overall case management. A learning module is thus being developed to inform health care providers about current management strategies for post-exposure prophylaxis (PEP).

DESCRIPTION OF THE LEARNING MODULE

The module will be available in both electronic and written format. Material covered will include updated information on PEP for blood-borne viruses from new CDC guidelines, and case-based questions to stimulate and assess learning.

DEVELOPMENT OF THE LEARNING MODULE

A pharmacy consultant with specialized expertise in the field of PEP identified differences between current CDC guidelines and our existing policies, and suggested relevant learning objectives. For each objective, didactic information and case-based questions were developed. The final module is organized into three separate sections, one for each of the three viruses of concern.

EVALUATION

The module also includes a series of multiple-choice questions for formal evaluation of knowledge acquisition. A separate evaluation form will allow for audience feedback on structure and content of the module. The module will be submitted for formal accreditation.

IMPACT

This module will serve to educate pharmacists and other health care providers about CDC recommendations for management of occupational exposures to blood-borne viruses. Information in this module will also aid the revision of institutional policies regarding PEP.

SECTION 2 – PHARMACOLOGY / BASIC SCIENCES

A14- EFFECT OF ENDOGENOUS NITRIC OXIDE ON BRADYKININ-INDUCED ADRENAL CATECHOLAMINE SECRETION *IN VIVO*

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Many previous studies examined the role of nitric oxide (NO) in adrenal catecholamine secretion but the results still remain controversial. The aim of the present study was to investigate whether NO would modulate the adrenal catecholamine secretion induced by exogenous bradykinin (BK) in anesthetized dogs. Plasma catecholamine concentration in adrenal venous and aortic blood was quantified by a high-performance liquid chromatography coupled with electrochemial detector. Adrenal venous blood flow was measured by gravimetry. An NO synthase inhibitor, N□-nitro-L-arginine methyl ester (L-NAME), a selective B_2 receptor antagonist (Hoe 140), and BK were administred intra-arterially into the left adrenal gland. The infusion rate was 0.5 ml/min. BK (0.01, 0.1 and 1.0 μg/ml) induced a dose-dependent increase in adrenal catecholamine output. The increase in catecholamine output evoked by BK (1.0 μg/ml) was significantly inhibited by Hoe 140 (1.37 μg/ml), while remained unchanged by L-NAME (2 or 10 mg/ml). These results suggest that BK-induced adrenal catecholamine secretion is mediated by the activation of B_2 receptor at the level of adrenal medulla and that the endogenous NO has no effect on adrenal catecholamine secretion in response to exogenous BK.

A15- POTENTIAL INVOLVEMENT OF MMP-2 IN HYPERTENSION-INDUCED EUTROPHIC REMODELING OF RESISTANCE ARTERIES.

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During hypertension, conduit arteries present a hypertrophic remodeling (increased cross sectional area, CSA), while small arteries undergo eutrophic remodeling. The involvement of matrix metalloproteinases (MMPs) has been suggested in large artery remodeling.
Purpose: Determine if MMP-2 is implicated in the eutrophic remodeling of resistance arteries during hypertension.
Methods: Males Wistar rats received L-NAME (50mg/kg/d) in their drinking water during 1, 3, 7, 14 and 28 days. Measurement of mean arterial pressure (MAP) was performed in awake, cannulated animals. The structure of small mesenteric arteries was determined by video-microscopy in a perfused and pressurized chamber at 40mmHg. Tissue MMP-2 activity was measured by ELISA, and total MMP2 levels were estimated by the same method after activation of pro-MMPs with APMA.
Results: L-NAME quickly elevated MAP (Ctrl: 97±1 mmHg; L-NAME day 1: 127±5, $p<0.05$). Media/Lumen ratio (M/L) of mesenteric arteries increased gradually to reach significance at 28 days (Ctrl: 6.9±0.4%; day 28: 8.7±0.5%, $p<0.05$). The CSA was not modified, confirming eutrophic remodeling. MMP-2 activity increased after 7 and 14 days of treatment (Ctrl: 0.37±0.08 ng/mL; day 7: 0.99±0.06; day 14: 1.43±0.18 ng/mL, $p<0.05$), while the total level of MMP-2 was not modified.
Conclusion: L-NAME treatment induced hypertension and eutrophic remodeling as seen in essential hypertension. The time-course of remodeling parallels that of MMP-2 activity. However, we need to confirm the involvement of MMP-2 in the remodeling process by using a specific inhibitor.

A16 -LENGTHENING OF REPOLARIZATION IN HIV TRANSGENIC MICE

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Medications used in AIDS patients have been associated with prolongation of repolarization and QT interval. Although new evidence suggests that cardiac diseases can occur in HIV-infected patients independently of the therapy, no relationship between QT prolongation and HIV infection has been established yet. Therefore, we examined cardiac repolarization in CD4C/HIV transgenic (Tg) mice, which express HIV-1 Nef in cells of the immune system and develop an AIDS-like disease. We compared QT interval between Tg and non-Tg mice. Significantly prolonged QT interval was observed in 75% of Tg. Patch-clamp technique was used to compare action potential durations (APD) and K^+ currents in ventricular myocytes isolated from Tg and non-Tg mice. The APD were significantly longer in Tg mice and this was associated with a lower current density for the 3 outward K^+ currents. Indeed, when compared at +30 mV, the Ca^{2+}-independent transient outward K^+ current (I_{to}) was decreased by 43%; the ultrarapid delayed rectifier (I_{Kur}) by 53%; and the steady-state outward K^+ current (I_{ss}) by 33% (n=15-33; *p<0.001). In contrast, the inward rectifier K^+ current (I_{K1}) was comparable in both groups. Alterations in kinetic parameters of the 3 outward K^+ currents explained their lower current density, which then leads to delayed repolarization in CD4C/HIV mice. These results suggest that a similar reduction of K^+ currents, in HIV-infected patients, could account for their longer QT interval and increased incidence of sudden cardiac death.
Abstract has been presented to the 2001 annual meeting of the American Heart Association and at the 2002 Gordon Research conference on cardiac regulatory mechanisms.

A17- LEUKOTRIENE AND PLATELET-ACTIVATING FACTOR: ASSESSMENT OF BIOLOGICAL SIGNIFICANCE IN NEUTROPHIL TRAFFICKING

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OBJECTIVES. To delineate the role of platelet-activating factor (PAF) and leukotriene B_4 (LTB_4) in polymorphonuclear neutrophils (PMN) accumulation induced by soluble agonists in a model of dermal inflammation in rats.
METHODS. Male Sprague Dawely rats (90-100 mg) were injected daily s.c. with granulocyte colony-stimulating factor at a dose of 0,17mg/kg for 9-11 days before the experiment. Rats was treated orally with UK74,505 or SR27417 (PAF receptor antagonists) or with a PAF and/or a LTB_4 (CP105,696) receptor antagonist or vehicle. Agonists under investigation were injected intradermally at duplicate sites in each rat. Skin bioassay was used to quantitate PMN accumulation using an enzymatic (myeloperoxidase) assay.
RESULTS. Our results show that the oral administration of the PAF antagonist UK74,505 (5 mg/kg) significantly inhibited PMN accumulation elicited by PAF by 51% ($p < 0,05$), whereas CP105,696 (30 mg/kg), a LTB_4 antagonist, did not significantly reduce PAF accumulation (30%). However, when CP105,696 and UK74,505 were co-administered, it was found that the two drugs co-operate in a positive manner to inhibit PMN accumulation elicited by PAF (73%) ($p < 0, 01$). In a similar manner, SR27417 (1mg/kg), a PAF antagonist, significantly reduced PMN accumulation induced by PAF 53% ($p < 0,05$) and tended to reduce LTB_4-elicited PMN accumulation by 44%. When CP105,696 was administered with SR27417, PAF accumulation was reduced by 64% ($p < 0,05$). In contrast, the inhibitory effect of CP105,696 on LTB_4-induced PMN accumulation was not modulatd by the addition of a PAF antagonist.
CONCLUSION. PAF and LTB_4 receptor antagonists exert a significant co-operative effect on PMN accumulation elicited by PAF. Supported by the Instituts de recherché en Santé du Canada (IRSC).

A18- ANTIOXIDANT PROPERTIES OF FLAXSEED LIGNANS AND MAMMALIAN LIGNANS DERIVED FROM FLAXSEED

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The potential role of flax (*Linum usitatissimum* L.) as a chemopreventive agent has received much attention in recent years. Flaxseed lignans are known to have a number of health benefits, which include the reduction of tumor growth and the lowering of serum cholesterol levels. It is believe that the flaxseed lignans secoisolariciresinol (SECO) and its diglucoside (SDG) exhibit chemopreventive activity that is the result of their antioxidant activities.
In an effort to better understand the antioxidant properties of flaxseed lignans we are using an in vitro model of lipid peroxidation, 2,2′-azobis-(2-amidopropane) (AAPH) to study the antioxidant reactions of SECO. A time course study of SECO oxidation by AAPH was performed in which oxidation was determined to be complete after 5h at 60°C when all of the SECO had been consumed (as determined by HPLC). Several oxidative metabolites of SECO were produced including two polar compounds (HPLC, R_T=2.8, 3.7 min) and five non-polar compounds (HPLC, R_T=18.7, 19.4, 25.6, 26.7, 29.0 min). Two of the non-polar products (18.7, 26.7 min) form rapidly and appear to undergo further oxidation to other products (19.4, 25.6, 29.0 min). The 26.7 and 29.0 min peaks have been purified by HPLC. The preliminary mass spectrometric (MS) data suggest peroxyl radical addition to SECO occurs. Further MS and NMR studies are underway to determine the structure of these metabolites. HPLC purification of the remaining metabolites is also underway. The time-course for product formation and preliminary structural identification results will be presented.

A19 - EX VIVO EVALUATION OF A NOVEL POLYIODINATED COMPOUND FOR EARLY DETECTION OF ATHEROSCLEROSIS

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PURPOSE: Atherosclerosis is a primary cause of heart disease and stroke. In western countries, it is the underlying source of about 50% of all deaths. It is known that early detection of atherosclerotic lesions would significantly reduce the risk. The objective of this study is to develop a noninvasive radioimaging method for detecting early atherosclerotic plaques.

METHODS: A novel polyiodinated cholesterol analog, cholesteryl 1,3-diiopanoate glyceryl ether (C2I), was synthesized and radiolabeled with ^{125}I. ^{125}I-C2I was incorporated into acetylated low density lipoprotein (AcLDL) which is considered as an atherosclerotic plaque seeking carrier. ^{125}I-C2I was also prepared as a chylomicron-like emulsion. ApoE and LDL receptors (LDLR) double knockout mice were used as an animal model of early atherosclerosis. ^{125}I-C2I/AcLDL or ^{125}I-C2I emulsion was injected into the ApoE/LDLR knockout mice via the tail vein and the mice were sacrificed twenty-four hours postinjection. Various tissues including aorta were removed and radioactivity was determined. The aorta samples were also imaged by a phosphorimaging scanner to determine the accumulation of radioactivity from C2I. The phosphorimages were compared to the atherosclerotic lesions revealed by lipid staining.

RESULTS: The accumulation of radioactivity in the aorta of ApoE/LDLR knockout mice as revealed by phosphorimages was superimposed on the lesion identified by lipid staining. Both phosphorimaging and lipid staining showed negative results with aortae of the control mice.

CONCLUSIONS: ^{125}I-C2I/AcLDL and ^{125}I-C2I emulsion resulted in the accumulation of radioactivity at the early atherosclerotic lesions, therefore may be useful for early detection of atherosclerosis.

A20- DOMPERIDONE AS A SUBSTRATE MARKER DRUG FOR CYP3A4 AND CYP3A5

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Recent studies from our laboratories have indicated that domperidone is mainly metabolized by the CYP3As family. The objective of our study was to characterize further the cytochrome P450 isozymes involved in the metabolism of domperidone and to determine whether this agent could be used as a marker substrate to differenciate between CYP3A4 and CYP3A5 activities. In vitro incubations were conducted with microsomes from baculovirus transfected cells (Supersomes) expressing high levels of either CYP3A4 or CYP3A5. Domperidone (1-700 μM) was incubated for 45 minutes with these enzymatic sources in the presence of NADPH regenerating system. Formation rate of domperidone major hydroxylated metabolite (M3) was monitored by HPLC with fluorescence detection (excitation 282 nm, emission328 nm). Km for the formation of M3 was 5 μM with CYP3A4 but 150 μM with CYP3A5. The addition of cytochrome b5 in enzymatic reconstitution system increased the Vmax values of supersomes 3A4 and 3A5, whereas solely affected the Km value of supersomes 3A4 (Km=26 μM). We estimated that the combination of supersomes and cytochrome b5 was the best predictor of domperidone metabolism in human liver microsomes. Incubations were also made at low (30 μM; Km for CYP3A4 plus CYPb5) and high (300 μM) domperidone concentrations using human liver microsomes from differents donors (n=15). Using this strategy, we observed that content varies from 0-40% in these preparations; thus CYP3A4 appears to be the major CYP3A isoform in human liver. Inhibition studies suggested that clarithromycin is not a true inhibitor of CYP3As. In conclusion, we propose that domperidone can be used in vitro as a substrate marker to differenciate between CYP3A4 and CYP3A5 activities in various enzymatic preparations.

A21- MODULATORY ROLE OF P-GLYCOPROTEIN ON THE CARDIAC ELECTROPHYSIOLOGICAL EFFECTS OF AN I_{KR} BLOCKER.

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P-glycoprotein (P-gp) is a membrane transporter which acts as a pump to eliminate a variety of xenobiotics from the cell. Under normal conditions, P-gp could protect the myocardium against intracellular accumulation of many drugs. Hence, a down regulation of P-gp or inhibition of the transporter could provoke intracellular accumulation of drugs, including I_{Kr} blockers. This effect can promote binding of I_{Kr} blockers to their intracellular receptor, increase block of the channel and prolong cardiac repolarization. P-gp was modulated by pre-treating guinea-pigs (n=48) 5 days with a P-gp inhibitor, verapamil (1.5 to 15 mg/kg/day), prior to EP studies. The duration of the monophasic action potential duration measured at 90% repolarization ($MAPD_{90}$) was evaluated at baseline and following a 5 minute perfusion period with cisapride (50 nM). At a basic cycle length of 250 msec, $MAPD_{90}$ was prolonged 17±5 msec in hearts treated with vehicle. In contrast, $MAPD_{90}$ was prolonged 42±11 msec in hearts pre-treated with verapamil 15 mg/kg/day ($p<0.05$). This effect was dose-dependent and time-dependent (1-7 days). P-gp activity was evaluated with rhodamine 123, a fluorescent substrate of P-gp. We demonstrated that Rho 123 accumulates in verapamil treated hearts (0.16±0.03 vs 0.2±0.02 μM; control vs verapamil 15 mg/kg/day, n=16, $p<0.05$). Rho 123 results indicate that cardiac P-gp activity is diminished following pre-treatment with verapamil. Potentiation of cisapride effects suggests that intracellular concentrations of the drug or access to its binding sites on I_{Kr} were increased. These results and future experiments should enable us to identify possible drug interactions that could potentiate dangerous electrophysiological effects of certain drugs. This work was supported in part by the Heart and Stroke Foundation of Canada.

A22- BEYOND THE FRACTAL CHARACTERIZATION OF POROUS MEDIA: THE MODIFIED AUTO-CORRELATION METHOD

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Purpose: In porous media, it is well known that microstructure fluctuations can have important consequences on bulk mechanical and rheological properties. These physical structures can share the same fractal dimension in spite of their different appearance. The most popularized concept in fractal analysis of structure was the fractal dimension. Only in the last decade, additional tools to get rid of the degeneracy character of this parameter have been developed. The few ones devoted to texture have proved to be still degenerate in rather simple cases. In order to characterize the fine details of a structure, mainly represented by the distribution and shapes of its gaps, we developed a new formalism which provides a complete characterization of the geometrical organization of porous media.
Methods: The method developed is based on a modification of the auto-correlation method, which is widely used in engineering. It can be viewed as a two-point joint moment (autocovariance) of the structure indicator function. This explains in a way why the measure given by our method completes naturally the information obtained from pointwise descriptors.
Results: The method has been tested on known sets as well as on porous models. It has resulted in a complete differentiation between structures having the same fractal dimension.

Conclusion: This method offers a more precise description of the fine texture of porous structure generally undistinguishable by existing methods. The results of the examples we studied are promising for a wider use.

A23-LOCALIZATION AND FUNCTIONAL EXPRESSION OF P-GLYCOPROTEIN (P-GP) IN RAT ASTROCYTE CULTURES: RELEVANCE TO THE TREATMENT OF HIV-1 INFECTION IN THE CENTRAL NERVOUS SYSTEM (CNS)

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An obstacle to the pharmacological treatment of human immunodeficiency virus (HIV) type-1 infection in the CNS is the expression of ATP-dependent, membrane-bound efflux drug transporters (i.e., P-gp) at the blood-brain barrier and in brain parenchyma. This project investigates the cellular/subcellular localization and functional expression of P-gp in astrocytes, a cellular target of HIV-1 infection in the CNS. The transport properties of [^{3}H]digoxin, a known P-gp substrate, were investigated at 37°C in primary rat astrocyte cultures and in a continuous rat astrocyte cell line (CTX TNA2). RT-PCR analysis detected P-gp mRNA for both mdr1a and mdr1b in primary astrocytes whereas only mdr1b was expressed in the CTX TNA2 cells. Western blot analysis using the P-gp monoclonal antibody, C219, detected a single band at approximately 170-kDa, a size previously reported for P-gp. Immunocytochemical analysis at the electron microscope level, using various P-gp monoclonal antibodies (i.e., C219, MRK16), detected the presence of P-gp at the plasma membrane, plasmalemmal vesicles, and at the nuclear envelope of cultured rat astrocytes. One hour [^{3}H]digoxin accumulation by monolayers of astrocytes was significantly enhanced in the presence of various P-gp inhibitors (verapamil, cyclosporin A, PSC833, quinidine), HIV-1 protease inhibitors (saquinavir, indinavir, ritonavir), and an ATP depleting agent (2',4'-dinitrophenol), suggesting P-gp functional activity. These results provide evidence for the localization and functional expression of P-gp in cultured rat astrocytes and suggest that the brain parenchyma may represent a secondary barrier to the brain permeation of various pharmacological agents, including HIV-1 protease inhibitors.
Supported by the Canadian Institutes of Health Research (Grant #HOP-56976), the Ontario HIV Treatment Network, Ontario Ministry of Health and a Merck-Frosst Canada Studentship

A24- EXPRESSION AND TARGETING OF P70S6 KINASE *IN VIVO* IN A MODEL OF VASCULAR HYPERTROPHY

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PURPOSE : $P70^{S6K}$ is an ubiquitous enzyme implicated in the regulation of the translation of messenger RNA coding for ribosomal proteins. Inhibition of this enzyme with antisense technology would reduce the excess of protein synthesis in presence of growth factors to control vascular hypertrophy. METHODS : Since Endothelin (ET) stimulates vascular protein synthesis, we have examined the expression of $p70^{S6K}$ in rats treated with ET (osmotic pumps implanted intraperitonealy) during 24 hours. We measured total $p70^{S6K}$ protein levels by Western blot and protein synthesis by incorporation of radioactive leucine in mesenteric arteries and in the aorta. In addition, we have conceived an antisense directed against the region of the AUG codon of $p70^{S6K}$ mRNA, and studied the effect of this antisense in the model of ET-treated rats.
RESULTS : Our results showed that ET doubled the expression and the phosphorylation of $p70^{S6K}$. According to these results, $p70^{S6K}$ would play an important role in the signaling pathway of ET. We have then established that the antisense exerts its maximal effect 48 hours after its administration. and no changes were noted. Our antisense reduced total $p70^{S6K}$ protein level by about 60% in the mesenteric arteries of normal rats. However, these results were not observed in ET treated rats. Moreover, the antisense did not reduce the level of protein synthesis in ET-treated rats. It seems that the antisense could not penetrate the aorta to exert its action since we did not oberve any effect on the expression of $p70^{S6K}$ in this artery. We have tested two dosages of the antisense, 10mg/kg and 1mg/kg, and both were equivalent to reduce $p70^{S6K}$ plasmatic levels. The administration of a negative control (scrambled), confirmed that the efficacy of our antisense is related to its mechanism of action. Furthermore, to confirm the absence of non specific effects, we have investigated the expression of ERK1/2 in antisense treated rats.
CONCLUSION : It is our aim to optimize the efficacy of the antisense with a polymeric vehicle in order to increase the penetration of the antisense in the arteries. Improvement of the antisense delivery to the vascular wall would allow us to assess the impact of $p70^{S6K}$ inhibition in a model of vascular hypertrophy.

A25 - HIGH-PERFORMANCE LIQUID CHROMATOGRAPHIC ASSAY FOR COMMON SUNSCREEN AGENTS: APPLICATION TO *IN VIVO* ASSESSMENT OF SKIN PENETRATION AND SYSTEMIC ABSORPTION IN HUMAN VOLUNTEERS

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Purpose: To develop a reverse-phase high-performance liquid chromatographic assay for quantifying four common sunscreen agents, namely 2-hydroxy-4- methoxybenzophenone (oxybenzone), 2-ethylhexyl-p-methoxycinnamate (octylmethoxycinnamate), 2-ethylhexyl-salicylate (octylsalicylate), and salicylic acid 3,3,5-trimethylcyclohexyl ester (homosalate) in a range of biological matrices. Skin penetration and systemic absorption of sunscreen filters after topical application to human volunteers were also measured.
Methods: Separation was achieved utilizing a Symmetry C-18 column with methanol-water as the mobile phase. A preliminary study involved application of Coppertone Colorblok® for kids (SPF 30) on arms and back of the volunteers. This commercially available sunscreen product contained the above four sunscreen filters. Sunscreen content in the stratum corneum was measured using the tape-stripping technique at 30 min, 4 and 8 hours. Blood samples were taken from all subjects at pre-application and at 1, 2, 4, 6, 8 and 24 hours post-application. The volunteers collected urine samples for 48 hours after application, recording the time and volume of each sample.
Results: The assay permits analysis of the sunscreen agents in biological fluids, including bovine serum albumin (BSA) solution, human plasma and skin strips. The assay was linear ($r^2 > 0.99$) with minimum detectable limits of 0.8 ng for oxybenzone, 0.3 ng for octylmethoxycinnamate, and 2 ng for homosalate and octylsalicylate. The inter- and intra-day variation for the four sunscreens was less than 3% at the upper end of the linear range and less than 6% at the lower end. Recoveries of sunscreens from plasma and 4% BSA solution were within the range 91-104%. Higher amounts of sunscreen agents were recovered from the upper layers of stratum corneum at 30 minutes. At 4 and 8 hours post

application, similar depth of penetration profiles were obtained but with overall lower sunscreen concentration. A significant amount of oxybenzone was measured in the plasma and urine. Upto approximately 1% of oxybenzone and its metabolites were detected in the urine.
Conclusions: The HPLC assay developed is sensitive, simple, rapid, accurate and reproducible. Results from the preliminary study demonstrate significant penetration of sunscreen agents into and across the skin.

A26-EFFECT OF GROWTH HORMONE RELEASING PEPTIDES ON FATTY STREAK FORMATION AND LIPID UPTAKE BY MACROPHAGES IN APOLIPOPROTEIN E DEFICIENT (APOE $^{-/-}$) ATHEROSCLEROTIC MICE

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Purpose. Macrophage uptake of oxLDL is a critical step in the progression of atherosclerotic lesion. CD36 appears to play a key role in mediating uptake of oxLDL into macrophages. Inhibition of CD36 activity could provide a potential anti-atherogenic therapy. We explored the effects of the GHRPs, EP80317 and hexarelin, on atherosclerotic lesion development in ApoE$^{-/-}$ mice fed a standard chow or a high fat high cholesterol (HFHC) diet.
Methods. ApoE$^{-/-}$ mice were treated with NaCl (0.9 %), hexarelin (100 μg/kg) and EP 80317 (300 μg/kg) administered by daily s.c. injections from 6 to 18 weeks old. Peritoneal macrophages were incubated with oxLDL (250 μg/ml) and stained with oil-Red-O. Immunohistochemical staining for CD36 was quantified with aorta microanatomy slides.
Results. EP 80317 (30-1000 μg/kg) shows a dose-dependent inhibition of fatty streak formation. For HFHC diet, EP 80317 and hexarelin pretreatment reduce lesion by 47% and 28% respectively, compared with vehicle and by 16% and 9% respectively, in mice fed a normal diet. In addition, GHRPs treatment *in vivo* significantly reduced oxLDL uptake by peritoneal macrophages incubated with oxidized LDL *in vitro*. Immunohistochemical analysis of aortas pretreated with GHRPs shows that the ratio (lesion area/media area) of EP 80317 pretreated aorta is reduced by 54 % compared with vehicle. CD36 expression in lesions is strongly correlated with the lesion area.
Conclusion. EP 80317 has significant pharmacological effects on inhibiting oxLDL uptake by macrophages and, therefore, may prevent aortic lesion development.

A27-THE EFFECT OF SEAL OIL ON THE CYTOTOXICITY INDUCED BY TAXOL

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Purpose
Some studies suggested that polyunsaturated fatty acids (PUFAs) which are constituted mainly by docosahexaenoic acid (DHA) and eicosapentaenioc acid (EPA) have the potential in the inhibition of growth of certain cancer cells. Considering that PUFAs are present abundantly in seal oil, we investigated the effect of seal oil on the cytotoxicity and apoptosis induced by taxol.

Methods
Breast cancer cell lines, MCF-7 and MDA-MB-231, were treated with taxol alone and in combination with seal oil for 24 hrs. Cell viability was evaluated by MTT assay. Apoptosis was investigated by morphological changes and DNA strand break assay. Western blotting was used to assess the expression of P53 and Bcl-2 protein.

Results
MTT assay showed that taxol in combination with seal oil resulted in enhanced cytotoxicity in both cell lines, in comparison with taxol alone. IC50 determined with taxol alone and in combination with 1.6% seal oil in MCF-7 were 82.9μM and 38.0μM, respectively. IC50 determined with taxol alone and in combination with 1.6% seal oil in MDA-MB-231 were 50.1μM and 27.0μM, respectively. Apoptosis assessed using morphological changes and DNA strand break assay indicated that more cells treated with taxol in combination with seal oil were found undergoing apoptosis than that with taxol alone. It should be noted that seal oil alone did not result in any noticeable apoptosis and cell death, which suggests that it is non-cytotoxic. Western blotting showed that seal oil up-regulated tumour suppressor P53 expression and down-regulated apoptosis inhibitor Bcl-2 expression.

Conclusion
Seal oil can be used to enhance the cytotoxicity and apoptosis induced by taxol in both breast cancer cell lines tested.

A28- STUDY OF SEAL OIL IN REDUCING THE NEPHROTOXITY OF CYCLOSPORINE A

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Purpose: Nephrotoxicity is a common and serious side effect associated with cyclosporine A (CsA), a potent immunosuppressant. Fish oil, rich in ω-3 polyunsaturated fatty acids (PUFA), has been reported to be beneficial in alleviating the toxicities including nephrotoxicity induced by CsA. Seal oil is another source of ω-3 PUFA. This study was designed to investigate the potential of using seal oil in the formulation of CsA to reduce its nephrotoxicity. Positive results of this study may be the key impetus leading to the development of novel formulation of CsA using seal oil.

Methods: The cytotoxicity of CsA alone and in combination with docosahexaenoic acid (DHA), a main PUFA in seal oil, was determined using the MTT assay in LLC-PK1 cell line (pig renal epithelial cell line). Lactate dehydrogenase (LDH) levels in the cell culture supernatant were measured by colorimetric assay as a parameter of cell damage. CsA emulsions were prepared in 20% of seal oil or corn oil by high pressure homogenization. The particle size of the emulsions was characterized by a Doppler electrophoretic light scattering analyzer. The CsA in seal oil or corn oil was given to SD rats at 50 mg/kg /day p.o or 25 mg/kg /day i.p. for 28 days. The CsA levels in blood were measured by the radioimmunoassay. Blood urea nitrogen (BUN) and creatinine clearance (Clcr) were measured as indicators of kidney function. In addition, peripheral blood pressure (BP), urinary N-Acetyl-1-β-D-glucosaminidase (NAG), 6-keto-Prostaglandin $F_{1\alpha}$ (6-keto-$PGF_{1\alpha}$), Thromboxane B_2 (TXB_2), and Malondialdehyde (MDA) levels in kidney were monitored. The results from the two groups (CsA in seal oil and CsA in corn oil) were compared.

Results: The particle size of the CsA emulsions was found to be around 340 nm in diameter. The emulsions were found to be stable (particle size remained unchanged) for at least 4 weeks.
The IC_{50} of CsA alone in LLC-PK1 cells upon incubation for 24 hr was found to be 2.5 μM, which was increased to 3.6 μM when incubated together with 5.0 μM DHA. The LDH levels in LLC-PK1 cells were reduced in the presence of DHA in a concentration-dependent manner.
The mean concentrations of CsA in blood following p.o. administration of CsA in seal oil and corn oil emulsions were 3816 ± 523 and 4083 ± 1226, respectively. The mean concentrations of CsA in blood following i.p. administration of CsA in seal oil and corn oil emulsions were 3018 ± 1195 and 3063±415, respectively. The levels of BUN, peripheral BP, urinary NAG, 6-keto-$PGF_{1\alpha}$ / TXB_2 ratio, and kidney MDA of rats administered with CsA in corn oil following both p.o. and i.p. administrations were found to be higher than the saline group, while the level of Clcr was lower, suggesting kidney toxicity caused by CsA. The above parameters were found to be improved following p.o. administration of CsA in seal oil suggesting that seal oil has the potential to reduce kidney toxicity induced by CsA. However, there was no significant difference observed between CsA in seal oil and CsA in corn oil administered via i.p.

Conclusion: The results of *in vitro* study showed that DHA reduced the cytotoxicity induced by CsA. Preliminary *in vivo* studies demonstrated that the nephrotoxicity associated with CsA was reduced in the presence of seal oil following p.o. administration. The results indicated a promising potential of replacing currently used vegetable oil by seal oil as the oil-phase of CsA formulation to reduce nephrotoxicity. However, more animal experiments are needed to confirm the results.

A29- PREDICTING THE ORAL ABSORPTION OF A CLASS II DRUG, GLIBENCLAMIDE: DEVELOPMENT OF STRONG *IN VITRO/IN VIVO* CORRELATIONS USING *IN VITRO* AND *IN SILICO* TOOLS

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Purpose: The purpose of this study is to predict oral absorption of a class II drug, glibenclamide. Biorelevant dissolution methods and *in vitro* permeability measurements were used in combination with computational technology. The objective was to establish strong *in vitro/in vivo* correlations (IVIVCs) based on biopharmaceutics drug classification system.
Methods: The dissolution behaviors of two brand tablets were tested using an Erweka DT 6 dissolution tester in different biorelevant dissolution media. The drug permeability was studied using Caco-2 cell line. Cells were cultured in 6 trans-well plates over 21 days. The integrity of the cell monolayer was assessed by measuring Transepithelial Electrical Resistance (**TEER**). Different transport media were used for the permeability studies. The predictions of the fraction dose absorbed were performed using GastroPlus^{TM}, a computational software based on the advanced compartmental absorption and transit model (ACAT). The results of the simulations were compared with actual clinical data taken from literature.
Results: The tablets exhibited significant differences in their dissolution behaviors depending on the nature of the dissolution media. Permeability was determined to be 3.5e-4 cm/sec. The *in vitro* data were used as input-function in the ACAT model. The simulation results successfully predicted the AUC and C_{max} for seven patients with less than 10% error for both formulations. This fell within the FDA criteria.
Conclusion: The proposed IVIVC exhibited excellent prediction of plasma time curve for each individual. *In vitro/in silico* methods are powerful tools to establish IVIVCs. The IVIVCs may be used as surrogates for clinical bioequivalence studies.

A30-GROWTH HORMONE-RELEASING PEPTIDES (GHRPs) TREATMENT MODULATES PLASMA LIPID PROFILE AND THE SCAVENGER RECEPTOR EXPRESSION WITHIN MACROPHAGES

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Atherogenesis is a complex process in which CD36 macrophage scavenger receptor typeB appears to play a major role. The expression of this scavenger receptor on macrophage cell surface is involved in the clearance of oxidized low density lipoproteins (oxLDL) leading to the the accumulation of cholesteryl esters in the macrophages and the foam cell formation. We have recently found that the long term administration of GHRPs induce a significant reduction of fatty streak formation in ApoE null mice fed a high fat high cholesterol (HFHC) diet. OBJECTIVE. The present study aims to document the mechanisms involved in such beneficial effect of GHRPs treatment by analyzing plasma lipid profiles and macrophage CD36 expression in ApoE null mice. RESULTS. The GHRP analog EP 80317 decreased the total plasma cholesterol and the non HDL cholesterol by 30 and 31%($p<0.01\%$) in ApoE null mice fed a HFHC diet compared to the control group. In addition, plasma HDL cholesterol levels tended to increase. The daily administration of EP 80317 for 12 weeks negatively modulate CD36 expression in macrophages as assessed by western blot and by flow cytometry analysis. CONCLUSION. Although the mechanisms of the anti-atherosclerotic effect of EP 80317 are yet to be determined, this effect could be explained in part by its negative modulatory effect on CD36 expression, a key regulator of lipid metabolism within macrophages which paralleled favourable plasma lipid profiles induced by GHRPs treatment. Supported by CIHR A31-

A31-MORPHINE GLUCURONIDE-TO-MORPHINE PLASMA RATIOS ARE AFFECTED BY A NOVEL POLYMORPHISM IN THE PROXIMAL PROMOTER REGION OF THE UGT2B7 GENE

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Objective: To clarify the molecular determinants of the metabolic variability of morphine, we searched for genetic polymorphism in the *UGT2B7* gene, evaluate the functional impact of novel polymorphisms *in vitro* and study their relationship with morphine glucuronides to morphine ratios in cancer patients.
Methods: Genetic analysis of the UGT2B7 proximal promoter was performed by polymerase chain reaction followed by direct automated sequencing with DNA samples from 58 Caucasian subjects. HepG2 hepatoma cells and Caco-2 colon cells were transfected with various sequence patterns of the promoter region in luciferase reporter gene constructs to assess functionality. Morphine and morphine 3- and 6- glucuronides were measured by liquid chromatography-mass spectrometer in 211 cancer patients and subjects were genotyped for the newly discovered polymorphism using the LightCycler fluorescence resonance energy transfer method.
Results: Genetic analysis revealed the existence of 8 single nucleotide polymorphisms (SNPs) in the UGT2B7 promoter, six of which are tightly linked; -1248, -1241, -1054, -842, -268, -102 relative to the hepatic start. In contrast, the novel SNP at position -66 occur independently, while the -79 variation appears in linkage disequilibrium with the codon 268 polymorphism (UGT2B7*2). Four haplotypes were observed in subjects included in the initial SNP screening. Upon functional *in vitro* characterization, the -79 variant was shown to cause an 8 to 11-fold less promoter activity compared to the 'wild-type' construct in Caco-2 and HepG2 cells, respectively. Cancer patients heterozygous for the -79 variant who received chronic oral morphine therapy displayed lower morphine-6-glucuronide/morphine and morphine-3-glucuronide/morphine ratios compared to non carriers.
Conclusions: Results suggest that the -79 functional SNP of the *UGT2B7* gene contribute to the interindividual variation of morphine metabolism and potentially to a number of therapeutic drugs biotransformed primarily by UGT2B7.

A32- LOCALIZATION OF SEX STEROID HORMONE RECEPTORS IN MOUSE VENTRICLES

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Sex steroid hormones (SSH) affect the cardiovascular system via interactions with their specific receptors. We have examined the expression and subcellular localization of estrogen (ERα, ERβ), progesterone (PR-a, PR-b) and androgen (AR) receptors in the mouse heart. Mouse ventricular myocardium was separated into different protein fractions (total (T), cytosolic (C), total membrane (M) and sarcolemmal (S)). The fractions were characterized using specific markers for the sarcolemma (Na^+/K^+-ATPase) and the cytosol (Glucose-6-Phosphate Dehydrogenase, (G6PD)). Compared to the total protein fraction, Na^+/K^+-ATPase was enriched ~3-fold in the sarcolemmal fraction whereas G6PD activity was ~2-fold greater in the cytosol. The subcellular localization of the SSH receptors (SSHR) was determined in these fractions by Western Blot analysis. ERα immunoreactivity was most abundant in the sarcolemmal fraction whereas ERβ, PR-a, PR-b and AR were primarily in the cytosol. Ovariectomized mice were employed to determine if the expression of SSHR is regulated by SSH in mouse ventricle. Six weeks post-ovariectomy, the estrogen level was reduced. There was a marked increase in the expression of ERα and PR-a without any significant changes in the expression of the other receptors. These findings show that sex steroid hormone receptors are present in the mouse ventricle, that they have different subcellular localization, and that ovariectomy selectively affects the expression of ERα and PR-a.

SECTION 3 – DRUG USE

A33 - USE OF INHALED RESPIRATORY MEDICATIONS BY WET NEBULIZATION IN NOVA SCOTIA SENIORS UNDER PHARMACARE'S REIMBURSEMENT GUIDELINES.

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PURPOSE: During 1999, approximately 5000 beneficiaries of the Nova Scotia Seniors' Pharmacare Program received respiratory medications by wet nebulized therapy (WNT), at a cost of over $2 million dollars (Canadian)/year. On August 1, 2000, guidelines for the reimbursement of WNT were implemented. We examined approved reimbursement requests to determine patient demographics, reasons for using WNT and the type of physician making requests.
METHODS: 200 approved requests for WNT therapy were randomly selected, 28 were excluded due to coverage by another program and 172 were reviewed for a 10-month period after implementation of the guidelines.
RESULTS: 98% of all requests were made by family physicians. Males and females represented 44% (mean age 77 ± 8 years) and 56% (mean age 79 ± 9 years) of requests, respectively. 27% of requests were for nursing home residents. The most frequently cited reasons for using WNT included inability to use dry inhaler devices (DIDs) due to dementia or physical disability (56%), poor inspiratory capacity (16%) or for short-term use in palliative care or during an acute illness (9%). 48% were using both WNT and DIDs.
CONCLUSIONS: Family physicians were responsible for almost all requests for WNT. Most patients using WNT were reported to be unable to use DIDs. The proportion using both DIDs and WNT suggests sub-optimal use of DIDs in some individuals. Further work is needed to determine patient and physician attitudes/preferences about WNT and DIDs, as well as the policy impact on health outcomes and utilization of health care services.
Funded in part by the Nova Scotia Department of Health through the Drug Evaluation Alliance of Nova Scotia.

A34 -RETROSPECTIVE COHORT STUDY OF CYSTIC FIBROSIS PATIENTS WITH A 3-WEEK REGIMEN OF 30 MG NEBULIZED COLISTIMETHATE BID

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Purpose : To evaluate the efficacy of a 3-week regimen of 30 mg nebulized colistimethate bid for the eradication of *Pseudomonas aeruginosa* (*P. aeruginosa*) in cystic fibrosis patients.
Methods : Retrospective cohort study of children aged 0-18 years old attending the cystic fibrosis outpatient clinic with a positive culture for *P. aeruginosa* (throat or sputum samples) at their visits between July 1999 and December 2002. Patients included had to be infected at least once prior to enrollment. Patients enrolled were treated according to an in-house protocol with a regimen of colistimethate 30 mg bid for 3 weeks. A positive culture 7 to 10 days post-treatment lead to a 3-month additional treatment at the same dosage. The primary endpoint was the eradication rate at the end of the 3-week and 3-month treatments as indicated by a throat/sputum sample. Relevant pulmonary parameters (FVC, FEV_1, FEF 25-75 %) were collected pre- and post-treatment.
Results : A total of 111 episodes (81 patients) were evaluated (60 % male, median weight 18,5 kg, median height 107 cm, median age 5.7 years old). The overall eradication rate was 52 % after a 3-week and 49 % after a 3-month regimen ($p = 0.60$). An additional 3-month regimen was used in 31 % of the episodes with an eradication rate of 41 %. No statistically significant difference was observed in pulmonary parameters.
Conclusion : A 3-week regimen of 30 mg nebulized colistimethate bid appears to be a useful treatment for the eradication of *P. aeruginosa* in cystic fibrosis children. Thus, further studies are required to evaluate the impact of a higher dose and a longer treatment duration on the eradication rate.

A35 -ANALYZING THE PREVALENCE AND OUTCOMES OF PHARMACEUTICAL INDUSTRY SPONSORED STUDIES INVOLVING CLOZAPINE, RISPERIDONE, OR OLANZAPINE

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PURPOSE**:** The objective of this study is to determine the prevalence and outcomes of pharmaceutical industry sponsored clinical trials involving clozapine, risperidone or olanzapine.

METHODS: All three antipsychotics were initially searched by subject and keyword between the years 1990 and 2002. Following this, "schizophrenia and disorders with psychotic features" was *exploded* in Medline. This search was next limited to the different types of clinical trials (i.e., phase I, II, III, IV, controlled, multicenter and randomized). A final limit by Human and English language was then performed. All studies found within the search were compiled. Excluded were review articles, letters, meta-analyses, animal studies as well as clinical trials not pertaining to schizophrenia. Data collected included the following parameters: Disclosure of any financial support, author(s) employed by the industry, comparator drug(s) within the trial, sample size, blinding, placebo controlled, and outcome (if the study was sponsored).

RESULTS: The literature search captured a total of 613 published journal articles of which 372 met the inclusion criteria for our study. One hundred and twenty-four (33.3%) of these studies were industry sponsored (18 by Novartis/Sandoz, 43 by Janssen, and 63 by Eli Lilly). Regarding authorship, 74.6% of Eli Lilly funded studies were authored/coauthored by members of the industry, which was significantly greater ($p<0.05$) than the studies funded by either Janssen (23.3%) or Novartis/Sandoz (5.6%). On the other hand, 28.6% of the studies sponsored by Eli Lilly compared their antipsychotic (olanzapine) to at least one other atypical antipsychotic. This was significantly greater than Novartis/Sandoz sponsored studies (5.6%, $p<0.05$) and numerically greater than Janssen sponsored studies (14.0%, $p=0.08$). Overall, no significant difference was noted for positive outcomes reported in the industry sponsored studies (92.1% vs. 88.4, and 72.2% for Eli Lilly, Janssen and Novartis/Sandoz respectively). What's more, no negative results were reported in any of the funded studies. Another major difference between the non-sponsored studies and the industry sponsored studies is that the latter were more likely to be blinded and placebo controlled.
CONCLUSIONS: One third of published clinical trials involving clozapine, risperidone or olanzapine have been funded by their respective manufacturer. Furthermore, the reported outcomes of the sponsored studies are highly in favor of their respective product.

A36 -OUTCOMES ASSOCIATED WITH THE INCLUSION OF SILDENAFIL AS A BENEFIT ITEM ON THE CANADIAN FORCES DRUG PLAN

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Purpose: Sildenafil was included as a special authorization item on the Canadian Forces drug plan in July 2000. Reimbursement was provided for prescriptions written by physicians with expertise in erectile dysfunction (ED), with up to 12 tablets reimbursed every 2 months. This study evaluated the impact of reimbursement criteria on usage of sildenafil.
Methods: Between July 2000 and March 2001, 163 patients were reimbursed for sildenafil prescriptions. Data was collected from patient charts to identify factors potentially associated with sildenafil use, including: patient demographics, cause of ED identified by general practitioner (GP) and ED specialist, number of physician visits, and length of time for specialist referral.
Results: There was poor correlation between ED etiology attributed by specialists and by GPs. However, sildenafil was equally likely to be prescribed, regardless of ED etiology. Between 3.3 - 7.5 weeks elapsed between referral and actual visit to the ED specialist. In patients with chronic illness, visits to physicians declined after sildenafil was prescribed.
Conclusion: The CF no longer requires patients to see a specialist to be reimbursed for sildenafil. However, patients with unknown ED etiology will continue to be referred to specialists for further investigations. The quantity limit remains unchanged.

A37 - DEVELOPMENT OF TOOLS FOR CRITICALLY APPRAISING AND ASSIGNING LEVELS OF EVIDENCE TO HERBAL MEDICINE LITERATURE

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Purpose:
The use of herbal products for a variety of conditions has increased substantially over the past decade. Concurrently, the emphasis in the practices of medicine and pharmacy has been to critically evaluate and consider the published evidence when making clinical decisions. This has proved to be difficult with herbal products. Concerns have been raised about 1)the quality of evidence to support the use of herbal medicines; 2) how to critically assess what evidence is available; and 3) how to use that evidence to make clinical decisions. The purpose of this project, was to develop specific tools for critically appraising and assigning levels of evidence to herbal medicine literature.
Methods:
Databases (e.g. PubMed, IPA) were searched for articles discussing tools used to critically appraise and assign levels of evidence and grades of recommendations to allopathic and herbal medications. Retrieved articles were compared and contrasted for completeness and rigor by looking at items such as: parameters/questions/criteria used to assess the trials, completeness, weighting of components, and how levels of evidence are assigned.
Results:
Examination of 20 articles identified questions considered important in critically appraising the literature. Tools were drafted using these important questions and adding others specific to herbal products. A tool for assigning levels of evidence was drafted in a similar fashion, using information from 24 articles and adding criteria specific to herbs.
Conclusions:
Tools to critically appraise herbal literature and assign levels of evidence were drafted which reflect unique features of herbal medicine.

A38 - ESTIMATION OF TIME-DEPENDANT RATE RATIOS IN CASE-CONTROL STUDIES

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PURPOSE: In pharmacoepidemiology, it is recognized that the rate of adverse events is likely a function of the duration of therapy. Basic principles for a valid estimation of time-dependant rate ratios were proposed in the 80's. These principles assume that the duration of therapy and the discontinuation of it bear on the excess incidence (duration-specific approach). However, these basic principles have rarely been applied in case-control studies. Concurrently, the time-windows method has been used in case-control studies to take into account the time-related dimension of exposure. The objective of this study is to compare the time-windows and the duration-specific approaches.
METHODS: Five cohorts were simulated, each of them composed of 500 000 individuals followed for a maximum of 200 days. For each cohort member, the likelihood of being exposed to a medication was simulated for each day. The occurrence of an adverse event was generated using a time-dependant hazard function for drug users and a constant one for non-users. We compared rate ratios obtained from nested case-control analyses using the time-windows and the duration-specific approaches to those obtained from the cohort analysis.
RESULTS: From our first cohort, we found that case-control rate ratio estimates using the duration-specific approach were equivalent to the cohort estimates. Also, rate ratios from the time-windows approach could be up to 3.40 times smaller than those from the duration-specific approach. More results were obtained from other cohorts.
CONCLUSION: If the rate ratio vary over time on therapy, the duration-specific approach will provide valid estimates, whereas the time-windows approach will provide biased estimates.

A39 - IDENTIFICATION DES DÉTERMINANTS DE LA PRESCRIPTION DES β-BLOQUEURS AU CHUS CHEZ LES PATIENTS AYANT UN DIAGNOSTIC DE MPOC ET UNE HISTOIRE POSITIVE D'INFARCTUS DU MYOCARDE

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Introduction : Malgré l'efficacité des β-bloqueurs pour réduire la mortalité en post-infarctus, on note encore une sous-utilisation de ces agents, entre autres, chez les patients atteints de MPOC.
Objectif : L'objectif principale de l'étude est d'évaluer la proportion de patients atteints de MPOC ayant subi un infarctus du myocarde qui ont reçu un β-bloqueur lors du congé de l'hôpital entre le 1er septembre 1999 et le 1er septembre 2001. Nous voulons aussi identifier les déterminants de la prescription des β-bloqueurs dans cette même population.
Méthodologie : Une étude rétrospective a été effectuée à partir des dossiers médicaux de 132 patients du CHUS hospitalisés pour un infarctus du myocarde.
Résultats: La proportion de patients recevant des β-bloqueurs à la sortie de l'hôpital est de 37,1 %. La prise de β-bloqueurs à l'admission est un déterminant de la prescription des β-bloqueurs à la sortie de l'hôpital (RC : 26,85 [6,30-114,38]). En contrepartie, la prise Combivent[MD] lors de l'hospitalisation décourage la prescription de β-bloqueurs lors du congé (RC : 0,11 [0,020-0,67]).
Conclusion : La proportion de patients recevant des β-bloqueurs dans cette étude est supérieure aux données disponibles dans la documentation scientifique. Nous croyons toutefois que les β-bloqueurs sont encore sous-utilisés dans cette population, ce qui justifie la tenue d'études supplémentaires sur la tolérance pulmonaire des β-bloqueurs.
Abrégé présenté dans le cadre de la Maîtrise en pratique pharmaceutique option établissement de santé de l'Université de Montréal en Août 2002.

A40 -USE OF INHALED CORTICOSTEROIDS AND PREGNANCY-INDUCED HYPERTENSION

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Purpose: Maternal asthma has often been associated with pregnancy-induced hypertension (PIH). Few studies have investigated the role of anti-asthmatic medications in this association and no study has specifically investigated the impact of inhaled corticosteroids (ICS). The study objective was to determine if the use of ICS during pregnancy increases the risk of PIH, preeclampsia and eclampsia in asthmatic women.

Methods: Three Quebec's administrative databases were linked to constitute a cohort of asthmatic and non-asthmatic women having at least one delivery between 1990 and 2000, and covered by the RAMQ drug insurance at least 1 year prior and during pregnancy. Crude rate ratios were estimated.
Results: The cohort comprises 4 616 pregnancies of asthmatic and 1 536 pregnancies of non-asthmatic women. 15.5% of pregnant asthmatic women were exposed to ICS during the first trimester. Rates of PIH were 11.4%, 8.8% and 7.1% for asthmatic women using ICS, asthmatic women non-users of ICS and non-asthmatic women, respectively. Comparing with asthmatic women non-users of ICS, use of ICS during the first trimester in asthmatic women was associated with an increased risk of PIH (RR=1.30; 95%CI:1.04-1.64) and eclampsia (RR=3.63; 95%CI:1.03-12.82). Comparing with non-asthmatic women, increased risks of PIH (RR=1.59; 95%CI:1.22-2.10) and preeclampsia (RR=1.67; 95%CI:1.17-2.40) were also observed.
Conclusions: Crude analyses indicate that using ICS during the first trimester increases the risk of PIH. These associations need adjustments for potential confounders before we can conclude definitively. Cox regression models will be used to investigate the role of the dose of ICS and of potential confounders in the ICS – PIH association.

A41 -PERSISTENCE AND DETERMINANTS OF ANTIHYPERTENSIVE AGENTS IN MIDDLE-AGED MEN AND WOMEN NEWLY TREATED

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Background: Hypertension is the most common and most important risk factor for cardiovascular disease. Continuous drug treatment has been found to decrease the rates of both death and morbidity associated with hypertension. Despite the existence of efficacious medications, many patients in actual practice remain with uncontrolled hypertension.

Objective: To evaluate the persistence of newly treated middle-aged hypertensive patients in actual practice and its relation to age, sex, social assistance, urban environment, presence of other cardiovascular risk factors and use of health care.

Methods: A cohort of 42,2000 patients has been identified from the prescription, medical care databases of Régie d'assurance maladie du Québec (RAMQ) Health Databases. To be included, subjects had to be newly treated for hypertension (no antihypertensive agents in the year preceding cohort entry) by a diuretics, ß-blocker, ACE inhibitor or calcium-antagonist (CCB) or ARA (antagonist of angiotensine II) between January 1st, 1998 and Decembre 31th, 2000. They had to be aged between 50 and 64 years old and free of cardiac disease in the year prior to cohort entry. Subjects were followed until June 31th, 2001, date of death or end of coverage of the insurance plan or incidence of a cardiac disease. The date of the first prescription was defined as the cohort entry. We first identified patient who initiate treatment as on monotherapy treatment or combined therapy of diuretics, ß-blockers, ACE inhibitors, CCB and ARA.The cumulative persistence rate was estimate using Kaplan-Meier. Treatment failure was defined as the absence of renewal in a 60 day-period after the end date of treatment. Cox regression models using time dependent variables were used to estimate the probability of drug cessation of different classes of antihypertensive agents adjusting for determinants: age, sex, social assistance, urban environment, cardiovascular risk factors and use of health care.

Results: Characteristics of patients initiating antihypertensive treatment were: mean age 58 years old, male (38%), social assistance (22%), diabetes (10%), hyperlipidemia (11%), respiratory disease (9%). Persistence with antihypertensive therapy decrease in the first 6 months after treatment was started and continued to decline over the next 3.5 years, from 68% to 54%, respectively. There was a significant difference between pharmacologic class for the persistence at 3.5 years, e.g. diuretics (40%), ß-blockers (55%), ACE inhibitors (62%), CCB (60%) and ARA (61%). Adjusted hazard ratios of treatment cessation for men were (diuretics used as the reference): ß-blockers (HR:0.65; 0.60-0.71), ACE inhibitors (HR:0.61; 0.57-0.66), CCB (HR:0.65; 0.60-0.71) and ARA (HR:0.63; 0.57-0.70); similar results were observed in women. All these variables were significant: age, social assistance, urban environment, diabetes mellitus, hyperlipidemia, number of different drugs, number of different pharmacist, number of prescribing physician.

Conclusion: This analysis of actual practice data indicates that barriers to persistence occur early in the therapeutic course and that achieving successful therapy when treatments is started is important to maintain long-term persistence.

A42 -PERSISTENCE AND DETERMINANTS OF STATINS IN NEWLY TREATED MIDDLE-AGED DYSLIPIDEMIC PATIENTS

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Background: Statins have been shown to significantly reduced morbidity and mortality in patients with coronary artery disease and in patients with hyperlipidemia but only if taken on a regular basis. In clinical trials, statins demonstrated benefit only after 1 to 2 years of continuous treatment. Persistence is a complex process with potential for non adherence, and little is known about long-term persistence with statin therapy among older and younger patients in real life practice as well as its determinants.

Objective: To evaluate the persistence of newly treated statin therapy in patients in actual practice and its relation to age, sex, social assistance, urban environment, presence of other cardiovascular risk factors and use of health care in patients.

Methods: A cohort of 20,728 patients has been identified from the prescription, medical care databases of Régie d'assurance maladie du Québec (RAMQ) Health Databases. To be included, subjects had to be newly treated for hyperlipidemia (no statin agents in the year preceding cohort entry) by simvastatin, pravastatin, atorvastatin, lovastatin or fluvastatin between January 1st, 1998 and Decembre 31th, 2000. They had to be aged between 50 and 64 years old and free of cardiac disease in the year prior to cohort entry. Subjects were followed until June 31th, 2001, date of death or end of coverage of the insurance plan or incidence of a cardiac disease. The date of the first prescription was defined as the cohort entry. We first identified patient who initiated statin treatment, and we classified them in 5 groups, as simvastatin, pravastatin, atorvastatin, lovastatin or fluvastatin. The cumulative persistence rate was estimate using Kaplan-Meier. Treatment failure was defined as the absence of renewal in a 60 day-period after the end date of treatment. Cox regression models using time dependent variables were used to estimate the probability of drug cessation of different statin agents adjusting for potential determinants: age, sex, social assistance, urban environment, cardiovascular risk factors and use of health care.

Results: Characteristics of patients initiating statin treatment were: mean age 58 years old, male (38%), social assistance (23%), diabetes (12%), hypertension (37%), respiratory disease (8%). Persistence with statin therapy decrease in the first 6 months after treatment was started and continued to decline over the next 3.5 years, from 60% to 42%, respectively. There was a significant difference between products for the persistence at 3.5 years, e.g. pravastatin (48%), simvastatin (50%), fluvastatin (43%), atorvastatin (26%) and lovastatin (35%). Adjusted hazard ratios of treatment cessation were (pravastatin used as the reference): simvastatin (HR:0.99; 0.93-1.05), atorvastatin (HR:1.70; 1.57-1.85), lovastatin (HR:1.38; 1.22-1.56) and fluvastatin (HR:1.11; 1.02-1.21). All these variables were significant: age, social assistance, urban environment, diabetes mellitus, hypertension, number of different drugs, number of different pharmacist, number of prescribing physician.

Conclusion: This analysis of actual practice data indicates that barriers to persistence occur early in the therapeutic course and that achieving successful therapy when treatments is started is important to maintain long-term persistence.

A43 -BONE-SPECIFIC DRUGS USE IN WOMEN WITH OSTEOPOROTIC FRACTURE

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Background: Osteoporotic fractures are associated with considerable morbidity, mortality and economic consequences. It is now well established that a first osteoporotic fracture significantly increases the risk of subsequent fracture. To date no information is available for the trend over time of the prevalence of the use of bone-specific drug among women with and without fracture

Objective: To evaluate from 1995 to 2001 the probability of bone-specific drug use in women aged 70 years and older who had at least one diagnosed osteoporosis-related fracture compared with those without osteoporotic fracture .

Methods: A cohort design was used. A 40% random sample of women was collected from RAMQ database. Women were classified in 4 cohorts. The cohort entry was defined as Jan 1, 95, 96, 98 and 2000. Fracture status was defined as those with a diagnosed osteoporotic fracture and those without a previous osteoporotic fracture in the 5 years prior to cohort entry. These women were followed up for a year after cohort entry. The exclusion criteria applied in the 5 years prior to cohort entry were multiple fractures, diagnosis of cancer, hyperthyroidism, hyperparathyroidism, Paget's disease, rheumatoid polyarthritis, metabolic and malabsorption diseases and osteoporosis secondary to drugs, dementia, cardiac insufficiency, stroke, living in nursing home. The probability of filling at least one prescription of bone-specific drug in women with a fracture compared to those without a fracture during the year following the cohort entry was determined using a Cox regression model that allowed us to adjust for age, chronic disease score, prior use, BMD test.

Results: Mean age and chronic disease score were 79 years old and 3.9 in women with previous fractures and without fracture. BMD test performed in 5 years prior cohort entry ranged from 20.4% in 1995 to 41.1% in 2000, and from 4.4% to 15.3% in women with and without fracture, respectively; and bone-specific drug use ranged from 2.7% to 24.3%, and 0.6% to 9.3%. The fracture status among women who had a BMD test did not significantly increased the probability of filling at least one prescription of bone-specific drug for the cohort 1995 (HR:0.98; 0.57-1.69), cohort 1996 (HR: 1.03; 0.69-1.54), cohort 1998 (HR: 1.21; 0.98-1.48) and cohort 2000 (HR: 1.06 (0.92-1.22); but, the fracture status among women without a prior BMD test presented an increasing trend of probability of filling a prescription, e.g. cohort 1995 (HR:1.55;0.73-3.29), cohort 1996 (HR: 2.40; 1.59-3.62), cohort 1998 (HR: 2.05; 1.60-2.63) and cohort 2000 (HR: 1.22;0.97-1.54). The effect of age and chronic disease score did not have a significant impact on the probability of filling at least one prescription of bone-specific drug over time. One of the major determinants of the probability of filling at least one prescription of bone-specific drug was prior use: the trend decreased significantly overtime among women with prior BMD test: the hazard ratio was 85.0 (53.4-134.1) in 1995 and 17.6 (15.7-19.9) in 2000; the hazard ratios were at 1230 (765-1980) in 1995 compared to 60.2 (53.5-67.9) in 2000 among women without a prior BMD test.

Conclusion: Effective osteoporosis interventions are underutilized among elderly women who experience an osteoporotic fracture. There is a need for an increase in managing on regular basis, and educating patients with the respect to their health risks

A44 -DRUG USE MANAGEMENT: ACADEMICS TRAVERSING THE POLICY WORLD

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Study Objectives
A Drug Use Management and Policy Residency Program was established between the College of Pharmacy, Dalhousie University and the Nova Scotia Department of Health. This Residency Program partnered graduate students (and their faculty advisors) with decision-makers to explore issues of mutual interest that would enable university-based researchers to better understand the processes by which research findings are applied in government policy-making. The study objectives are:
1) To assess the extent to which the Program Goals were fulfilled from the perspectives of residents, decision-makers/preceptors, faculty advisors, and program administrators.
2) To recommend program modifications prior to the next intake of policy residents.

Statement of Methods
This poster will present the results of a formative evaluation of the first year of the Residency program. The Program objectives are: 1) to enhance interaction among graduate students, government decision-makers, and university faculty regarding how research is created and used in policy-making; 2) to understand the research transfer preferences of decision-makers; and 3) to familiarize government decision-makers with how policy-relevant evidence can be created using various research methods. A qualitative approach incorporated a semi-structured interview with key-informant representatives of all stakeholder groups. Triangulation of data was achieved through face to face interviews involving multiple stakeholder perspectives and augmenting this primary data with the Residents' Learning Portfolios, pre-designed Residency Program Evaluation Forms, and observations of the external and internal evaluators.

Summary of Results
An analysis of the themes that emerged from the data lead to a series of six issues for consideration. These were: 1) the need to place greater emphasis on selecting topics for investigation that are of mutual interest to the Resident and the Decision-maker (Preceptor); 2) the need to re-structure the Program so that there is more visibility of Resident within the Department of Health and more regular contact with the Preceptor; 3) the need to clarify resident - faculty advisor disconnections; 4) the need for greater coordination among all stakeholder groups; 5) the need to balance decision-makers' needs for 'just in time' policy analyses with methodological precision and academic rigor; and 6) the need to ensure that the graduate students selected as Residents have an appropriate skill set and knowledge based for working in government.

Statement of Conclusions
This evaluation revealed that the Residents learned a great deal about the formulation of drug policies within the Nova Scotia Department of Health. Also, it was determined that the government decision-makers learned there was a valuable source of expertise within Dalhousie University upon which they might call for assistance in policy development. And, while the results suggest that some modifications would increase the probability that the Program goals are reached, stakeholders from the university and from the government were effusive concerning the work of the Program.

A45 -PROVISION OF NON-PRESCRIPTION MEDICATIONS BY PHARMACISTS IN THE CANADIAN ARMED FORCES

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BACKGROUND:
In consultation with a base pharmacist, non-prescription, over-the-counter (OTC) medications are made available to Canadian Forces (CF) members.
DESCRIPTION:
Treatment outcomes and patient satisfaction with pharmacist interventions were assessed.
IMPLEMENTATION:
Members consulted with the base pharmacist for the treatment of minor ailments. OTC medication recommendations were documented on the member's electronic profile. Electronic records of recommendations were tabulated to identify members. These members were contacted to participate in a telephone survey.
EVALUATION:
Evaluation involved documenting health outcomes and assessing member satisfaction resulting from pharmacist consultations.
RESULTS:
One hundred and sixty members, accessing 203 OTC medications, were included in the analysis. Most members (88%) were "very satisfied" with the process. The majority of interactions (82%) were perceived to be 1 to 3 minutes duration. Practically all members (98%) interacted with the pharmacist, 69% recalled being asked about relevant medical history, and 39% reported being counseled to see a physician if symptoms did not resolve. About half of members (48%) likely would have consulted a physician to obtain a prescription to treat their ailment.
Overall, symptoms completely resolved in 82% of cases. Most recommendations were for analgesics (32%), antihistamines (29%) and cough and cold preparations (20%). Complete symptom control was reported in 91%, 69% and 80% of cases, respectively.
IMPACT:
Members are satisfied initiating contact with pharmacists to treat minor ailments with OTC medications. As reported by members, interventions by pharmacists successfully treated the majority of their ailments.

SECTION 4 – MANAGEMENT

A46- DEVELOPMENT OF AN INTRANET IN A PHARMACY DEPARTMENT OF A MOTHER-CHILD TEACHING HOSPITAL

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Purpose: To develop an Intranet in a pharmacy department of a mother-child teaching hospital. **Methods** : Based on Initially, we identified the contents existing or easily being able to be transformed into databases. When possible, the update of the data banks is also migrated towards the intranet. Then we made the inventory of technologies and licences already accessible in our establishment to identify the best platform for development. Finally the migration of the databases and the programming of the site and tools for publication were carried out.

Results : We initially identified 4 sources of contents to be migrated : the therapeutic formulary, the intravenous drug compatibility tables, the patients leaflets and the pharmacist's schedule. Additional contents like the employee's directory of the employees, a pharmaceutical care plan database to train students, the list of the publications of the department and other were then added. The site was developed on a IIS server, initially with FrontPage then with Dreamweaver Ultradev and XMLSpy. The programming languages used included Vbscript, Javascript, ASP, XSLT. The tools for publication on the intranet include a Word template programmed in VBA which allows the publication of contents by all the pharmacists from any computer in the pharmacy. Another tool makes it possible to generate data access pages simply by registering the relevant parameters in a database. The log book and the module of management of research were dreated with this tool .

Conclusion : Technologies making it possible to develop an Intranet in a department of pharmacy are often already available on site. The implication of a pharmacist in the programming speeds up the development of such tools. An intranet can be a very useful tool of communication and access to the data in a growing department of pharmacy with decentralized sites. The main advantage is the instantaneous accessibility to the content as soon as it is published..

A47 - IMPLEMENTATION OF THE CANADIAN FORCES DRUG EXCEPTION CENTRE

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Rationale: The Canadian Forces (CF) no longer provides 24-hour pharmacy services on military bases; this has resulted in increased dependence on non-military health care providers. The Canadian Forces Drug Exception Centre was developed to enable consistent provision of care through both military and non-military sites.
Description: This program aims to achieve good patient outcomes. Clinical literature, published in peer-reviewed journals, forms the basis for assessment of drugs for coverage by the drug benefit provider. Following literature review, recommendations for drug use are made by the Federal Pharmacy and Therapeutics Committee (P&T), an advisory body of medical professionals providing impartial and practical advice to federally funded departments. The CF P&T then weighs these recommendations against the established Spectrum of Care and operational requirements for drug use. All requests for drugs which are not listed as CF benefit items are reviewed individually by a clinical pharmacist, using an evidence-based medicine (EBM) approach.
Results: Patient care is optimized through the application of EBM. Drug utilization evaluations completed to date have confirmed good adherence to clinical practice guidelines. This has resulted in overall reductions in drug expenditures for the CF, in contrast to the increase in drug costs observed by other private and government agencies.
Importance: Under this program, approximately 60,000 members of the CF receive equitable drug benefits through military and civilian pharmacies across Canada.

A48 - DEVELOPMENT AND PRE-TESTING OF A PATIENT DECISION AID TO ASSIST PHARMACEUTICAL CARE IN THE PREVENTION OF CARDIOVASCULAR DISEASE

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BACKGROUND: Pharmaceutical care improves cardiovascular health. However, these interventions are complex and time consuming. Decision aid (DA) for patients may be a valuable tool to assist and facilitate pharmaceutical care. There is no DA available for patients at high risk of cardiovascular disease (CVD). **OBJECTIVES:** To develop and pretest a DA for patients with hypertension or dyslipidemia. METHODS: The DA was developed by researchers, clinicians, and a language specialist. A before-after study design was conducted among a convenience sample of patients with hypertension and/or dyslipidemia (n=16). **RESULTS:** The DA is composed of a booklet providing general evidence-based information and a personal worksheet providing patient specific information on 1) risk factors and estimated CVD risk, 2) estimated benefits of various treatment options, 3) a plan of action, and 4) a progress summary. Most patients (86%-93%) rated the way the information is presented as excellent or very good, 80% judged the information as balanced and 100% found it useful. After using the DA, patients reported higher mean knowledge scores for risk factors in general (before-after: 91%-100%; p=0.009), personal risk factors (73%-92%; p=0.017), and treatment options (68%-99%; p=0.000). More patients were able to estimate their risk category (50%-93%; p=0.03) and their CVD risk (0%-93%; p =0.000). Less patients reported an overall decisional conflict score > 2.5 (4/16 - 1/15; p=0.38).
CONCLUSION: The DA was acceptable and improve knowledge and risk perception. Two studies are ongoing to asses the feasibility of using the DA in family medicine units and in community pharmacies.

A49 - PHARMACY DISCHARGE PLANNING: HOW PHARMACY STUDENTS ARE INVOLVED DURING HOSPITAL CLINICAL CLERKSHIP?

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Purpose: To evaluate if 4th year pharmacy students on hospital clinical clerkship provide pharmacy discharge plans to patients and to determine which clinical interventions were being provided.
Methods: Between September and December 2002, 58 pharmacy students on hospital clinical clerkship were responsible to compile their pharmacy discharge plans on a data collection sheet. Blinded copies were attached to the data collection sheet.
Results: During the study period, 19 students (32%) wrote pharmacy discharge plans for patients leaving the clinical unit. A total of 71 pharmacy discharge plans were written for an average of 3,7 per student.
Pharmacy discharge plans were written to inform about the: addition or withdrawal of medications (46%); change in the dosage of one drug (39%); addition of one drug (39%); withdrawal of one drug (24%); management of heavy medication profile (22%); and monitoring of clinical parameters (21%).
Clinical interventions related to the pharmacy discharge plans were: patient counseling (76%); telephone communication with community pharmacist (49%); medication schedule (45%). The pharmacy discharge plans were given directly to patients (67%) and mailed to community pharmacists (34%). Of these 71 pharmacy discharge plans, 24 (34%) were documented in patients' medical records.
Conclusion: By providing pharmacy discharge plans during their clinical clerkship, pharmacy students assured continuity of care throughout the transmission of clinical information to the community pharmacists. Outcomes related to this activity have not been measured. Further investigation would need to be done.

A50 - *"*Opinion pharmaceutique*" AND "*refus*": HOW pharmacy students are involveD DURING COMMUNITY clinical clerkship?*

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Purpose: To evaluate if 4th year pharmacy students on community clinical clerkship perform *opinions pharmaceutiques* and *refus* and to determine the nature of their interventions.
Methods: From September to December 2002, 58 students on community clinical clerkship were ask to compile all their *opinions* and *refus* on a data collection sheet. Blinded copies were attached to the data collection sheet.

Results: During the study period, 46 students (79%) and 47 students (81%) had performed respectively 528 *opinions* and 360 *refus* for an average of 11,5 *opinions* and 7,7 *refus* per student.
The *opinions*, accepted at a rate of 64% by prescribers, aimed to: increase the efficiency of the therapeutic regimen (46%); decrease the risk of adverse effects/toxicity (43%). The o*pinions* were to: add a required drug (28%); modify a dose due to inefficiency (12%); substitute drug due to adverse effect/intolerance (11%). Drugs involved mainly were cardiovascular agents (33%) and anti-infective agents (11%).
The *refus*, accepted at a rate of 87% by prescribers, aimed to: decrease the risk of an adverse effect/toxicity (46%); increase the efficiency of therapeutic regimen (40%); prevent medication errors (17%). The *refus* were induced mainly by a: low dosage (33%); high dosage (20%); major drug interactions (12%). Drugs involved mainly were anti-infective agents (34%) and hypotensive agents (20%).

Conclusion: By performing *opinions pharmaceutiques* and *refus* during their community clinical clerkship, pharmacy students induced changes in therapeutic regimen for appropriate pharmaceutical care to the community based patients.

A51- PROVISION OF NON-PRESCRIPTION MEDICATIONS TO CANADIAN FORCES MEMBERS WITHOUT ACCESS TO A BASE PHARMACY: A PHARMACOECONOMIC ANALYSIS

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BACKGROUND: Although some non-prescription (OTC) medications are approved for all Canadian Forces (CF) members, access is compromised for members without access to a base pharmacy. As the CF endeavors to provide equitable access to both medication and pharmacy services, an alternative method of providing OTC medications from community pharmacies was designed and evaluated in a pilot project.

DESCRIPTION: A pharmacoeconomic analysis of three different options of providing OTC medication to CF members from Canadian Forces Health Services (direct costs) and from the CF (indirect costs) perspective
EVALUATION: Three options were incorporated into the pharmacoeconomic model: 1) members consult a community pharmacist for all OTC medication needs; 2) If all CF members consult a physician for all OTC medication needs; 3) members obtain a prescription and present to a community pharmacy (status quo).
RESULTS: Direct costs of providing all OTC medications to members directly from a community pharmacist were $17.95 while indirect costs were $13.48 for a total of $31.43 per transaction. Direct costs of providing all OTC medications in consultation with a physician were $46.10 while indirect costs were $55.69, for a total of $101.79 per transaction. The current costs of providing OTC medications to members (status quo) totals $57.34 per transaction (direct costs = $23.69, indirect costs = $33.65). Compared to the status quo, the option of providing OTC medications to members directly from a pharmacist could result in a savings of $25.91 per transaction.
IMPACT: Allowing CF members direct access to the community pharmacist for the provision of OTC medications is the most cost-effective option. Members are very satisfied initiating contact with a pharmacist to obtain OTC medications.

A52 -PROVISION OF NON-PRESCRIPTION MEDICATIONS TO CANADIAN FORCES MEMBERS THROUGH CIVILIAN PHARMACIES: A PILOT PROJECT

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BACKGROUND: Although non-prescription (OTC) medications are approved for all Canadian Forces (CF) members, access is compromised for members without a base pharmacy. As the CF endeavors to provide equitable access to both medication and pharmacy services, an alternative method of providing OTC drugs was designed.

DESCRIPTION: In this pilot project, wallet cards were provided to patients to facilitate access to OTC drugs directly from community pharmacies.

IMPLEMENTATION: Wallet cards and information sheets were sent to eligible members, encouraging them to obtain OTC drugs from a civilian pharmacy. Wallet cards list approved OTC products and provide instructions for reimbursement of drug costs and cognitive service fees.

EVALUATION: Preliminary evaluation involved assessing feasibility and member satisfaction with this alternative process. Electronic records on OTC drug claims were reviewed monthly. Members who obtained OTC medications were contacted to participate in a telephone survey.

RESULTS: Wallet cards were issued to 583 members. Between 01 May and 31 October 2002, 400 transactions were identified. Of these, 217 were excluded (96 lost to follow-up, 66 prescriptions, 54 cancelled, and 1 declined survey). These results are based on 183 transactions from 129 encounters with the pharmacist.Most members (82%) were “very satisfied” with the process. However, more time was spent on technical tasks: while 73% of members spent only 1-5 minutes discussing symptoms, 65% reported that more than 6 minutes were spent processing the claim. Eighty percent of members were asked about their medical history, and 57% were counseled to see a physician if symptoms did not resolve. Total symptom resolution was reported in 82% of cases surveyed. Only one member required physician follow-up. Our pharmacoeconomic model proved that direct access to the pharmacist for OTCs is cost effective. Compared to a prescription-only reimbursement model, a saving of $25.91 per transaction could be realized.

IMPACT: Members appear to be satisfied initiating contact with pharmacists to obtain OTC medications. Allowing CF members direct access to the pharmacist for the provision of OTCs is the most cost-effective option.

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ACKNOWLEDGEMENTS OF FINANCIAL SUPPORT

AFPC is very fortunate to have the pharmaceutical industry and national pharmacy organizations provide significant support to the programs, awards and conferences of our association. The listing below identifies those companies/organizations who have committed to support AFPC for the 2003 year. This list is as of June 30, 2003.

Please take a moment to review this list and the next time you meet with a representative of that contributor, please express our sincere appreciation for their support to Canadian pharmacy education at the national level.

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PART 2.0

MINUTES OF AFPC MEETINGS

2003

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

MID-YEAR COUNCIL MEETING
FEBRUARY 9 – 10, 2003, DELTA MEADOWVALE, TORONTO

1. Opening Remarks - President Lavern Vercaigne called the meeting to order and welcomed Council members to Toronto.

2. Roll Call and Approval of Agenda
   The following executive and council members were present: Lavern Vercaigne, President; Susan Mansour, President Elect; Fred Rémillard, Past President; Rita Caldwell, ADPC representative; Simon Albon, UBC; Zubin Austin, Toronto; Sheila Kelcher, Alberta; Jean Lefebvre, Laval; Sylvie Marleau, Montréal; Yvonne Shevchuk, Saskatchewan; Lili Wang, Memorial; Anne Marie Whelan, Dalhousie; A special welcome was extended to the two new Councilors: Jean Lefebvre (Université Laval) and Anne Marie Whelan (Dalhousie University). Mike Namaka from Manitoba was unable to attend due to a death in his family.

3. Council Meeting Minutes
   - 3.1 Council Meeting, Friday, May 11, 2002 (2001 – 2002) The minutes were approved on a motion by Sheila Kelcher and Zubin Austin.
   - 3.2 Council Meeting, Monday, May 13, 2002 (2002 – 2003) The minutes were approved on a motion by Fred Rémillard and Sheila Kelcher.
   - 3.3 AFPC Proceedings 2002 – The AFPC Proceedings for 2002 were approved on a motion by Zubin Austin and Sheila Kelcher. It was suggested that the addresses of each faculty be included in future proceedings.

4. Business Arising From Minutes of Meetings
   - 4.1 Compendium of Pharmacy Student Projects – The first draft of the Compendium were distributed to council for their review. It was recommended that the first initials on each author be included. It was suggested that the Research committee be given the responsibility for future editions of the Compendium. Council members were requested to provide feedback to the AFPC office by the end of February.
   - 4.2 Faculty Role in Residency Projects – Christine Hughes from the Hospital Pharmacy Residency Board has agreed to meet with Council at AFPC/CCCP Conference in Montréal. They are seeking more standardized faculty involvement with residency programs in Canada.
   - 4.3 Review/Update AFPC Discussion Paper on Entry-Level Pharm.D. Programs – Councilors provided an update on the current situation at their faculty regarding

discussions relating to implementation of an entry-level Doctor of Pharmacy Program:

Toronto – in the process of reviewing current B.Sc. program;

Memorial – in the process of going from 2 pre-pharmacy plus 3 year pharmacy curriculum to 1 pre-pharmacy year with a four year pharmacy curriculum;

UBC – had a forum looking at the entry level Pharm D;

Montréal – the entry level Pharm. D. committee has completed work and faculty support the report. The university has given approval in principle to the entry level Doctor of Pharmacy program and it is planned to be implemented in 2005. The main difference will be one more year of rotations with more emphasis on the problem solving approach. They are planning for 200 students. There will be an extended use of summer hours with all of externship hours put into the academic program. The faculty will also have a three year bachelor of science program which does not qualify for pharmacy licensure that will begin in 2006.

Dalhousie – no plans as of now but will look at it in their strategic plan; Nova Scotia is looking at qualifications of health care practitioners and any change will be required to go through a special committee of government;

Alberta – comparing their curriculum to USA and believe with this comparison, they are not far away from it;

Sask. – the Vice President is requesting a report on the entry level Pharm. D.; Laval – generally in favour, but no time table and are collaborating with Montréal; had a conference to evaluate the future;

Manitoba – decided not to pursue an entry level Pharm D but streamed new program to make it easier to switch to the entry level Pharm D.

5. Committee Reports

5.1 Awards Committee – Sylvie Marleau reported that there is a Feb. 21 deadline for comments back from the award reviewers. There was a discussion regarding the interpretation by Bristol-Myers Squibb that the award expenses are to be shared by the sponsoring company and AFPC. A motion was made to inform BMS that we have a policy that all award sponsoring companies are responsible for the award including the costs of having the award recipient attend the AFPC conference to participate in the Awards Session and receive the award. (Shevchuk, Austin). The motion was carried.

The necessary changes will be made to the Terms of Reference for the BMS Award to reflect the above motion.

The motion was approved that the GlaxoSmithKline Graduate Student cash award would be $ 750 (Austin, Marleau).

Sylvie Marleau will investigate alternate conference accommodation for the CFP students in Montréal.

Sylvie Marleau indicated that the award recipients will be reminded of the nature of the audience in attendance at the Awards Session. It was also recommended that the list of award recipients be promoted in various journals including the Rx & D Bulletin.

5.2 Bylaws Committee – Fred Rémillard noted that there is need to revise the definition for Honored Life Member as well as the criteria for AFPC awards.

5.3 Communications Committee – Simon Albon highlighted the written report. Phase 1 of web site development is almost complete. He indicated that the web site is receiving1200 hits a day with the majority looking at postings and Newsletters. Total amount of money being spent on the site averages about $ 279 per month. Rebecca Law will continue as AFPC Communications Editor. The Phase 2 development of the web site will permit on line conference registration; abstract submission; roster information and there will be a French language mirror site. It was recommended that AFPC investigate the possibility of obtaining a grant to assist in setting up the French mirror web site. Jean Lefebvre would be interested in working on this project. It was suggested that we consider a summer student project that initially will focus on the most important items to be translated. It was noted that Pauline Beaulac has been performing this task for PEBC and she may be approached to see if she is interested in working for AFPC. Chantal Guillemette had obtained quotes for French translation and it was indicated that PEBC pays a dollar per word for translation services.

It was recommended that the roster of AFPC members be included on our web site. It was also recommended that we list the chairs of academic affairs and other academic committees as well as listing admission requirements, tuition fees; etc. The Executive Director will circulate the information that we currently have on faculties to Council and the Deans for their comments and suggestions.

Jean Lefebvre has agreed to serve on the Communications Committee;

Once the Compendium is published it will be placed on the web site and submissions for future editions could be submitted on the web site.

Simon discussed several draft logos for council's consideration and he indicated that they are focusing on four themes – Pharmacy, Canada, Education and Research in order to update our current mortar and pestle logo.

The WHO Institutional Database organization has contacted AFPC requesting institutional information similar to what we are about to include on our web site.

5.4 Conference Planning Committee – Sylvie Marleau/Jacques Turgeon

Sylvie Marleau reported that the committee has been very active. The registration fees have been set: AFPC & CCCP members $ 450; joint AFPC and CSPS conference $ 700 with joint student registration $ 150. The registration fee includes Thursday dinner, all coffee breaks and lunches and the Saturday banquet. There will be $ 50 added to registration fees after May 1. Janssen-Ortho has agreed to sponsor the AFPC/CCCP Conference banquet. The evidence based medicine workshop and the pharmacy practice symposium will be held on Sunday morning, June 1. It was recommended that in future joint conferences, we schedule the AFPC and CCCP AGM's at different times during the conference.

The Council members should arrive on Wednesday evening, May 28 and return on Sunday, June 1 after 4 PM.

5.5 Education Committee – Zubin Austin reported that David Fielding is currently completing the follow up from the 2002 Teachers' Conference. The U of T program for foreign pharmacy graduates is now accepting applications from other provinces. There are 213 foreign graduates taking some component of the program and 100 % of those who completed the program have been successful in the PEBC foreign graduate examination. Information on the program may be obtained by checking (www.newontariopharmacists.com). Our web site will make reference to that site.

Zubin Austin has proposed that the committee survey senior year students in Canadian faculties regarding academic dishonesty. He will contact each faculty to determine the relevancy of all questions for those particular students and it will likely require Ethics Approval at each university.

5.6 Executive Committee – Lavern Vercaigne indicated that the Meeting Notes of the Executive Teleconference calls of October 25, 2002 and January 9, 2003 had been circulated to all Council members.

5.7 Nominating Committee – Fred Rémillard reported that the Nominating Committee members are David Fielding and Leslie Lavack. The call for nominations for the position of President Elect was included in the January/February issue of AFPC Communications and it will be included in an upcoming the AFPC Update.

The Executive Director will notify the Deans regarding the completion of the terms of the Councilors for Dalhousie, Montréal and Saskatchewan.

5.8 Planning and Finance Committee – Susan Mansour
The draft AFPC Financial Statement 2002 was reviewed and after finalizing a few items, it will be submitted to the auditor (Myers Norris Penny).

The draft AFPC Budget 2003 was presented by Susan Mansour. It was recommended that $ 5,000 be transferred from the Web Site budget line to the

AGM Council costs. Following discussion with the Deans, it was also recommended that there be an increase in the Faculty Fee for 2003. Rita Caldwell will discuss the faculty fee recommendation with the ADPC and advise the Executive and Council within the next two weeks.

It was moved by Susan Mansour, seconded by Anne Marie Whelan that the interim 2003 Budget be approved, but it will be subject to revision following the discussion with the Deans.

5.9 Research Committee – Dr. Mike Namaka

In the absence of Mike Namaka, Lavern presented the Research Committee Report. Concern was expressed regarding the poor attendance at last year's AFPC Award presentations and what could be done to improve attendance. Sylvie Marleau will send a letter to the awards winner to emphasize the speaker's time allotment and remind them that the audience participants have different pharmacy backgrounds.

It was suggested that we invite CSPS members to attend but due to the joint registration, this may not be desirable. It was recommended that notification of the AFPC Award Winners be sent to the Rx&D Newsletter as well as other pharmaceutical journals.

5.10 Executive Director Search – Lavern Vercaigne

Lavern Vercaigne summarized the search process. Several ads were sent to the traditional sources (CPhA, CSHP, CSPS Website etc) that lead to one candidate. Ads were re-submitted to the same organizations but including the Canadian Society of Association Executives web site. That generated 12 applications. Three candidates have been short-listed and the decision will be made by the end of February.

It was recommended that the current executive director continue until the 2003 Conference. He will work with the replacement as soon as the candidate is selected.

5.11 Task Force on Experiential Education – Fred Rémillard provided an update on the Task Force. The Task Force budget was set at $ 45,000 for three meetings. Dr. Rémillard attended the ADPC meeting in October and the Deans agreed to provide $ 18,000 to support the Task Force. The Canadian Association of Chain Drug Stores was requested to provide $ 27,000 and they agreed to fund $ 15,000 with the recommendation that Debbie Saltmarche from CACDS be added to the Task Force.

It was moved by Sheila Kelcher, seconded by Rita Caldwell that we accept the funds from CACDS along with the addition of Ms Saltmarche. The motion was approved.

It was suggested that the Task Force consider obtaining the services of a consultant to work with them to obtain the required information and write the draft Report. A final meeting of the Task Force on Experiential Education will then be convened to complete and approve a final report

6. Report of Representatives to External Groups

6.1 Report of Representative to CPhA Human Resources Project – Lavern Vercaigne presented an overview of the project activities. It will be a $ 2.5 million study with the pharmacy profession being required to provide $ 250,000 in kind/cash with a minimum of $ 130,000 in cash. There will be 1 – 3 signatories with HRDC (CPhA and possibly NAPRA and CACDS) and the remaining organizations will sign a memorandum of understanding. Steering committee members will provide guidance to the research that will include surveys and focus groups of academic pharmacy, students, as well as other components of the profession. Academic pharmacy was represented by Lavern Vercaigne (AFPC) and Dennis Gorecki (ADPC).

It was moved (Zubin Austin and Yvonne Shevchuk) that AFPC has agreed to contribute $ 5,000 per year ($ 2000 plus Dr. Vercaigne's travel expense) during the three-year study period. The motion was approved.

6.2 Report of ADPC Representative – Rita Caldwell provided an overview of the AFPC activities during the past six months. The annual ADPC meeting was held in Lake Louise in October. The Deans have requested CCAPP to begin developing standards for entry-level Pharm D programs in Canada. Jacques Turgeon is serving another term as the ADPC president.

6.3 Report of CPhA Academic Board Member – Linda Suveges has provided a report for inclusion in the next issue of AFPC Communications. It was noted that a "bogus organization" had distributed a membership fee statement that resembled CPhA and the RCMP had been alerted.

6.4 Report from CCAPP Representatives – Sylvie Marleau & Jake Thiessen:
Sylvie Marleau provided a brief account of the CCAPP activities. The proposed changes in the accreditation process were discussed. Councilors were requested to review the CCAPP proposal with faculty members and provide comments to the AFPC office. Sylvie reported that there was American accreditation group (ACPE) representation at the Université de Montréal accreditation site visit. CCAPP is in the very preliminary stage of investigating the feasibility of establishing a pharmacy technician accreditation program.

6.5 Report from PEBC Representatives – Monique Richer & Linda Suveges:
It was moved by Fred Rémillard, seconded by Yvonne Shevchuk that Louise Mallet be appointed to replace Monique Richer as the AFPC representative to PEBC for the 2003 – 2006 term. The motion was approved.

The previously distributed proposal for change in the PEBC regulations was discussed and it was agreed that this would be one of the topics for consideration at the meeting with PEBC representatives on February 10.

6.6 Report from CCCEP Representative – Marc Desgagné (no report submitted)
CCCEP has been required to charge GST including back payments and have requested an additional payment from representative bodies for the 2003 year (one time charge).

The motion that we accept this one time only additional charge was approved (Susan Mansour and Sheila Kelcher).

6.7 Representative for Pharmacy Technician Stakeholder Group – The report from AFPC delegate Wayne Hindmarsh was discussed.

7. Executive Director's Report – Jim Blackburn provided a brief overview of his written report.

8. In Camera Session

9. New Business

9.1 Arrangement for Meetings with External Groups – the agenda for each of the following meetings on Feb. 10 was discussed.
- CACDS
- Pharmaceutical Industry
- PEBC
- ADPC

9.2 Post Romanow Commission Activities
Lavern Vercaigne provided a summary of the CPhA Workshop that was held to provide discussion on plans by the profession to follow up on the Romanow Commission recommendations with the appropriate government bodies.

9.3 Future Planning
- AFPC Office & relationship to ADPC – Rita Caldwell will discuss this item with the ADPC members within the next week.

- future AFPC meetings – The 2004 CPhA meeting will be held in Niagara Falls, May 14 – 17. This may create problems for the University of Toronto to host another conference within a three-year period. The Executive Director will determine the location of the 2004 CSPS meeting.

Zubin also mentioned that the International Life Long Learning in Pharmacy Conference will be held in Canada in 2005 in either Saskatchewan or Alberta (Nancy McBean is the conference organizer).

Lisa Dolovich has contacted AFPC regarding Joint AFPC/CPhA Pharmacy Practice Research Sessions when the two organizations hold joint meetings. AFPC is definitely in favor of this concept.

10. Meetings with External Groups, Monday, February 10, 2003

10.1 8 AM - Meeting with CACDS – Deb. Saltmarche
President Lavern welcomed Deb Saltmarche to our meeting and introduced everyone around the table.

Primary Care Program – genesis came from the Canadian pharmacy submission to Romanow that pharmacists are under utilized but it failed to identify how to make maximum use of the profession. Primary care pharmacy services may not necessarily be linked to the traditional dispensing function.
There is a specific project proposal from Alberta where a Pharmacy coordinator will work with the regional health authority and the College to identify the protocols for primary care pharmacy functions. The physician has a form with list of primary care functions that the patient takes it to pharmacy of their choice. CACDS has visited every province to determine the level of support and agreement that it is within the current scope of service. The project does not address the pharmacist reimbursement system.

Task Force on Experiential Education – Lavern Vercaigne and Fred Rémillard outlined the overall proposal including the suggestion to utilize the services of a consultant. Ms. Saltmarche indicated that CACDS would support this approach

10.2 9 AM - Meeting with Dr. Rav Kumar, Vice President, GlaxoSmithKline
Following introductions, Dr. Kumar indicated that one of his responsibilities is to enhance the company's relationship with the pharmacy profession. He found that GSK was virtually invisible in the pharmacy market and they do not really "detail" pharmacists. He believes that they need to focus on academic pharmacy at both the undergrad and post grad levels as well as continuing education. Industrial pharmacy as an academic pursuit is another important issue. Dr. Kumar indicated that the former Glaxo Wellcome Study Guide is out of print and they

would be interested in enlisting the help of academic pharmacy with the potential for a contract with AFPC to begin this process.

GSK employs about 120 people in pharmaceutical development and they wish to revise the Glaxo Pathways program. They are interested in the number of faculties contemplating a B Sc in pharmacy programs that emphasize the science. Elizabeth Vadas has recently retired from Merck and she is going to work with Dr. Kumar to enhance the relationships with the schools of pharmacy

GSK believes that pharmacists are under utilized and under valued, particularly in the areas of compliance and best use of medicine. They are willing to assist at both undergraduate and postgraduate level through rotations, tours of GSK and participation in discussions on important topics to the students.

Dr. Vercaigne briefly outlined the AFPC topics of interest that relate to industry: experiential education task force; role of industrial residency programs; residencies in specialized areas – drug information; regulatory affairs; direct to consumer advertising and continuing education for health professionals.

It was agreed that there were many areas of common interest and we should develop an action plan to consider future steps to jointly pursue these issues. An invitational conference with representation from students, faculty, industry and practitioners may be worthwhile to consider.

10.3 10 AM - Meeting with Dr. John Pugsley, Registrar Treasurer, and Andrea Cameron, President, PEBC

John Pugsley provided an update on PEBC activities as they prepare for their upcoming annual meeting. Louise Mallet has been appointed by AFPC to replace Monique Richer on the PEBC Board. Monique will continue to represent PEBC on CCAPP Board. There were 1200 candidates who wrote part 1 and 1095 sitting for part 2 with the involvement of two additional sites - Kingston and London. Another site in Hamilton is also planned for 2003. PEBC has assessed 35 candidates for noncertification in Alberta and BC. Some other provinces are also interested in this approach. Most foreign graduates are seeking licensure in Ontario and BC. PEBC is involved in the exploration of a technician certification process with HRDC funding being sought as a component of the pharmacy human resource project. Other potential projects include looking at possible involvement in credentialing; assessing continuing competence with BC using it at a higher level; look at new technology – computerized adaptive testing. A recent examination breech at NABP forced the cancellation of their exam for several months. Additional international test sites for foreign graduates are now being considered (currently, there is a site in England).

There was considerable discussion on the PEBC proposal to remove the requirement to limit the number of examination attempts as most agencies do not impose limits. The University of Toronto program for foreign graduates is excellent but a lot of foreign trained candidates want to get through the system quickly and they are not willing to take the program for economic reasons. Consideration is being given to require a statement from a provincial regulatory agency indicating that they have met the language requirement.

PEBC does not want to get involved directly because of potential conflict of interest; willing to provide feedback to candidates but it is very difficult to provide specific remediation. The Toronto experience indicates that language needs, culture of practice needs, and having no experience in Canadian health care are the major hurdles for foreign pharmacy graduates. The University of Toronto will accept non-Ontario applicants but they will have to pay full fee of around $ 8,000. The rate limiting student enrollment factor is finding the number of tutors and role models. One of the problems is that recruiters keep bringing in new immigrants when they could have access to individuals who are currently here and need support.

Feedback on Canadian grads – in general Canadian students are doing well with pass rates of around 90 %. The potential deficiencies in some graduates are the abilities to identify areas of need, assessing the status of the patient and monitoring drug therapy. The handling of ethical situations was an issue on the first exam. PEBC is now looking at ways to get feedback to individual faculties on specific areas that may be deficient in the students who wrote the exam.

10.4 11 AM - Meeting with Judy Hackett, Eli Lilly Canada Inc.

Judy Hackett had extensive experience in community pharmacy, pharmacy organizations and also as a lab instructor at the U of T prior to entering the industry. The industry was disappointed with the Romanow report but it will depend on what approach government uses in the implementation phase (or lack thereof). Eli Lilly annually takes two industrial pharmacy summer students and they host Memorial and Alberta student visits to their facilities. They have a health economics residency program and have hired the last three students. There also is a one month residency in medical information for an Alberta student. Ms Hackett noted that it is an ongoing challenge to get students to consider industry seriously but all her new hires have been pharmacists for government and professional affairs positions. We need to market the skills of our students now that pharmacists are becoming more of a decision maker regarding drug therapy.

There was a discussion of some of the perceived skills gaps of our graduates: seem to be very naive, need more presentation skills to present concisely rather than a data dump; lack of vocabulary and creativity seems to be problematic; writing skills is another problem.

How can we enhance the relationships between academics/practitioners and industry? The health policy challenge take a step back and be aware of the concerns of industry when determining the appropriate approach to various issues.

10.5 1 PM - Meeting with ADPC (All Deans were present except Linda Hensman Memorial University and Bob Sindelar, University of British Columbia). Lavern Vercaigne provided an update on the Executive Director Search. The Deans were requested to identify the specific duties and compensation that the Executive Director would provide for ADPC. The Deans will meet immediately following this meeting to provide that information.

Experiential Task Force – Fred Rémillard reviewed the situation regarding the funding for the Task Force and the proposal to obtain the services of a consultant. During the discussion, it was agreed that it must be a "Pan Canadian view" and there must be an action plan by the consultant that is not telling us what we all already know.

Web Site – Simon Albon provided an update on the utilization of the web site since the launch last year in Winnipeg. The Phase 2 approach will result in more dynamic functions – online abstract submissions and review; adding information from different schools like roster information, stats, enrollment levels, etc. Although each school has their web site, certain information at a central site is advantageous.

Fee structure - The current financial situation was explained and the ADPC agreed to consider the proposed updated faculty fee structure.

HRDC – Dennis Gorecki and Lavern Vercaigne discussed the HRDC project. It was suggested that the shortage at professorial level is worse than practitioner shortage. The steering committee will direct the project and then they will appoint a panel to make the recommendations regarding the research approach.

10.6 Follow up on External meetings

10.7 4 PM - Adjournment

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

COUNCIL MEETING Minutes
MAY 29, 2003,
Room 532, DELTA CENTRE-VILLE, MONTRÉAL

1. Opening Remarks - President Lavern Vercaigne extended a warm welcome to Executive Director Frank Abbott. He provided an overview of Frank's background and indicated that he was ideally suited for the AFPC & ADPC Executive Director's position. Lavern also extended the appreciation of AFPC for all Sylvie's efforts in the planning of this year's conference.

2. Roll Call and Approval of Agenda The following Executive and Council members were present: Lavern Vercaigne, President; Fred Rémillard, Past President; Susan Mansour, President Elect; Rita Caldwell, ADPC representative; Simon Albon, UBC; Sheila Kelcher, Univ. of Alberta; Yvonne Shevchuk, Univ. of Saskatchewan; Mike Namaka, Univ. of Manitoba; Zubin Austin, Univ. of Toronto, Sylvie Marleau, Univ. de Montréal; Jean Lefebvre, Univ. Laval; Anne Marie Whelan, Dalhousie Univ.; Lili Wang, Memorial Univ.; Frank Abbott, Executive Director; Jim Blackburn, Outgoing Executive Director.

   The agenda was approved on a motion Fred Rémillard and Mike Namaka.

3. Council Meeting Minutes: The distributed minutes of the Midyear Council Meeting, Feb. 9 – 10, 2003 were approved on a motion by Zubin Austin and Anne Marie Whelan.

4. Business Arising From the Minutes of Mid-year Council Meeting
   - 4.1 Compendium of Pharmacy Practice and Education Student/Resident Projects – The Compendium is being published as a supplement to the June, 2003 issue of the Canadian Journal of Hospital Pharmacy. AFPC will approach Merck Frosst to determine their interest in supporting a 2002 – 2003 edition, once the current supplement is published.

   - 4.2 Faculty Role in Residency Projects – The survey from the Hospital Pharmacy Residency Board has been circulated to the Council. Christine Hughes was unable to be present for this conference, so the planned discussion has been deferred until we meet with Nese Yuksel and the CCCP executive later this afternoon.

   - 4.3 Future AFPC Meetings – The CPhA is holding their 2004 annual conference in Niagara Falls, May 16 – 18, 2004. There was concern that it would be difficult for the University of Toronto staff to host this year's conference. Zubin Austin indicated that if the decision were made to meet with CPhA, they would be willing to host the conference. Frank Abbott reported that CSPS is planning their 2004 conference in Vancouver. CCCP has planned to hold their 2004 conference with two pharmacology associations in Winnipeg. (June 3 – 7, 2004).

Sheila Kelcher moved, seconded by Rita Caldwell, that AFPC meet with CSPS in 2004, providing UBC is willing to act as faculty host for the conference. The motion was approved.

The motion by Zubin Austin, seconded by Fred Rémillard that AFPC hold their 2005 Conference at the time of the International Lifelong Learning Conference in Saskatoon in June 2005. The motion was approved.

4.4 Formal Approval of Faculty Fee structure for 2003 – The new fee structure was implemented for the 2003 year (see Appendix A). Each faculty was billed for the original fee in January and they received a supplemental invoice for the difference between the previous faculty fee and the new fee. The proposed fee structure includes a $ 4500 base fee plus a charge of $ 34.50 per first year student based on 2002 first year enrollment in each faculty. The revised faculty fee will result in an increase from $ 55,800 to $ 74,657 in AFPC income in 2003.

The motion to accept the new faculty fee structure for the years 2003 and 2004 was approved (motion by Mike Namaka and Zubin Austin).

5. Committee Reports

5.1 Awards Committee – Sylvie Marleau presented an outline of the written report acknowledging recipients of awards and the reviewers. Sylvie expressed special congratulations to Simon Albon for being awarded the BMS National Award for Excellence in Education. She also noted that Ed Knaus has received the Pharmaceutical Research Award for the second time but this was within the guidelines of a minimum of 10 years between awards.

Dr. Marleau indicated that we needed to attract more applications for the Merck Frosst Post Graduate Student Fellowships.

Lili Wang, Jean Lefebvre and Mike Namaka volunteered to serve as the review panel for the Canadian Foundation for Pharmacy posters. There was discussion regarding the division of the $ 1,000 National Poster award into three awards.

It was noted that with the extended clerkships in the third year of the programs, it is more difficult for those students to qualify for the Apotex Pharmacy Practice Research awards and this has led to two faculties not participating in the 2003 program.

Dr. Marleau recommended that we review the French version of the Awards Book as there are discrepancies between the French and English award descriptions. She also recommended that award criteria guidelines for reviewers be developed for those awards that currently do not have guidelines.

The competition for the 2003 – 2004 Rx and D Visitations will be held following the receipt of reports from the 2002 – 2003 visitors.

The motion to accept the report was approved (Sylvie Marleau and Susan Mansour).

5.2 Bylaws Committee – Fred Rémillard reported that no bylaw revisions are being presented at this time. However he served notice that a revision in the criteria for AFPC Honorary Membership should be considered in 2004.

5.3 Communications Committee – Simon Albon provided an overview of the written report. The new logo was presented for consideration of Council. Jean Lefebvre reported that the cost of providing a French mirror edition of the web site would be in the range of $ 50,000 to $80,000. The Committee is investigating granting agencies (government grant may support this project up to $ 5,000) to assist in the support of the translation and they are also looking at the possibility of hiring students for some parts of the project.

It was moved (Yvonne Shevchuk and Sheila Kelcher) that we defer funding the Phase II plan until we have a clearer picture of the AFPC financial situation. However, we support the AFPC Communications Committee in their efforts. The motion was approved.

It was moved (Yvonne Shevchuk and Anne Marie Whelan) we express our sincere appreciation to Rebecca Law and ask her to continue to serve as Editor of AFPC Communications. The motion was approved.

5.4 Conference Planning Committee – Sylvie Marleau provided a brief description of the conference program. There will be two breakfast symposia (Saturday – Aventis; Sunday – Merck Frosst) associated with the conference.
Sylvie Marleau moved, seconded by Zubin Austin that the report be received. The motion was approved.

5.5 Education Committee – Zubin Austin commented on his written report as well as the program evaluation report that David Fielding had provided (UBC document). It was recommend that each Councilor go back to their schools, evaluate the document and provide feedback to Zubin. It will also be placed on the web site (indicated as a draft).

Study of academic honesty – Zubin Austin has two summer research students working on the study. Each council member is requested to identify a coordinator and also have each school copy a sufficient number of the survey form for their students. Each councilor is requested e-mail Zubin Austin as soon as possible with the potential contact for their faculty.

The motion (Zubin Austin, Simon Albon) to accept the report was approved.

5.6 Executive Committee – Lavern Vercaigne outlined the activities of the Executive since the midyear meeting and made reference to the Meeting Notes of Teleconference Call, April 15, 2003. It was agreed that new Council members would be financially supported by AFPC to attend the Council meetings. The current policy of not paying conference registration fees for Councilors will be maintained.

A motion to have the AFPC President and the ADPC representative prepare a multi-year financial plan for AFPC was approved (Fred Rémillard and Zubin Austin).

The report was approved on a motion by Lavern Vercaigne and Fred Rémillard.

5.7 Nominating Committee – Fred Rémillard presented the slate of candidates for the following positions:

President – Susan Mansour, Dalhousie University
President Elect – Sylvie Marleau, Université de Montréal
New Council Members for: 2003 – 2006
Dalhousie – Anne Marie Whelan
Saskatchewan – Roy Dobson
Montréal – Ema Ferreira

The motion to accept the Nominations Committee report (Fred Rémillard, Sheila Kelcher) was approved.

5.8 Planning and Finance Committee – Susan Mansour presented the audited AFPC financial statement for 2003. She pointed out the differences between the budget and the actual expenses (conference income decrease, SPEP task force income, decrease web site maintenance expenditures and unbudgeted executive director advertisements.

The motion to accept the AFPC Audited Financial Statement 2002 for presentation to the Annual General Meeting was approved (Anne Marie Whelan and Zubin Austin).

Susan then presented the revised 2003 budget. Following discussion, it was recommended that we reduce the web site budget to $ 6,000 from $ 10,000 on a motion by Simon Albon and Sheila Kelcher. The motion was approved.

The motion to accept the revised budget, which will lead to an excess of income over expenditure of $ 357, was approved (Lili Wang and Simon Albon).

5.9 Research Committee – Mike Namaka briefly outlined the Research Committee Report and expressed regrets about being unable to attend the midyear meeting. Sylvie Marleau is serving as a liaison with the Awards Committee. The question

of reinstituting data collection for faculty research as well as other statistics will be discussed at the ADPC meeting by Rita Caldwell. A brief article on the AFPC award recipients will be prepared and forwarded to Pharmacy Practice and the Rx & D Bulletin to determine if they would be willing to publish it. The terms of reference for the committee will be re-examined. Each Council Member is requested to review the AFPC mission statement and provide comments back to Mike Namaka on how they view the research committee fitting into the mission statement.

The motion to accept the Research Committee report was approved (Mike Namaka and Zubin Austin

5.10 Task Force on Experiential Education – Fred Rémillard indicated that Donna Wheeler Usher had presented a contract proposal for AFPC consideration. The motion to accept her proposal for everything except planning the final meeting was approved (Yvonne Shevchuk, Zubin Austin). It was moved by Rita Caldwell and Simon Albon that we negotiate the fee. The motion was approved.

6. Report of Representatives to External Groups

6.1 Report of Representative to CPhA Human Resources Project – Lavern Vercaigne indicated that the final proposal is now about to be submitted to HRDC for funding. AFPC is represented on the management committee and CPhA, NAPRA and CACDS will be the signatories. It was noted that larger employers are actively recruiting off shore but there are an estimated 1400 off shore pharmacists in Ontario and there is a need to focus on those residing in Canada rather than increasing immigration. It is vital that faculties be involved in the project as there both students and faculties will be surveyed. If AFPC members work on specific sub-projects associated with the grant, it may be considered as in-kind contributions. It was also noted that the recruitment of pharmacy faculty is also a big problem for the profession

The motion to accept the report was approved (Lavern Vercaigne and Zubin Austin).

6.2 Report of ADPC Representative – Rita Caldwell stated that the deans are pleased to work with AFPC and look forward to sharing the executive director position. The motion to accept the report was approved (Rita Caldwell and Sheila Kelcher).

6.3 Report of CPhA Academic Board Member – Linda Suveges. It was noted that Linda provided a report that was printed in the latest issue of AFPC Communications. The CPhA Conference is being held in Vancouver this weekend.

6.4 Report from CCAPP Representatives – Sylvie Marleau & Jake Thiessen. Sylvie Marleau commented on the election of Jake Thiessen as President and the

retirement of Bruce Schnell as Executive Director. CCAPP has been asked by ADPC to prepare standards for the entry-level Doctor of Pharmacy program and they are also investigating the feasibility of developing accreditation standards for pharmacy technician programs in Canada. Dr. Pete Vlasses from the American Council for Pharmacy Education attended the 2003 CCAPP annual meeting and the two organizations are looking forward to collaborating on a number of initiatives.

A new accreditation status will be added to the 3 existing categories ("Preliminary Accreditation", "Full Accreditation", "Probationary Accreditation"). The new status will be "Conditional Accreditation". It may be granted if major deficiencies in compliance with accreditation standards and/or requirements are identified. "Conditional Accreditation" will initially be granted for a maximum of three years. The "conditional" status may be removed and accreditation extended to a longer term (not exceeding six years), subject to receipt of a report convincing the CCAPP that the matters giving rise to the concerns are being adequately addressed.

6.5 Report from PEBC Representatives – Linda Suveges & Louise Mallet
The report indicated that Bev Allen is the new President of PEBC. In 2002, therewere significant increases in the number of applicants taking the Qualifying and Evaluating examinations as well as the number of document examinations. Bev Allen and John Pugsley will meet with the executive on May 30 to discuss comments received from students and faculty regarding this year's examination.

6.6 Report from CCCEP Representative – Marc Desgagné will be presenting his report to the Annual General Meeting.

6.7 Representative for Pharmacy Technician Stakeholder Group – Wayne Hindmarsh's report indicated that the group has drafted a pharmacy technician competency statement that is being reviewed. Lucinda Maine from AACP commented on the US programs where two associations are testing technicians and are approaching certifying 150,000 technicians.

The motion to accept the report was approved (Zubin Austin and Sheila Kelcher).

7. Executive Director's Report – Jim Blackburn expressed sincere appreciation to President Lavern Vercaigne, the executive and Council for the opportunity to work with them and the AFPC members. AFPC is very fortunate to have attracted Frank Abbott to assume the Executive Director position and this association is well positioned to provide outstanding leadership to Canadian academic pharmacy during this time of potentially significant changes about to affect our profession.

8. New Business

8.1 AFPC Office & relationship to ADPC - Frank reported that the office for both

Associations will be:

Dr. Frank Abbott, Executive Director
AFPC and ADPC
3919 West 13th Ave.
Vancouver, BC V6R 2T1
Tel: (604) 222-0221
Fax: (604) 222-2574
E-mail: fabbott@telus.net

8.2 Meeting with CCCP Executive (Glen Pearson, Shallen Letwin, Natalie Kennie, Nese Yuksel, Scot Simpson)

8.2.1 Joint Meetings – CCCP indicated that they were starting a new venture by having their annual conference with the clinical pharmacology group and the pharmacoepidemiology group and this joint arrangement may be a permanent arrangement. With regard to the present meeting, it was believed that a combination of increased costs, SARS and the conflict with the CPhA conference all contributed to the lower than expected number of CCCP registrants.

8.2.2 Recognition of Clinical Faculty – there continues to a major issue for clinical faculty, both in regard to recruitment and retention and it is important that both organizations follow up on the report that came from the 1999 joint meeting in Québec City. This report will be distributed to the Deans, Council, CCCP and also to Lucinda Maine at AACP.

8.2.3 Hospital Pharmacy Residency Board – Nese Yuksel commented on the Hospital Pharmacy Residency Board survey of faculty involvement. Nese will request that the Board determine what specific areas of faculty involvement are desired. Both organizations will revisit mechanisms for encouraging students to seek advanced training or education. This issue will also be discussed with Deans at their midyear meeting. Lucinda Maine indicated that the AACP Teachers of Pharmacy Practice and Deans have developed a discussion paper on this subject that will be considered at the July AACP meeting.

8.3 Meeting with Lucinda Maine, Executive VP AACP. Lucinda brought greetings to the AFPC Council from AACP. She presented an overview of her written report, indicating that AACP are reviewing their membership categories for Colleges in light of the number of new Colleges and the specific accreditation requirements. She indicated that AACP is very interested in working with AFPC in a number of areas of mutual interest. President Susan Mansour and Executive Director Frank Abbott will be attending the AACP Annual Meeting in Minneapolis in July.

8.4 Lifelong Learning Conference 2005 – A letter has been received from Nancy McBean, CCCEP regarding this international conference. As noted previously, it was suggested that AFPC meet at the same time in Saskatoon.

9. Adjournment – The meeting adjourned at 4:30 PM on a motion by Zubin Austin.

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

MINUTES OF THE NEW COUNCIL MEETING
SUNDAY, JUNE 1, 2003
ROOM VERSAILLES
DELTA CENTRE VILLE, MONTRÉAL

1. President Susan Mansour welcomed the 2003-2004 Council members to the meeting.

2. Roll Calls and Approval of Agenda:

   The following executive and council members were present: Susan Mansour, President; Sylvie Marleau, President Elect; Lavern Vercaigne, Past President; Rita Caldwell, ADPC representative; Frank Abbott, Executive Director; Simon Albon, UBC; Mike Namaka, Manitoba, Zubin Austin, Toronto; Sheila Kelcher, Alberta; Jean Lefebvre, Laval; Roy Dobson, Saskatchewan; Lili Wang, Memorial; Anne Marie Whelan, Dalhousie. A special welcome was extended to new Councilors Roy Dobson and Ann Marie Whelan. New Councilor Ema Ferriera (Universite de Montreal) was unable to attend – she is on maternity leave.

   Two items were added to the agenda
   6.3 Planning discussion

   6.4 AFPC promotion within individual Faculties

3. Appointments and Charge to Committees

   3.1 Awards Committee

   Lili Wang agreed to accept the chair of this committee with the understanding that there would be input and assistance from previous chair Sylvie Marleau. Continuing issues of this committee were the low number of applicants for the Julien Braun Award – numbers eligible to be nominated are to be reviewed. The committee will examine the Canadian Foundation for Pharmacy Student Research Poster award. The question is should it remain an award to just one individual or should it be divided and shared, say by the top three poster presenters? Based on the rather poor turn out of students to the awards presentations and to the final banquet, there was a suggestion that the expectations of the CFP awardees need to be clearly spelled out.
   Apotex Pace award – some Faculties are finding it difficult to field candidates with the required criteria for the award and it was suggested that a second year student be eligible. French and English guidelines for the awards need to be consistent. Emma, Sylvie and Jean will look at the French version in the awards booklet. The committee may need to develop more detailed criteria for the review process in each of the award categories.

It should be noted that the AFPC Special Service Award to Dr. David Hill and the AFPC Honorary Lifetime Member Award to Frank Abbott would be presented at next year's conference banquet.

3.2 Bylaws Committee - Lavern will assume the responsibility. One priority is to act on Fred Rémillard's recommendations for Honored Life Member criteria.

3.3 Communications Committee – Simon, Jean, Rita and Sheila from Council and Rebecca Law (editor of the Newsletter) to continue on this committee. The work of this committee is fairly straightforward with the web design project continuing as a focus. Production of a mirror site in French is a major initiative. Suggestions for the web site included having photos of Councilors with their committee duties listed. From the 2003 conference, it was felt that we could post copies of the presentations made by speakers at the education sessions held on Friday and Saturday. Permission of the presenters would be required and Frank is to contact Claude Mailhot, who chaired the sessions, to ask if the presenters were averse to having their presentations published.

3.4 Conference Planning Committee
Based on discussions with the executive of the Canadian Society of Pharmaceutical Sciences, a joint meeting of CSPS and AFPC will be held in Vancouver either in the last week of May or the second week of June in 2004. The Faculty of Pharmaceutical Sciences at UBC will be the host committee. The planning committee should bear in mind that the Education committee plays a large role in developing the program.

Suggested conference themes included:

- Entry level Pharm D theme.
- Integrating pharmaceutical sciences in the new curriculum.
- Zubin's study of honesty and dishonesty in Canadian Pharmacy.
- Peer educator program at UBC.
- Large group instruction. Implementing active learning in large classes.
- Task force on experiential education.

It was suggested that UBC hold an Open House on the Saturday – practice lab tour. Simon asked about the formatting of sessions – did Council agree that more interaction by participants was needed. Workshops were preferable and more Canadian content was suggested.
Note: Evaluation forms are required for all of the speakers in order for participants to receive CE units.
Links with CSPS – their fee structure is a bit high. The fee structure for students should be examined because it did not cover our costs for the social events. Common sessions with CSPS would include the awards presentations and a common banquet. For company sponsors it was suggested that we develop a sign up sheet for each session and event and make these available to the sponsors. Further discussion took place regarding the timing and format of awards presentations. Simon mentioned using an approach that would integrate the awards presentations along with CSPS presenters.

We are all looking forward to Simon and the rest of the planning committee to develop an outstanding program for next year's meeting.

3.5 Education Committee

Zubin will continue to chair this committee with Simon on board to contribute and dovetail conference planning with the activities of the education committee.
The academic honesty and dishonesty study will be pursued on a National level and there will be follow-up on the evaluation template. Comments on the program evaluation document are to be sent to Zubin.

3.6 Executive Committee

This committee is made up of past president Lavern, president Susan, president elect Sylvie and the ADPC representative Rita.

3.7 Nominating Committee

Lavern will chair the committee and identify candidates for President Elect.

3.8 Planning and Finance Committee

President elect Sylvie will chair this committee and work with ADPC representative Rita and with President Susan and others as needed.

3.9 Research Committee

Mike agreed to chair the committee. With Sylvie stepping down from the committee, it was suggested that Emma Ferreira be asked to serve. Mike wants to maintain a close interaction with the awards committee (Lili Wang). Frank is to contact Rx and D to see if we can put our award winners on their web site. In regards to Simon's AFPC web site project, Frank is to set up a process for categorizing the submitted abstracts for the next conference into the following categories: Social Administrative Research, Clinical Research, Educational and Teaching Research, Basic Science Research, and Pharmacy Practice Research. ADPC representative Rita and Frank to consult the Dean's for benchmark data re: type of research conducted, funding sources and profile of graduate students that was recommended in Mike's report.
Pharmacy practice research: This item was discussed under the Education Committee. Merck Frosst has been a generous supporter of the practice research symposium at AFPC and it is a conference activity that we need to promote. Lisa Dolovitch, who presented and chaired the Sunday morning session on Pharmacy Practice Research, is to be contacted by Jim Blackburn to confirm our interest in pursuing an increased liaison between the CPhA Pharmacy Practice Research Group and AFPC. Lisa is to be invited to serve on the committee and perhaps help AFPC to develop a strategy to respond to the Romanow Commission. There is also an interest in creating a database of pharmacy practice research.
It was also suggested that the poster presentations of the conference could be expanded.

3.10 Other:

Susan emphasized the point that our executive should immediately look into who might serve as chair and possible committee members to begin setting the educational outcomes for the entry-level Pharm. D.

4.0 Confirmation of AFPC Representatives, Delegates and Council Member Assignments

4.1 ADPC Representative: Rita Caldwell

4.2 Canadian Council for Accreditation of Pharmacy Programs: Sylvie Marleau
Jake Thiessen

4.3 Task Force on Experiential Education: Fred Rémillard to continue the work of the task force. With the help of a consultant the task force will develop a document with the intent of having it in final form for the 2004 AFPC Annual Conference in Vancouver.

4.4 CPhA Human Resources Project Planning Committee: Lavern will continue to represent AFPC.

4.5 Canadian Council for Continuing Education in Pharmacy:
Appointment of a new delegate is anticipated.

4.6 Communications Editor: Rebecca Law will continue her fine work.

4.7 Pharmacy Examining Board of Canada: Linda Suveges
Louise Mallet

4.8 Representative to United States Pharmacopoeia – Colin Briggs

4.9 Other Appointments

5.0 Business arising from the May 29 Council Meeting

Following up on the meeting that Council had with the executive of CCCP, it was important that we clarify the issues raised by CCCP. Nese Yuksel is to supply Lavern with information regarding what the residency boards want with respect to Faculty participation in the program. Glen Pearson is to provide an electronic form of a report that came out of the 1999 joint meeting in Quebec City regarding the development of clinical faculty. Frank should contact Glen to obtain the document for distribution.

Fred (a welcome guest at this meeting) mentioned the need to stay connected with CAPSI.

The executive reported on the meeting held with Bev Allen and John Pugsley from PEBC. One issue for PEBC was the number of times the exam can be written. This is to be settled with stakeholders. Satellite exam sites i.e. in other countries do not appear realistic. The issue of the latest exam being rather heavy on managerial or administrative questions, PEBC stated that the exam contained additional test questions in that area of expertise in order to build up their bank of questions. Issues regarding the blue print of the exam are being discussed by PEBC with NAPRA.

6.0 New Business

6.1 Date and Time for Mid-year Meeting

The Deans would like the mid-year meeting to coincide with the CACDS meeting in Toronto in February. There did not appear to be a high priority by the Deans for a joint meeting. Midterm breaks about that time of year should also be taken into consideration.

Suggested Stakeholders:
CSHP
CPHA Board.

In order to make the best use of the mid-year meeting, it was agreed that we would use it for a planning session. Rita and Roy have agreed to take on the responsibility of facilitating the session. Susan asked councilors to begin thinking about the issues and solutions critical to setting strategic and business plans for AFPC. Simon would like a full day for planning.

Tentative dates and location will be sent out.

6.2 Confirmation of Date and Time for the 2004 Conference – most likely June 11-13 or the following weekend in 2004.

6.3 Planning session: See 6.1.

6.4 AFPC promotion within individual Faculties:

Marketing AFPC could be a part of the planning session.
Each councilor should make a report for their respective Dean. To assist in this endeavour, the Executive director is to make a synopsis of the meeting for use by individual councilors.
A list of attendees is to be submitted for inclusion in the synopsis of the meeting.

Once again, Sylvie was thanked and congratulated for putting on such a great program!!

7.0 Adjournment

Motion to adjourn.

Frank Abbott, recorder.

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

ANNUAL GENERAL MEETING

SATURDAY, MAY 31, 2003, DELTA CENTRE VILLE, MONTRÉAL

1.0 Opening Remarks - President Lavern Vercaigne welcomed attendees to the 60th AGM of the Association of Faculties of Pharmacy of Canada. He introduced executive and council members for 2002 – 2003: President Lavern Vercaigne; Past President Fred Rémillard; President Elect Susan Mansour; ADPC representative Rita Caldwell; Council members: Simon Albon, UBC; Zubin Austin, Toronto; Sheila Kelcher, Alberta; Jean Lefebvre, Laval; Sylvie Marleau, Montreal; Mike Namaka, Manitoba; Yvonne Shevchuk, Saskatchewan; Lili Wang, Memorial; Anne Marie Whelan, Dalhousie; Frank Abbott, Executive Director; Jim Blackburn, Outgoing Executive Director.

2.0 Approval of Agenda – The agenda was approved on a motion by Zubin Austin and Mike Namaka

3.0 Acceptance of 2002 Annual General Meeting Minutes – The minutes of the 2002 Annual General Meeting, May 12 in Winnipeg were approved on a motion by Yvonne Shevchuk and Sheila Kelcher.

4.0 Conference Committee Announcements – Information regarding the Conference Banquet was provided by Sylvie Marleau.

5.0 Greetings

Dr. Lucinda Maine, Executive Vice President, American Association of Colleges of Pharmacy, brought greetings from AACP. She indicated that it was a pleasure to attend her first AFPC Conference and she appreciated the opportunity to attend the AFPC Council meeting. Lucinda indicated that the two organizations have very similar issues and our featured speakers (Bob Beardsley, Dana Hammer and Bruce Berger) will be presenting a white paper on professionalism at the AACP conference in July. AACP is looking forward to working with AFPC and Frank Abbott in the future.

6.0 Memorial to Deceased Members – President Lavern Vercaigne called for a minute of silence in recognition of the following Honorary Members who passed on during the year:

Dr. Stephen Sim, AFPC Honorary Member, University of Toronto
Professor Isabel Stauffer, AFPC Honorary Member, University of Toronto

7.0 President's Address – Susan Mansour assumed the chair and called on President Lavern Vercaigne to present the presidential address. Lavern expressed his thanks to all who

worked for the association during the year; recognizing the time taken from family and personal time to commit to AFPC activities. He expressed the appreciation of AFPC to outgoing Executive and Council members – Fred Rémillard, Yvonne Shevchuk and Jim Blackburn.

Lavern formally introduced the Executive Director, Frank Abbott, briefly reflecting on his innumerable accomplishments in administration, teaching and research while at the University of British Columbia.

He recognized David Fielding and the UBC committee for developing the program outcomes evaluation template and indicated it will be distributed to all faculties for their evaluation and also posted on the web site. Lavern noted that AFPC has contracted a facilitator to work with the SPEP Task Force and he also indicated that the HRDC Human Resources Project will be an important project for the future of our profession and academic pharmacy.

The President's Report was approved on a motion by Lavern Vercaigne and Linda Hensman

8.0 AFPC Committee Reports

8.1 Awards Committee Report – Sylvie Marleau acknowledged the award recipients and thanked the reviewers and the award sponsors. She noted that the Awards Book will be revised during the next year.

8.2 Nominations Committee Report – Fred Rémillard presented the slate of candidates for the following positions:

President – Susan Mansour, Dalhousie University
President Elect – Sylvie Marleau, Université de Montréal
New Council Members for: 2003 – 2006
Dalhousie – Anne Marie Whelan
Saskatchewan – Roy Dobson
Montréal – Ema Ferreira

The Nominations report was approved on a motion by Fred Rémillard and Andrea Cameron.

8.3 Bylaws Committee Report - Fred Rémillard noted that there were no changes to the bylaws for 2003. However, he recommended that the Honorary Membership criteria be re-examined during the next year.

The motion to accept the report was approved (Fred Rémillard and Sheila Kelcher)

8.4 Education Committee Report – Zubin Austin indicated that David Fielding and the UBC committee have drafted the Template for Program Outcomes Evaluation. It will be posted on the web site and all faculties are encouraged to evaluate it. This document is intended to establish consistency for the evaluation of outcomes of pharmacy programs. Zubin has prepared an academic dishonesty survey and it will be distributed to all Canadian pharmacy faculties this summer.

The motion to accept the report was approved on a motion by Zubin Austin and Lesley Lavack.

8.5 Research Committee Report – Mike Namaka commented on his written report. The committee is seeking to better publicize the AFPC Award recipients as well as promoting research in Canadian Faculties of Pharmacy. He is seeking membership input on the most effective methods to meet the AFPC mission statement through the Research Committee.

The motion to accept the Research Committee Report was approved (Mike Namaka and Yvonne Shevchuk).

8.6 Communications Committee Report - Simon Albon. Sheila Kelcher presented the report on behalf of Simon Albon. The committee has focused on the AFPC Newsletter, the development of a new AFPC logo and the updating of the web site.

The web site is being used extensively with a daily average of 137 persons hitting the web site, 143 times per day. The committee is working on the development of a mirror site in French.

The report was accepted on a motion by Sheila Kelcher and Sylvie Marleau.

President Lavern Vercaigne presented a gift to Rebecca Law for all her efforts and talents in serving as editor of AFPC Communications for a number of years.

9.0 Reports from Special Committees and Delegates

9.1 Appointee of the Association of Deans of Pharmacy of Canada – Rita Caldwell indicated that the ADPC is very pleased to be sharing Executive Director Frank Abbott with AFPC and they are looking forward to many collaborative ventures for the benefit of academic pharmacy in the future

The motion to accept the report was approved (Rita Caldwell and Linda Hensman)

9.2 Academic Board Member of the Canadian Pharmacists Association – Linda Suveges report to AFPC was included in the last issue of AFPC Communications. The CPhA Conference is being held in Vancouver beginning this weekend.

9.3 Appointees to the Canadian Council for the Accreditation of Pharmacy Programs - Sylvie Marleau & Jake Thiessen - Sylvie Marleau outlined the written report. She indicated that Dr. Bruce Schnell is retiring as the first CCAPP Executive Director after 10 years. The major issues for CCAPP the development of standards for the entry level Doctor of Pharmacy Program and the consideration of the possibility of initiating standards for pharmacy technician programs in Canada. A new category of accreditation has been established, "Conditional Accreditation" which is given if there are major deficiencies to be corrected by a faculty. The conditional status may be removed within a three-year period upon the completion of a report documenting the steps taken to correct the deficiencies.

The motion to accept the report was approved (Sylvie Marleau and Lesley Lavack).

9.4 Appointee to the Canadian Council on Continuing Education in Pharmacy - Marc Desgagné summarized his report. He indicated that CCCEP was notified last year that they were required to pay GST and forwarded a one time invoice to all stakeholders to cover the back dated charges. Therefore, they have billed our organization for GST from the past. New guidelines and procedures have been established for accrediting CE providers. The third CCCEP national educational program was held last fall and there will be a fourth program in November 2003. The International Life Long Learning Conference will be held in Saskatoon in June 2005

The report was accepted on a motion by Marc Desgagne and Yvonne Shevchuk.

9.5 Task Force on Experiential Education – Fred Rémillard outlined his written report. Due to the departure of Chair David Hill for the United States, the committee work has been delayed. It was decided to utilize the services of a consultant to prepare the background work for the committee's report. AFPC is now in the process of negotiating a contract with the consultant.

The motion to accept the report was approved (Fred Rémillard and Yvonne Shevchuk).

9.6 Report of Representative to CPhA Pharmacy Human Resources Planning Team - Lavern Vercaigne indicated that the final proposal is now about to be submitted to HRDC for funding. AFPC is represented on the management committee and CPhA, NAPRA and CACDS will be the signatories. It was noted that larger employers are actively recruiting off shore but there are an estimated 1400 off shore pharmacists in Ontario and there is a need to focus on those residing in

Canada rather than increasing immigration. It is vital that faculties be involved in the project as both students and faculties will be surveyed. If AFPC members work on specific sub-projects associated with the grant, it may be considered as in-kind contributions. It was also noted that the recruitment of pharmacy faculty is also a big problem for the profession

The motion to accept the report was approved (Lavern Vercaigne and Zubin Austin).

10.0 Report of Executive Director - Jim Blackburn expressed sincere appreciation to the President Lavern Vercaigne, the executive and Council for the opportunity to work with them and the AFPC members. AFPC is very fortunate to have attracted Frank Abbott to assume the Executive Director position and this association is well positioned to provide outstanding leadership to Canadian academic pharmacy during this time of potentially significant changes about to affect our profession.

The motion to accept the report was approved (Zubin Austin and Sheila Kelcher).

11.0 Financial Statements:

11.1 Audited 2002 Financial Statements and Budget for 2003 – Susan Mansour, Future Planning and Finance Committee Chair presented the audited AFPC financial statement for 2003. She pointed out the differences between the budget and the actual expenses (conference income decrease, SPEP task force income, decrease web site maintenance expenditures and unbudgeted executive director advertisements.

The motion to approve the AFPC Audited Financial Statement for 2002 was passed (Susan Mansour & Linda Hensman).

11.2 2003 AFPC Budget – Susan presented the budget that Council revised at the May 29 meeting which changed the web site budget allocation from $ 10,000 to $ 6,000. This will result in an excess of income over expenses of $ 357. Susan noted the increased faculty membership fee that was introduced in 2003.

The motion to approve the AFPC 2003 Budget was passed (Susan Mansour, Monique Richer).

12.0 Appointment of Auditor – It was moved by Lavern Vercaigne, seconded by Pierre Bélanger that Myers Norris Penny LLP be retained as the AFPC auditor for the 2003 year. The motion carried.

13.0 New Business

13.1 Site of Future Meetings - 2004 - joint meeting with CSPS in Vancouver tentatively planned for June 11 – 13.
- 2005 – tentatively planned for Saskatoon at the time of the International Life Long Learning Conference (June)

13.2 Office of AFPC Executive Director

Dr. Frank Abbott, Executive Director, AFPC & ADPC
Association of Faculties & Deans of Pharmacy of Canada
3919 West 13th Avenue
Vancouver, BC V6R 2T1
Tel: (604) 222-0221
Fax: (604) 222-2574
E-mail: fabbott@telus.net

14.0 Transfer of Presidency – Lavern Vercaigne turned over the gavel to incoming President Susan Mansour.

15.0 Confirmation of Signing Authority – The motion to name Susan Mansour and Frank Abbott as signing authorities for AFPC for the 2003 – 2004 year was approved (Fred Rémillard and Lili Wang).

16.0 Adjournment – The motion to adjourn the 2003 AFPC Annual meeting was accepted. (Zubin Austin and Yvonne Shevchuk).

AFPC ANNUAL GENERAL MEETING, 2003
LIST OF ATTENDEES

Jean Lefebvre
Frank Abbott
Marc Desgagné
Jenny Lower
Carmen Vézina
Monique Richer
Bob Sindelar
Lucinda Maine
Dale Wright
Dennis Gorecki
Yvonne Shevchuk
Sheila Kelcher
Ingrid Price
Mike Namaka
Rita Caldwell
Anne Marie Whelan
Lalitha Raman-Wilms
Rebeca Law
Mary MacCara
Sylvie Marleau
Susan Mansour
Jana Bajcar
Fred Rémillard
Lavern Vercaigne
Huy Hao Dao
Pierre Moreau
Marie-Pierre Rousseau
Eve Marie Charbonneau
Petra Pohan Korea
Kim Bujold
Jim Blackburn
David Williamson
Daniel Thirion
Louise Mallet
Marie DuBois
Johanne Vinet
Diane Lamarre
Rehana Durocher
Linda Hensman
Andrea Cameron
Lesley Lavack
Zubin Austin
Simon Albon
Rosemin Kassam
Jean Christophe Leroux
Dorothée Le Garre
Marie-Andrée Yessine
Jacques Turgeon

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PART 3.0

REPORTS OF AFPC STANDING COMMITTEES, REPRESENTATIVES AND DELEGATES

AFPC PRESIDENT'S REPORT – LAVERN VERCAIGNE
AFPC AWARDS COMMITTEE REPORT – SYLVIE MARLEAU
AFPC BYLAWS COMMITTEE – FRED RÉMILLARD
AFPC COMMUNICATIONS COMMITTEE REPORT – SIMON ALBON
AFPC EDUCATION COMMITTEE REPORT – ZUBIN AUSTIN
AFPC NOMINATIONS COMMITTEE REPORT – FRED RÉMILLARD
AFPC RESEARCH COMMITTEE REPORT – MIKE NAMAKA
TASK FORCE ON EXPERIENTIAL EDUCATION – FRED RÉMILLARD
HRDC PHARMACY SECTOR STUDY STEERING COMMITTEE - LAVERN VERCAIGNE
SPECIAL TASK FORCE ON TECHNICIANS – WAYNE HINDMARSH
ADPC REPORT – RITA CALDWELL
CCAPP REPORT – SYLVIE MARLEAU & JAKE THIESSEN
CCEPP REPORT – MARC DESGAGNÉ
AACP REPORT – LUCINDA MAINE
REPORT OF THE EXECUTIVE DIRECTOR – JIM BLACKBURN
PLANNING AND FINANCE REPORT – SUSAN MANSOUR

President's Report To 2003 Annual Meeting

1. **Thank you:** I would like to begin my report by thanking all of the AFPC Executive, Council, and Association Members for their work, dedication and contributions toward improving pharmacy education in Canada over the last year. I have enjoyed my time as president, primarily because of the people that I've had the chance to interact with. I am very grateful for their input, advice, and counsel along the way. As time goes by, it seems that there are ever more demands, and less time to meet them. I know how difficult it is to give extra time to committee work, time to travel to meetings, review documents, organize conferences, review award applications, etc. It is with this in mind that I thank everyone for giving up time with family, friends, and your own personal time to contribute to pharmacy education in Canada. Your contributions do not go unnoticed.

2. **New Executive Director:** I am also very pleased to report that AFPC / ADPC hired Dr. Frank Abbott as the new Executive Director for both associations. Dr. Abbott is a pharmacy graduate from the University of Saskatchewan (B.S.P and M.Sc.) and Purdue University (PhD) and a long time member of the Faculty at the University of British Columbia. During the course of his career, Dr. Abbott was well known for his research in drug metabolism and toxicology, having received the AFPC McNeil Award for excellence in Pharmaceutical Research in 1993. He is also a founding member of the Canadian Society for Pharmaceutical Sciences.

   Dr. Abbott was a strong advocate for students throughout his career. He was the inaugural and five-time repeat winner of the Master Teacher Award (given each year by the graduating class), the UBC Teaching Prize in Pharmaceutical Sciences (1994) and the Bristol-Meyers Squibb Award for excellence in teaching (1995). While Dean of the Faculty (1996-2002), Dr. Abbott served as the President of the Association of Deans of Pharmacy of Canada and is Past-President of the Canadian Council for Accreditation of Pharmacy Programs. In 2002 the Canadian Association of Chain Drug Stores awarded Dr. Abbott the Len Marks Pharmacy Advancement Award for his innovation in education.

   We are very pleased to welcome Frank as our new Executive Director!

3. "Program Evaluation": We have been working over the last year to develop a "Program Evaluation Template" based on input from the schools of Pharmacy at last years Annual General Meeting in Winnipeg. The process has been facilitated by Dr. David Fielding from the University of British Columbia. A draft template is available on our website (www.afpc.info). I invite all members with an interest in program evaluation to visit the website and offer feedback on its contents. We are planning to refine this template based on comments from the Schools of Pharmacy, and begin discussions with Deans and CCAPP regarding the appropriateness of this template to guide program evaluation in the schools of pharmacy across Canada

4. Task Force on Experiential Learning: The Task Force on Experiential Learning was developed by AFPC/ADPC and supported financially by CACDS to investigate issues regarding the delivery of experiential education (community and health care settings) in pharmacy programs throughout Canada. We are currently negotiating with a project coordinator to facilitate data collection and analysis.

5. HRDC: We are participating in the process of preparing an application to HRDC for an Occupational Study of Pharmacists and Pharmacy Technicians/Assistants. I feel it is very important that Canadian Schools of Pharmacy actively participate in this important study, appreciating that some of the recommendations may impact on pharmacist training in Canada. Many AFPC members and students throughout our Faculties may be asked to participate in surveys, focus groups, or review drafts of research tools, documents etc. I encourage you to participate in this process in whatever capacity you feel is appropriate.

6. Website: We continue to develop our website to include more information regarding the organization. We are investigating the potential of having the website translated into a French version. In addition, we are investigating the potential for the website to accommodate interactive functions (e.g. on-line abstract submission).

   Again, thank you for the opportunity serve AFPC as President for the last year and I wish Susan Mansour, President Elect for 2003-2004 best wishes for a productive and successful year.

Respectfully submitted,

Lavern M. Vercaigne, Pharm.D.

President, AFPC (2002-3003)

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AFPC AWARD COMMITTEE REPORT 2003

AWARD RECIPIENTS 2003

AFPC/AstraZeneca New Investigator Research Award

The AFPC Award Committee reviewed 3 applications to the 2003 AstraZeneca Award competition. The recipient is:

Jean-Christophe Leroux, Faculté de pharmacie, Université de Montréal

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

The AFPC Award Committee reviewed 2 applications to the 2003 BMS Award competition. The recipient is:

Simon Albon, Faculty of Pharmaceutical Sciences, UBC

AFPC/Janssen-Ortho Pharmaceutical Research Award

The AFPC Award Committee reviewed 3 applications to the 2003 Janssen-Ortho Award competition. The recipient is:

Edward E. Knaus, Faculty of Pharmacy, University of Alberta

Note: It has been pointed out that Dr. Knaus already received the award (1986). This award may be given to the same individual every ten years.

AFPC/GlaxoSmithKline Graduate Student Research Award

The AFPC Award Committee reviewed ***8*** applications to the 2003 AFPC/GSK Award competition. The recipient is:

Huy H. Dao, Faculté de pharmacie, Université de Montréal

Merck Frosst Postgraduate Pharmacy Fellowships

The AFPC Award Committee reviewed 5 applications to the 2003 Merck Frosst competition. The recipients are:

Julien Braun Award

Caroline Sirois, Faculté de Pharmacie, Université Laval

James E. Frosst Awards

Judith Balfour, Leslie Dan Faculty of Pharmacy, University of Toronto

Catherine Cheung, University of British Columbia

AFPC Special Service Award

Dr. David Hill

AFPC Honorary Member

Dr. Frank Abbott

CANADIAN FOUNDATION FOR PHARMACY STUDENT RESEARCH
POSTER AWARDS 2003

Dalhousie University

Angela Hatfield (achatfie@dal.ca**)**

Development of tools for critically appraising and assigning levels of evidence to herbal medicine literature

Memorial University of Newfoundland

Wei Yang (wyang@pharm.mun.ca**)**

Study of seal oil in reducing the nephrotoxity of cyclosporine a

Université de Montréal

Guylaine Lessard (lessardguylaine@hotmail.com**) et Valérie Paquet (**kasimodo69@hotmail.com**)**

IDENTIFICATION DES DÉTERMINANTS DE LA PRESCRIPTION DES β-BLOQUEURS AU CHUS CHEZ LES PATIENTS AYANT UN DIAGNOSTIC DE MPOC ET UNE HISTOIRE POSITIVE D'INFARCTUS DU MYOCARDE

University of Toronto

Patrick Ronaldson (ptronaldson@sympatico.ca**)**

Localization and Functional Expression of P-glycoprotein (P-gp) in Rat Astrocyte Cultures: Relevance to the Treatment of HIV-1 Infection in the Central Nervous System (CNS)

University of British Columbia

Anton Chau (antonchau@shaw.ca)

Analyzing the prevalence and outcomes of pharmaceutical industry sponsored studies involving clozapine, risperidone, or olanzapine

University of Alberta

Hai Wei (HWEI@pharmacy.ualberta.ca**)**

Predicting the oral absorption of a class ii drug, glibenclamide: development of strong in vitro/in vivo correlations using in vitro and in silico tools

Université Laval

Yannick Duguay (yannick.duguay@crchul.ulaval.ca**)**

Morphine glucuronide-to-morphine plasma ratios are affected by a novel polymorphism in the proximal promoter region of the ugt2b7 gene

University of Saskatchewan

Farah Hosseinian (farah.h@usask.ca

Antioxidant properties of flaxseed lignans and mammalian lignans derived from flaxseed

University of Manitoba

Mr. Vikram P. Sarveiya (vsarveiya@hotmail.com**)**

High-performance liquid chromatographic assay for common sunscreen agents: application to in vivo assessment of skin penetration and systemic absorption in human volunteers

AFPC/APOTEX P.A.C.E UNDERGRADUATE PHARMACY PRACTICE
SUMMER RESEARCH AWARD 2003

Université Laval

Olivier Drouin

Description de l'utilisation d'un protocole de thrombolyse et évalutation de son innocuité

Supervisors: Mrs. Anne Dionne (faculty) and Mrs. Elizabeth Bourassa (practitioner)

University of Manitoba

Diana Duncan

Standards of Practice Manual on Pharmaceutical Care: A Self Assessment Guide

Supervisors: Dr. Ruby Grymonpre (faculty); Nancy Remillard, Rich Charles, Nerissa Santos and Lai Au (practitioners)

University of Saskatchewan

Bonnie Gratton

Assessing teamwork and interdisciplinary collaboration in community pharmacy practice

Supervisors: Dr. Roy Dobson (faculty) Ron Mack (practitioner)

Université de Montréal

André Kayal

Evaluation of a Decision Aid Regarding Options for Lowering the Risk of Stroke and Coronary Heat Disease: a pilot study

Supervisors: L. Lalonde, S.A. Grover, A.M. O'Connor, E. Drake, P. Duguay

University of British Columbia

Zahra Sadikali

Testing of pictograms used in dispensing medicines

Supervisors: Dr. Rosemin Kassam (faculty/practitioner supervisor)

University of Toronto

Amy Seaden

Pharmacy Services in Ontario's Home Care Program: A Survey of Community Care Access Centres

Supervisors: Dr. Linda MacKeigan, (faculty) David Milovanovic (practitioner)

Dalhousie University

Nicole Sweeney

An evaluation of t-PA compared to TNK in the management of acute coronary syndromes – a retrospective review of patient outcomes and Cath Lab referrals.

Supervisors: Rita Caldwell (faculty) Danette Bechinor (practitioner)

Memorial University of Newfoundland and the University of Alberta did not have an award

2003 AFPC AWARD COMMITTEE

Chair:

Sylvie Marleau

Reviewers:

Zubin Austin, University of Toronto
Reina Bendayan, University of Toronto
Jean-Guy Besner, Université de Montréal
Frank Burczynski, University of Manitoba
Thérèse DiPaolo, Université Laval
Roy Dobson, University of Saskatchewan
Tannis Jurgens, Dalhousie
Sid Katz, UBC
Rebecca Law, Memorial
Hu Liu, Memorial University
Alan McIntosh, University of Manitoba
Fred Remillard, University of Saskatchewan
Monique Richer, Université Laval
Yvonne Sevchuk, University of Saskatchewan
Lili Wang, Memorial University
Kishor M. Wasan, UBC
Anne Marie Whelan, Dhalousie
Pollen K.F. Yeung, Dalhousie

I wish to express my gratefulness to all reviewers

Respectfully submitted,
May 26, 2003

Sylvie Marleau

BYLAWS COMMITTEE REPORT

There will be no revisions for this year.

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For next year, we need to make changes to the Honored Life Member criteria.

Criteria 1 in Awards Book reads:

> "On retirement or disablement, Honored Life Membership will be awarded to active members who have been members for 10 years including at least 5 consecutive years at the time of their retirement or disablement.
>
> (i.e. retired regular member)

Criteria 2 is for individuals who have made a major contribution to AFPC but are not eligible for to be regular academic members)

> (i.e. non-member but major contributor)

Suggested revision may combine the two; retiring member (and active non-member) who has made a major contribution to AFPC.

Respectfully submitted,

Fred Rémillard
Past President

AFPC 2003 Annual General Meeting

Communications Committee Report

Membership: Simon Albon, Chair (University of British Columbia)
Sheila Kelcher (University of Alberta)
Rita Caldwell (Dalhousie University)
Chantal Guillemette (Laval University; member until February 2003)
Rebecca Law (Memorial University of Newfoundland)
Jean Lefebvre (Laval University)

Committee Activities:

1) **AFPC Newsletter:**
The AFPC Communication Newsletter continues to be published three times per year (January, April, September). AFPC councilors in each Faculty provide newsletter submissions to Rebecca Law, the newsletter editor, for publication. On a rotating basis each Faculty is asked to provide a "Spotlight" for the newsletter highlighting specific activities within the Faculty. The newsletter is circulated to the membership by the Executive Director through e-mail and posted on the AFPC website (www.afpc.info). Recent AFPC Website User Statistics (see the attached Web Usage Statistics document for details) indicates that the AFPC Newsletter is being accessed regularly online. Rebecca continues to use the new format for newsletter submissions to streamline the editing process. These changes include:

1) Submission Formatting:
   - Submissions should be brief (no limit was set but councilors were asked to keep submissions to a reasonable length). Currently, Rebecca is able to fit most Faculty submissions into ½ to 1 page in length.
   - Submissions to be submitted in Word 95 or 97 using New Times Roman 11pt font.
   - Submissions should not be double- or 1.5-spaced and there should not be a space between any tiles and subsequent text. In particular, Format Paragraph Spacing should be set to "0pt" spacing before and after each paragraph. The Hard Return should be used to add a space between paragraphs. In addition, hanging indents should not be used.
2) Category Formatting:
   - New grants and grant renewals should be submitted as separate categories.
   - Titles of grants should be in quotes and italics.
   - No bolding of investigators names.
   - No listing of amounts received.
   - No listing of the duration of the grant.
3) Additional Categories:
   - Academic appointments, promotions, resignations or retirements.

- General faculty news (major programmatic, research, facility or other undertakings by the faculties)
- Individual faculty news [major awards and presentations only (not attendance at conferences and titles of paper/poster presentations), elections to offices in professional associations/societies, research accomplishments and other timely achievements].
- Opportunities (upcoming meetings, conferences, workshops etc.)
- Major visitors
- Education corner (teaching innovations)
- Research corner (new research developments)

NOTE: The Communications Committee would like to thank all submitters to the AFPC Newsletter for their efforts in adhering to the submission format and deadlines. This has allowed for timely turn-around times for the Newsletter to reach our membership. The Communications Committee would like to thank Rebecca for the outstanding job she continues to do as Editor of the AFPC Newsletter.

2) AFPC Website Re-design Project

The AFPC Website re-design project is on-going with the following activities to report:

- The AFPC Website has been functional since the May 2002 AFPC AGM in Winnipeg (www.afpc.info). Planetfish Design was contracted to maintain the site and has worked closely with the Executive Director to keep the site current. The discussion forum was replaced on the site with a Photo Gallery section. Recent AFPC Website User Statistics (see the attached Web Usage Statistics document for details) indicates that the site receives significant user traffic.
- Phase I of the redesign project was completed except for completion of a small amount of descriptive text for the site.
- Phase II planning for the Website Redesign Project was completed and a strategic brief, including budget, created to guide the next steps in the redesign project. The main areas of focus for Phase II include adding additional information about each pharmacy school, developing on-line conference abstract acceptance and review and creation of a mirror site in french (see the attached AFP-351 Strategic Brief for Phase II details). Depending on the resources available decisions will be made as to the focus of Phase II developments. External funding for Phase II is being sought.
- The costs to date for Phase I of the re-design project have been compiled and include development costs, website URL registration, web hosting costs and on-going maintenance costs (see the attached AFPC Phase I Costs Annual Report document for details). This information may be of importance for budget considerations for Phase II developments.

3) AFPC Logo Redesign Project

Planetfish Design was contracted for the project. The project was started January 2003 and completed May 2003. The new logo will be presented at the AGM in Montreal. A Graphics Standards Manual was prepared detailing how the logo should be used (see attached Graphics Standards Manual for details).

Respectfully submitted
Simon P. Albon

Association of Faculties of Pharmacy of Canada

Education Committee Report
May 2003

1. Report from Dr. David Fielding regarding Program Evaluation and Outcomes Assessment

At last year's Annual AFPC meeting, Dr. David Fielding facilitated a workshop for participants interested in Program Evaluation and Outcomes Assessment. Feedback from this workshop was enthusiastic, and Dr. Fielding agreed to summarize results and provide AFPC members with a consolidated document. The Report of the UBC committee, headed by David Fielding is attached to this report. The Committee thanks Dr. Fielding and the UBC committee for their continuing efforts on behalf of AFPC.

2. Study of Academic Honesty and Dishonesty in Canadian Pharmacy

Preliminary results from this study (undertaken at the University of Toronto) are complete and will be presented at this year's conference. Based on feedback from the mid-year meeting, there appears to be interest in expanding this study nationally; as a result, Dr. Zubin Austin from the University of Toronto is working with Emily Raynen and Stephanie Gracie (CIHR-sponsored summer research students) to develop individual research ethics approval submissions for each university interested in participating in this study. In order to proceed, interested schools should:

- Identify a co-investigator who will be a primary point-of-contact for this study. Ideally, co-investigators should be involved in senior-level pharmacy practice courses and laboratories, or structured-practical-experience programs. Advanced research or academic credentials, while helpful, are not essential.
- Commit to photocopying, distributing, collecting, and returning to the University of Toronto an 11-page survey to all senior level undergraduate pharmacy students and pharmacist-teaching assistants involved in pharmacy practice lectures and labs

- Submission of ethics protocol submissions to each university will be co-ordinated by the University of Toronto, although facilitation by co-investigators will be required. Data collation and analysis will be undertaken by the University of Toronto, and co-investigators will be provided with results and analysis.

Faculty of Pharmaceutical Sciences
The University of British Columbia

Proposed Comprehensive Program Evaluation Process for the Undergraduate B.Sc. (Pharm.) Educational Program

May 2003

NOTE: This is a draft version.

A committee composed of the following members of our Faculty developed the process outlined in this document.

Undergraduate Program Evaluation Sub-committee

Mr. Simon Albon, Faculty
Dr. Gail Bellward, Faculty
Dr. David Fielding, Faculty (Chair)
Dr. Rosemin Kassam, Faculty
Amanda Lai, Student
Dr. Kath MacLeod, Faculty
Abbas Merali, Student
Dr. James McCormack, Faculty
Dr. Keith McErlane, Faculty
Dr. John McNeill, Faculty
Ms. Marion Pearson, Faculty
Dr. Ingrid Price, Faculty
Bryce Wong, Student
Ms. Marg. Yee, Faculty

Caveat:
"Not everything that can be counted counts and not everything that counts can be counted."
Albert Einstein

Comprehensive Process for Program Evaluation

Faculty's Mandate: The Faculty's primary mandate is "to maximize the health and well being of the citizens of British Columbia and beyond" through service, education and research. To measure success at achieving this mandate, our Faculty is implementing a comprehensive program evaluation process. This proposed approach is a modification of Robert Stake's "Countenance Model" of program evaluation (Stake, 1967).

Creating a Culture of Evaluation: It is our hope that the implementation of this process will create a "culture of evaluation" in which faculty, staff and students routinely gather evaluation data, as part of their day-to-day activities. Both program-specific and general evaluation policies and procedures are essential to collect data in a focused and efficient manner. The application of these policies and procedures to each of the Faculty's three responsibility areas (education, research and service) will result in discrete data sets summarizing inputs, processes and outcomes. These data will provide the evidence to guide judgments of quality for each responsibility area and, when taken collectively, will provide a means to direct continuous overall Faculty improvement.

The Process: The program evaluation process is summarized in **Appendix B**. At present, the educational program of the Faculty can be sub-divided into entry-to-practice (B.Sc. (Pharm.)), advanced-clinical practitioner (Pharm. D.), continuing professional (licensed practitioners) and graduate education (M.Sc., & Ph.D.). For each of these, an evaluation sub-committee has or is being established.

The undergraduate education sub-committee (with representatives from all Divisions, relevant committees and the undergraduate student society) has been meeting regularly since December 2002, and the following outlines the evaluation process under development. It is envisaged that this model will be adapted to the three other areas of educational responsibility (Pharm.D., CPE, and Graduate).

Step 1: ***Program Elements***
Program elements (important program activities/ functions that have an impact on program quality and program outcomes, e.g., student recruitment, student selection, instruction, or, would indicate program quality, e.g., program outputs and outcomes) are identified.

Step 2: ***Program Element's Objective(s)***
For each program element, specific objectives (desired outcomes) are identified. Why is this element important to the undergraduate program? How would it influence/ indicate quality?

Step 3: ***What Evidence?***

What data should be collected to determine if this program's element objective has been achieved and how would these data indicate quality?

Step 4: ***When, How, How Often and by Whom?***
When, how and how often should this evidence be gathered and by whom? This information will be used to provide guidance and to serve as the basis for development of necessary policies, procedures and data collection templates. To the greatest extent possible, the program evaluation data gathering would be an on-going process and integrated into daily routines/practices and use existing sources.

Step 5: ***Gather The Evidence***
In fulfilling every program activity/function, evaluation data are collected and recorded.

Step 6: ***Compare Results and Make Judgment***
Apply specific standards, criteria or expectations set for each program element to make a judgment as to whether the intent/objective of this program element was achieved. The standards, criteria or expectations could be: national standards set by AFPC or CCAPP; informal but generally accepted targets used by all Faculties of Pharmacy in Canada; or internal expectations of an individual Faculty.

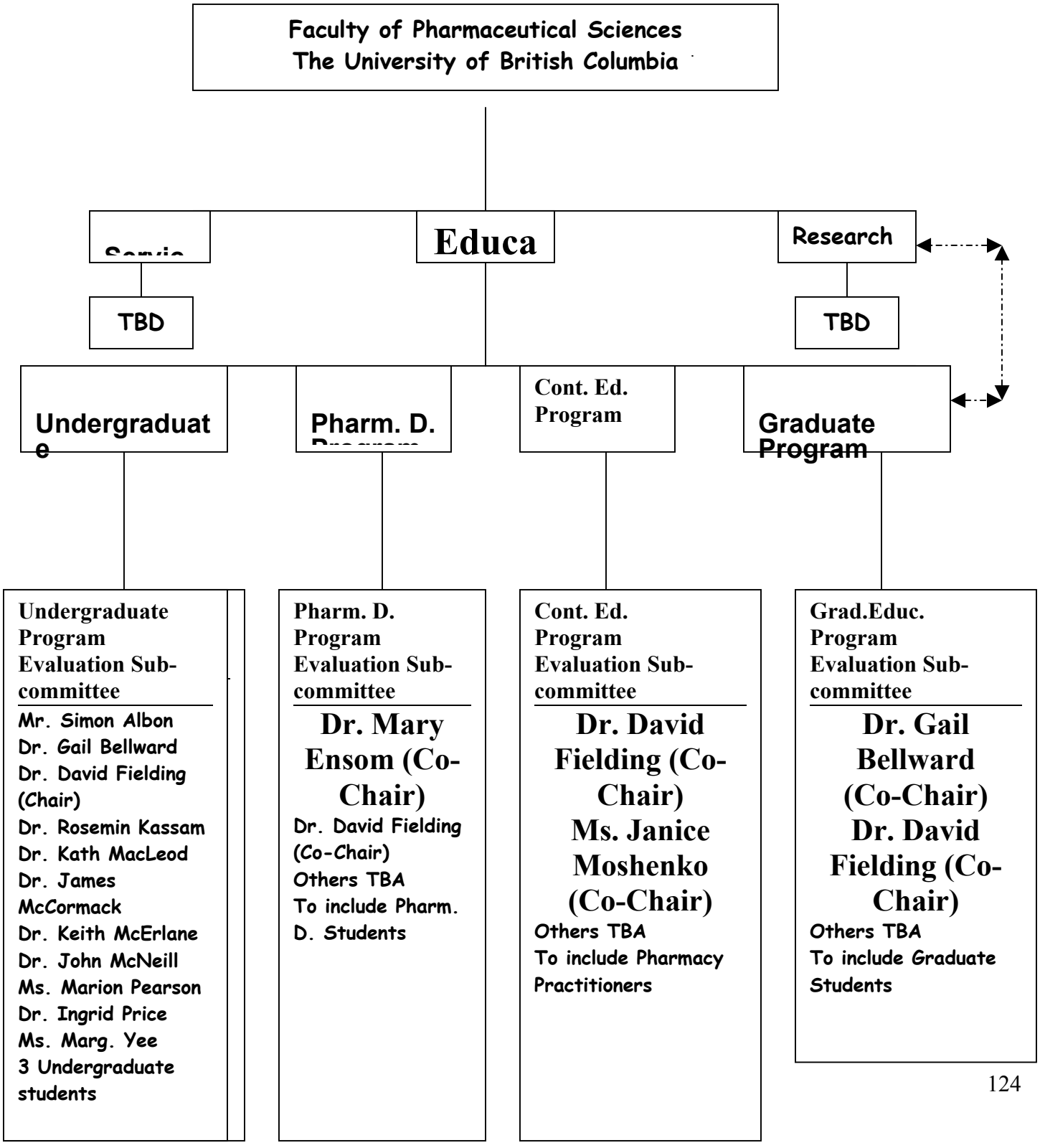
Step 7: ***Unintended Consequences***
Record and consider the implications for program quality of all unintended consequences (good and bad) resulting from the implementation of specific objectives set for a program element. For the most part, these will only become evident when comparing what has occurred with what was intended.

Step 8: ***Recommend Program Refinements***
The goal of program evaluation is program improvement. As a result of the program evaluation process, what changes are necessary to enhance the competence (quality) of our B.Sc. (Pharm.) graduates?

Appendices C to N outline the suggested program elements for the undergraduate program. (Although every attempt has been made to make this as comprehensive as possible, other important elements may need to be added.) For each, specific objectives are set and the "what, how, when, where and by whom" of data collection are suggested. When reviewed collectively, such data will permit an evaluation of the overall undergraduate program and provide direction for continuous program refinement and growth.

Appendix O is a representation of the Committee's view that, to the greatest extent possible, program evaluation items should be "embedded" into routine Faculty activities.

Appendix A:
Overview of Faculty Program Evaluation



Appendix B: Program Evaluation Process

Evidence → **Judgment**

Enter ↓ **Practice**

Undergraduate Program

Evaluation Criteria / Program Elements	Objectives; Desired outcomes	Evidence to Gather	Who; When; How	Evidence Gathered	Standards; Criteria; Expectations	Judgment	Un-Intended consequences (+ / -)
Student Recruitment							
Student Selection/admission							
Student Orientation							
Student Services/support							
Learning Environment/ Infrastructure							
Faculty							
Curriculum							
Instruction							
Instructional Technology							
Learning Assessment							
Course Evaluation							
SPEP							
Outputs							
Outcomes							

Appendix C

Program Element: **Student Recruitment**
What is/are the objective(s) or desired outcome(s) of this program element? 1. **To ensure awareness by career counselors in all BC high schools/ colleges and universities of the various educational opportunities (and corresponding career options) provided by the Faculty** 2. **To increase the proportion of highly qualified applicants (e.g., motivated, capable, pharmacy-wise, mature, inter-personally competent) to the undergraduate program** 3. **To increase the representation in our applicant pool of groups identified for special recruitment attention (e.g., rural or first-nations students)**
How would this element influence or indicate quality? **Quality "raw materials" provide increased likelihood of a quality, finished product** **It is assumed that the more geographically diverse the applicant pool, the greater the likelihood of graduates returning to communities throughout BC**
What evidence would suggest that this program objective/outcome is achieved? **Counselor's knowledge of Faculty's entrance requirements, programs and career options** **Applicant's knowledge of programs and career options** **Applicant's characteristics relative to Faculty's selection criteria** **Select demographic data**

How and where should that evidence be gathered? **Survey of high school, college and university career counselors (Obj. # 1)** **Faculty records (Obj.#'s 2 & 3)** **Interview applicants (Obj.# 1) How did they find out about the Faculty and its programs? Was the information accurate?**
When and how often would that evidence be gathered? **Ongoing**
Who should gather that evidence? **Associate Dean Undergraduate Affairs**
Are there any **unintended consequences**? **Accepting more highly qualified students may mean more go onto medicine, dentistry, etc., rather than community pharmacy** **Those selected may not fulfill any of our needs**
What **standards, criteria, expectations or other program examples** could be used to assist in the judgment of quality? **Needs discussion/development by Faculty**

Appendix D

Program Element: **Student Selection/Admission Process and Procedures**
What is/are the objective(s) or desired outcome(s) of this program element? **To select those students from the applicant pool most compatible with the undergraduate program objectives and educational outcomes**
How would this element influence or indicate quality? **The more those admitted have the pre-requisite knowledge, skills, attitudes and commitment to the Faculty and the profession, the greater the probability of an individual's success prior to and after graduation**
What evidence would suggest that this program element's objective/ outcome is achieved? **For each cohort:** **Educational and demographic characteristic of all applicants** **Academic performance of all admitted students** **Graduation numbers** **Career choices and persistence**
Where and how would that evidence be gathered? **Application records** **Faculty academic records** **College/ alumni records** **CPBC records**
When and how often would that evidence be gathered? **Yearly – ongoing**
Who should gather that evidence? **Undergraduate student affairs office**

Are there any **unintended consequences?** **Unrealistic admission criteria may increase the job dissatisfaction after graduation due to the incongruity between theory and practice** **Our graduates may not be compatible with the expectations of employers**
What **standards, criteria, expectations or other program examples** could be used to assist in the judgment of quality? **Program objectives need to be set by our Faculty**

Appendix E

Program Element: **Student Orientation to Faculty**
What is/are the objective(s) or desired outcome(s) of this program element? **To begin the process of incorporating new students into the "culture" of the UBC Faculty of Pharmaceutical Sciences** **To provide entering students with a general overview of the program (content, processes and procedures)** **To provide entering students with a detailed outline of the Faculty's standards for student conduct (academic, professional, behavioural)** **To provide entering students with an overview of student support services within the Faculty and at the University**
How would this element influence or indicate quality? **Informed students are happier, involved and access resources in an appropriate and timely manner**
What evidence would suggest that this program element's objective/ outcome is achieved? **Increased number of students involved in undergraduate student and Faculty activities (committees, etc.,) More and earlier involvement.** **Students have accurate information about the program requirements and expectations**

Fewer "disciplinary" matters/fewer faculty & student complaints

Students self-refer in a timely manner to appropriate individuals/ organizations when seeking information or support services

How and where should that evidence be gathered?

Academic advisors and Faculty Mentors
Monitor student involvement in Faculty and student affairs.
Student/faculty surveys
Data/information from student support services internal external to Faculty

Where would that evidence be gathered?

Faculty/ university records

When often would that evidence be gathered?

Ongoing

Who should gather that evidence?

Undergraduate student affairs

Are there any **unintended consequences**?

An effective student orientation program may result in individuals leaving the program upon realizing that this program is not for them Space lost for individual more compatible to the program

What **standards, criteria, expectations or other program examples** could be used to assist in the judgment of quality?

More students applying for activity awards, as well as the SSRP and Rx & D studentships and being nominated and running for leadership positions
Fewer disciplinary problems
AFPC/ CCAPP/ ACPE expectations for student orientation activities?

Appendix F

Program Element: **Student Services/Support**
What is/are the objective(s) or desired outcome(s) of this program element? **Students are aware of and have access to accurate, timely academic advising and other support services**
How would this element influence or indicate quality? **Students receiving appropriate support services will be academically successful**
What evidence would suggest that this program element's objective/ outcome is achieved? **Students make appropriate use of academic advising services** **Students receive accurate academic advice** **Students' registration problems are solved in a timely manner** **Students receive appropriate referral to other services (e.g. health, counselling)** **Advising activities are documented in students' files** **Students successfully complete the program without untoward personal or academic incidents**
How and where should that evidence be gathered? **Survey of student, faculty, staff, and academic advisor awareness, activity and opinion** **Records of usage/opinion/satisfaction** **Documentation of faculty and staff advisory activities**
When and how often would that evidence be gathered? ***Ongoing***

Who should gather that evidence? **Undergraduate student affairs**
Are there any **unintended consequences**?
Time required gathering data
Students do not follow advice
What **standards, criteria, expectations or other program examples** could be used to assist in the judgment of quality? **Comparison with other units at UBC and other Canadian pharmacy programs**

Appendix G

Program Element: Learning environment and infrastructure
What is/are the objective(s) or desired outcome(s) of this program element? To ensure that the appropriate amount and type of space (on/off campus), instructional equipment, instructional material and faculty and support staff are available for quality instruction in the pharmacy undergraduate program
How would this element influence or indicate quality? Provision of the above would help ensure that the teaching and learning environment for our students is optimal
What evidence would suggest that this program element's objective/ outcome is achieved? Faculty and student satisfaction with instructional resources, learning environment, SPEP sites Available space, etc. permits flexibility in organizing students for instruction and how the instruction is delivered
How should that evidence be gathered? Student, faculty surveys Comparisons with other programs/universities
Where would that evidence be gathered? In classes Faculty records *Practice sites*
When and how often would that evidence be gathered? Ongoing – at the end of an exercise, class, term

Who should gather that evidence? **Individual Instructors/appropriate committees/Associate Dean for Undergraduate Affairs**
Are there any **unintended consequences?** **??**
What standards, criteria, expectations or other program examples could be used to assist in the judgment of quality? **Comparison of tests scores before and after improvements/degradation in infrastructure** **Comparisons with other academic units** **New faculty/students views on whether expectations were met**

Appendix H

Program Element: Faculty
What is/are the objective(s) or desired outcome(s) of this program element? Recruit, retain and develop outstanding university teachers and mentors
How would this element influence or indicate quality? Quality faculty will provide quality instruction
What evidence would suggest that this program element's objective/ outcome is achieved? Student achievement scores Teaching qualifications of new hires Evidence of teaching quality, awards, participation in ongoing professional development related to teaching, scholarly activity in teaching and learning
How should that evidence be gathered? Student evaluations of instruction Peer reviews of instruction External reviews
Where would that evidence be gathered? Faculty records, committee records CV Teaching dossier
When and how often would that evidence be gathered? Ongoing -

Who should gather that evidence? **Faculty, appropriate committees, Dean's office**
Are there any **unintended consequences?** **Not immediately apparent**
What **standards, criteria, expectations or other program examples** could be used to assist in the judgment of quality? **Need to be developed**

Appendix I

Program Element: **Curriculum**
What is/are the objective(s) or desired outcome(s) of this program element? **Design and implement curriculum to meet the general and specific abilities-based outcomes required for contemporary and emerging practice**
How would this element influence or indicate quality? **A well designed curriculum will meet the general and specific ability-based outcomes**
What evidence would suggest that this program element's objective/ outcome is achieved? **Course outlines, objectives, content and learning assessment methods are reflective of the general and specific abilities-based outcomes for B.Sc. (Pharm.) degree** **Student performance on outcome-based assessments at various levels (see below)**
How should that evidence be gathered? **Review course outlines, objectives, content and assessments methods** **Surveys of students**
Where and how would that evidence be gathered? **Curriculum Committee** **Individual instructors**

Results of student assessments (class level – formative assessment; course level – summative assessment; program level – global assessment; institutional level – licensing examinations)

Who should gather that evidence? **Faculty** **Curriculum Committee** **(Curriculum evaluation sub-committee)**
Are there any **unintended consequences**? **Not immediately apparent**
What **standards, criteria, expectations or other program examples** could be used to assist in the judgment of quality? **Faculty, AFPC, CCAPP, PEBC CPBC and NAPRA**

Appendix J

Program Element: **Instruction**
What is/are the objective(s) or desired outcome(s) of this program element? **Within each course, instructional strategies are compatible with curricular content, desired learning outcomes and student needs**
How would this element influence or indicate quality? **Students achieve and retain desired knowledge, skills and attitudes in each course** **Graduates enter practice, graduate studies or residencies with the pre-requisite knowledge, skills and attitudes**
What evidence would suggest that this program element's objective/outcome is achieved? **Desired knowledge, skills and attitudes (learning outcomes) are articulated in each course and throughout the curriculum** **Instructional strategies are congruent with desired knowledge, skills and attitudes** **Student input is sought in course/curriculum design** **Learning-centred educational strategies are used in every course** **Employers, graduate programs, and residency coordinators are satisfied with KSA of students** **Success from licensing examinations**

UBC Graduates are preferentially recruited
How should that evidence be gathered? **Review of objectives and instructional strategies for each course** **Survey of student opinion** **PEBC results** **Employer/supervisor surveys**

Where would that evidence be gathered?

Course evaluations (selected questions?)

Teaching evaluations (selected questions?)

Course syllabi (for objectives and educational strategies)

Peer reviews

Student membership on appropriate faculty committees (e.g. Curriculum, Teaching Evaluation & Development, etc.)

Surveys of employers, graduate programs, and residency coordinators

When and how often would that evidence be gathered?

Ongoing

Who should gather that evidence?

Instructors, Teaching Evaluation and Development Committee, Course Evaluation Committee, Course Coordinator, Curriculum committee

Are there any **unintended consequences**?

Time required gathering data

Students' wants/needs are not congruent with curricular requirements.

What **standards, criteria, expectations or other program examples** could be used to assist in the judgment of quality?

Faculty, University, CCAPP

Appendix L

Program Element: **Instructional Technology: Teaching, learning and Infrastructure Support**
What is/are the objective(s) or desired outcome(s) of this program element? **To facilitate achievement of the undergraduate program's educational outcomes, appropriate instructional technologies are available and applied**
How would this element influence or indicate quality? **When appropriately available and applied, IT would enhance instruction,** **facilitate student learning, provide access to digital resource material,** **support integration disciplines, support active learning and improve student and faculty computer literacy**
What evidence would suggest that this program element's objective/outcome is achieved? **It is available and used in courses to support teaching practice and student learning** **When appropriate, undergraduate courses have a website presence (i.e., WebCT)** **The Faculty has a GPOF - funded IT Centre that provides technical (hardware and software), developmental (creating the IT), training and "just-in-time" or "help desk" support for faculty and students** **Faculty and student survey results (satisfaction/perceptions) on the impact of IT on teaching practice and student learning (addressing the specific aims of IT use identified in the element objective)** **User tracking for website and IT Centre use by faculty and students**

Where would that evidence be gathered? **From faculty and students - Course surveys and questionnaires (pre- and post surveys to assess/evaluate IT use within courses and across curriculum and to assess/evaluate faculty/student user perceptions)** **From course websites -Website user tracking tools** **From the Faculty IT Centre - IT Centre log book or database**
When and how often would that evidence be gathered? **Ongoing collection of data using a central integrated database system that would automatically prompt faculty, students and the Faculty IT Centre at the appropriate times to complete course/user perception surveys** **Data gathering (evidence) should be collected in dynamic database format (e.g., Cold Fusion) which would lend itself to efficiencies of data collection as well as long term tracking and comparisons**
Who should gather that evidence? **IT Committee (database could be administered through the Faculty IT Centre), Course Evaluation Committee, Teaching Evaluation and Development Committee**
Are there any **unintended consequences**? **Time and resources required to create the IT could hamper other Faculty initiatives** **Time required to collect data, create surveys and setting-up database**

Opportunity for research activities related to the data collected (tracking long term use of technology on teaching practice and student learning)

What **standards, criteria, expectations or other program examples** could be used to assist in the judgment of quality?

CCAPP standards

Comparison with other schools across Canada (perhaps USA)

Mission statements of UBC & Faculty
Outcomes of instruction

Appendix L

Program Element: **Learning Assessment**
What is/are the objective(s) or desired outcome(s) of this program element? **Formative and summative learning assessments are reflective of stated course learning objectives and curricular outcomes**
How would this element influence or indicate quality? **Students who are able to demonstrate acceptable performance in desired knowledge, skills and attitudes (defined by course objectives and ability-based outcomes) will be successful on licensing exams and in practice**
What evidence would suggest that this program element's objective/outcome is achieved? **All courses have clearly stated, learning-centred objectives** **All ability-based outcomes are assessed in each year in the program Assessment tools used are appropriate to the learning objective(s)** **Multiple assessment opportunities are provided** **Students receive timely, constructive feedback on performance**
How should that evidence gathered? **Review of objectives and assessment strategies for each course**
Where would that evidence be gathered?

Course syllabi and assessment instruments
When and how often would that evidence be gathered? **Ongoing**
Who should gather that evidence? **Curriculum Committee, Teaching Evaluation and Development Committee and the Course Evaluation Committee**
Are there any **unintended consequences**? **Time required gathering data** **Lack of faculty ability (skill, time, resources) to articulate and assess for objectives??**
What **standards, criteria, expectations or other program examples** could be used to assist in the judgment of quality? **Faculty's ability-based outcomes**

Appendix M

Program Element: **Course Evaluations**
What is/are the objective(s) or desired outcome(s) of this program element? **Courses are regularly evaluated to ensure content; their implementation and resources reflect desired course and curricular outcomes**
How would this element influence or indicate quality? **Courses are the "delivery system" for the curriculum. When the right content in the right amount is provided at the right time to the right student there will be optimal educational outcomes**
What evidence would suggest that this program element's objective/ outcome is achieved? **Each course is directly related to the Faculty's mission** **Course content is systematically planned, sequenced and delivered** **Courses include appropriate general and specific ability-based outcomes** **Specific learning objectives are articulated** **Formative and summative assessments of learning are performed in a timely and an appropriate fashion**
How should that evidence gathered? **Each course should have a detailed course outline and those course outlines should be monitored by the Course Evaluation Committee/ Curriculum Committee**

Each course should be evaluated by the students

Course outlines, records of the Curriculum and Course Evaluation Committees

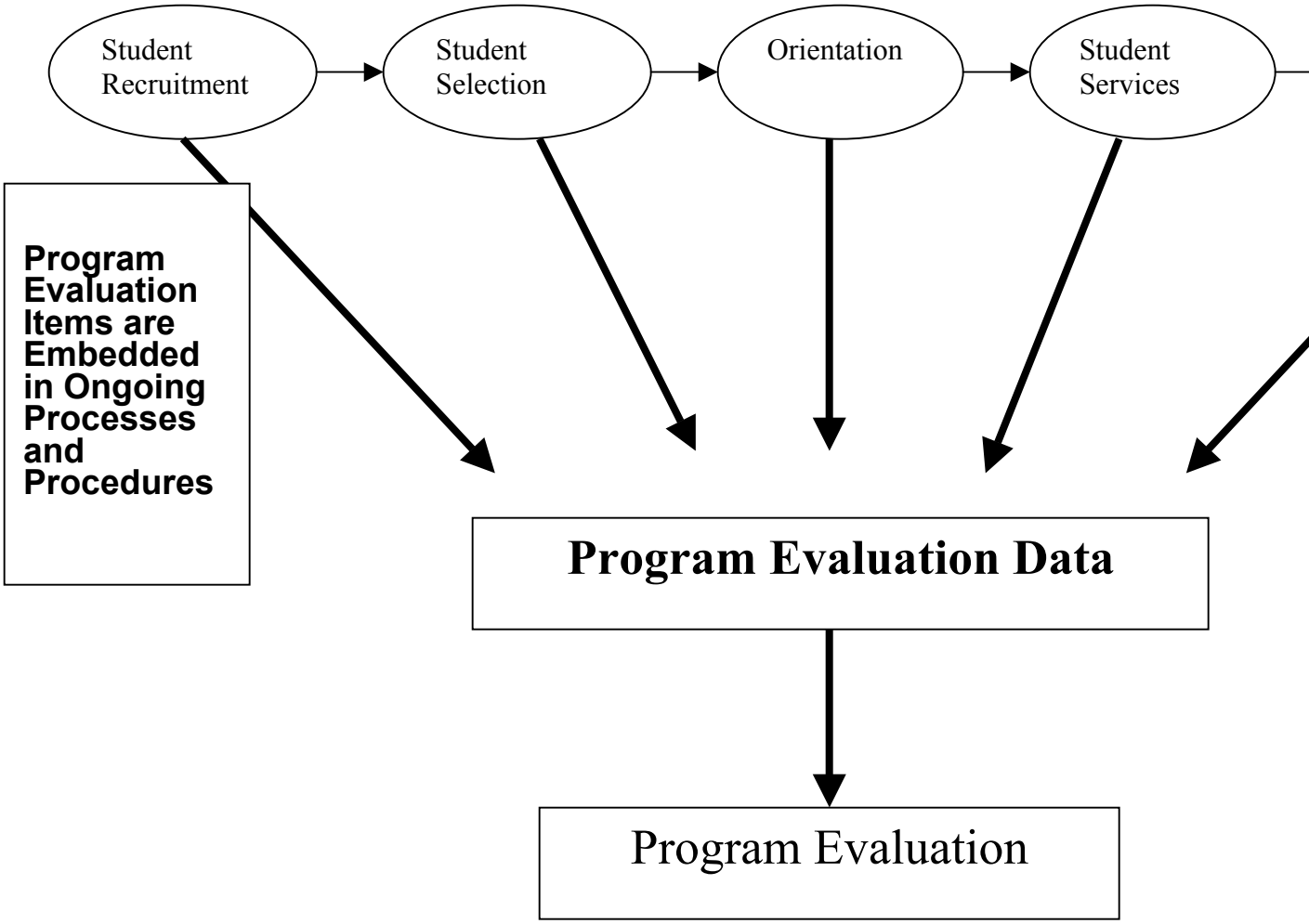
When and how often would that evidence be gathered? **Ongoing** **There should be regular (yearly) submissions to the Course Evaluation Committee and the Curriculum Committee. Students should evaluate each course once per year** **Peers within the same Division should evaluate each course once per year**
Who should gather that evidence? **Instructors** **Curriculum and Course Evaluation Committees**
Are there any **unintended consequences**? **Faculty backlash**
What **standards, criteria, expectations or other program examples** could be used to assist in the judgment of quality? **To be developed**

Appendix N

Program Element: **Structured Practice Educational Program**
What is/are the objective(s) or desired outcome(s) of this program element? **To provide undergraduate pharmacy students with clinical clerkship experiences that facilitate the progression from "novice" to competent practice of comprehensive pharmaceutical care in a variety of practice settings**
How would this element influence or indicate quality? **Clerkship experiences reinforce knowledge and refine skills essential to practice of comprehensive pharmaceutical care** **Clerkships provide opportunities for students to demonstrate their competency gained in our abilities-based curriculum in solving drug-related problems (DRP's)**
What evidence would suggest that this program element's objective/ outcome is achieved? **Depending upon their stage in the Faculty's educational program, students would be able to:** **Apply technical aspects of pharmacy practice** **Assess and address DRP related to "basic" pharmaceutical care** **Initiate and provide comprehensive pharmaceutical care for patients with single or multiple (2 – 3) chronic diseases** **Identify and resolve all relevant DRP's**
How should that evidence be gathered? **Faculty, preceptor, patient and student assessment of performance**
Where would that evidence be gathered? **Course records, clerkship sites, pharmacy practice laboratories,**

cases in pharmaceutical sciences (CAPS)
When and how often would that evidence be gathered? **Clerkship sites: initial, ongoing, midpoint and end-of-rotation** **Faculty: At appropriate points throughout curriculum**
Who should gather that evidence? **SPEP personnel, preceptors, Faculty, students**
Are there any **unintended consequences**? **Theory practice - disconnect. The opportunities for students to apply advanced pharmaceutical care in practice may be less than desired** **Practitioners may withdraw from SPEP if they perceive it as being too intensive** **SPEP Students may play a larger role than expected in advancing practice**
What **standards, criteria, expectations or other program examples** could be used to assist in the judgment of quality? **Needs to be developed/discussed**

Appendix O - Undergraduate Program Evaluation Embedding Process



Association of Faculties of Pharmacy of Canada
Association des Facultés de Pharmacie du Canada

Annual General Meeting
Montréal - May 2003

NOMINATIONS COMMITTEE REPORT

The Nominations Committee members included David Fielding (UBC), Lavern Vercaigne (Manitoba), Lesley Lavack (Toronto) and Fred Rémillard (Saskatchewan).

Calls for nominations were announced to each eligible AFPC member by e-mail. There was also a notice in the January 2003 AFPC Newsletter.

The following nominations have been received:

Ms. Susan Mansour for President

Dr. Sylvie Marleau for President-Elect.

New Council Members

I am pleased to announce that Roy Dobson will be the new council member for the University of Saskatchewan and Anne Marie Whelan will be the new representative for Dalhousie University for the term 2003 - 2006. The new council member for l'Université de Montréal is Emma Ferriera.

Respectfully submitted,

Fred Rémillard, Chair

AFPC RESEARCH COMMITTEE REPORT
MAY 2003

Meeting with Dr Vercaigne regarding the Research Committee:

Issues to address from May 2002 AFPC AGM:

- Determine and develop a new terms of reference of the research committee
- Reflect the new terms of reference back onto the mission statement for AFPC
- What can the research committee do to address the minimal attendance at the Awards Presentation speeches.
- Address ways to enhance clinical research submissions for the available awards.

Awards Requiring Speaker Presentations:
AstraZeneca New Investigator Research Award:
Bristol-Myers Squibb National Award for Excellence in Education
Janssen-Ortho Pharmaceutical Research Award (Long term career research award)
AFPC/ADPC Graduate Student Research Award

Issue #1: Concern over reduced attendance at the awards presentation was raised at the May 2000 AFPC meeting. This may be due to a diverse range of conducted research that dealt with too many specific details of their own inherent research that was not applicable to most attendees. This was especially true for the New Investigators Award, the Janssen-Ortho Pharmaceutical Research Award and the AFPC/ADPC Graduate Student Research Award. The speeches for the Bristol-Myers Squibb award were applicable to most attendees and well received via the higher attendance.

Suggestions:

- Establish or highlight guidelines for Speakers that emphasize relevance to the projected audience not in that specialty area.
- Eliminate the speeches from the award winners and just call them up to receive the cash award presentation. The cash award could then be used by the recipient as they desire (**Issue:** no chance of winners to present research).

Issue #2: Establish a direction of the AFPC Research Committee. AFPC is an organization that is dedicated to recognize outstanding research in Canadian schools of pharmacy across Canada.

Suggestions:

- Conduct data collection on the type of research, funding sources of research and type of post-graduate students etc. on all Faculties across Canada. This may be redundant as the

Dean's already collect this information for which they draw conclusions from. As a result, what would AFPC expect to gain from this labor-intensive data collection?

- More preferable idea is to be involved in recognition and promotion of all the award winners through writing a brief article (by the research committee) that could be submitted to a journal AJPE, Pharmacy Practice, CSPS etc (~$300/journal article/year: cost to AFPC) complete with their picture and story. In this way, AFPC would promote their research to other stakeholders. If this could be done in conjunction with establishing guidelines for speaking of the award recipients this would be an optimal favored choice.

Issue#3: Emphasize Clinical Research.

Suggestions:

- Currently, submission for both clinical and basic science research are accepted for the AFPC awards competitions. Due to the generic titles of most of the awards mentioned above, it is possible for clinical research projects to capture any of the above mentioned awards. However, most clinical research submissions would probably go to CSHP or CCCP that deals specifically with clinical research. As a result, AFPC is doing its best at welcoming all types of research submissions despite being secondary to CSHP & CCCP. Henceforth, the Research Committee may need extra emphasis on promoting clinical research submissions for the awards.

Research Committee Summary Suggestions:

- Establish guidelines for award winner speaker presentations in an attempt to improve attendance at the awards presentation segment of the program. If this fails, then possibly just calling up the award winners for a photo giving them an unrestricted cash award.
- Recognize and Promote AFPC award recipients via brief editorial articles submitted to various journals. These editorials would be written by the AFPC Research Committee.
- Enhance promotion of clinical research submissions as well as basic science submissions, recognizing that clinical submissions may be reduced due to other clinical research forums such as those held by CSHP or CCCP. The important point to note is that a clinical research project could be awarded any of the awards, due to the generic titles of each award. The AFPC awards are not restricted only to basic science research. There is no need at present to establish a independent clinical award at this time.
- Ensure that the above suggestions for consideration by AFPC at the next midyear meeting match Mission Statements outlined for AFPC.

Association of Faculties of Pharmacy of Canada
Association des Facultés de Pharmacie du Canada

Annual General Meeting
Montréal - May 2003

TASK FORCE ON EXPERIENTIAL EDUCATION REPORT

At the last Mid-Year Council meeting (February 9-10, 2003), it was suggested that the Task Force consider obtaining the services of a consultant to facilitate the mandate of the committee. I contacted Donna Wheeler-Usher from Halifax on several occasions to discuss the purpose of the Task Force and her potential involvement as a facilitator. Donna expressed an interest in the proposal but cautioned me that she had several priority projects needing completion and that she would not be available until May. The next step was to prepare an agenda with timelines and provide an estimate for her services. This was completed.

The preliminary agenda was to start with a reviewing, organizing and categorizing all the issues identified by the Task Force by way of a teleconference in May of this year. Task Force members would then be assigned some specific issues to research and develop with a completion date by early summer. A draft document would be prepared by late fall and a Task Force meeting would take place in early spring (2004) to make final revisions. A final document would be ready for the 2004 AFPC Annual Conference.

The estimated consulting fee however would not leave much in our budget for a face-to-face Task Force meeting. This issue was discussed with Donna but she emphasized the importance of this final meeting. Although the consulting fee may be an over-estimate other options included appointing representatives from the Task Force committee or hold the meeting with a concurrent conference to minimize travel expense claims from our budget. Discussions with the Executive concluded that we should proceed with the Task Force with the help of a consultant.

Respectfully submitted,

Fred Rémillard

HRDC Liaison Report to AFPC Annual General Meeting

May 29-June 1/03, Montreal, Quebec

1. **There have been no further Steering Committee Meetings since the last update. The final details of the official submission to HRDC are being completed by members of the management council. There is significant optimism that the study will move forward. AFPC members are encouraged to participate when the study is officially approved.**

2. **The next Steering Council Meeting is scheduled for Sept 15 and 16th. I will make the arrangements to attend that meeting.**

Respectfully submitted,

Lavern M. Vercaigne, Pharm.D.

Report of AFPC Representative to the Pharmacy Technician Working Group

May, 2003

The Committee met on November 26th, to review the draft Competency document. Competencies B and D (see below) were all that the Pharmacy Technician Working Group had time to address. The changes were then forwarded to the Competency Working Group for consideration at their December 8th meeting. The product of their meeting, is to be considered by the Pharmacy Technician Working Group in the near future.

Please note that the following is just a Synopsis, there are competency elements under each subsection of each of the competency units.

Synopsis of Competencies and Their Related Competency Units

A. **Practice in a Professional Manner within a Legal and Ethical Framework**
A1 Comply with legal requirements; demonstrate professional integrity; and act ethically

B. **Receive A Prescription**
B1 Receive a Prescription from a patient or patient=s agent or a request from a patient to renew a prescription
B2 Receive a new or repeat prescription from a healthcare provider
B3 Transfer/copy a prescription, in compliance with relevant legislation and established policies and procedures

C. **Enter a Prescription**
C1 Enter the prescription as part of the processes used to prepare a pharmaceutical product for release and to keep records.

D. **Prepare a Pharmaceutical Product for Release, in Collaboration with the Pharmacist**
D1 Check that the pharmacist has had the opportunity to review the prescription and patient profile
D2 Prepare/compound a pharmaceutical product for release, in collaboration with the pharmacist
D3 Verify the accuracy and completeness of a pharmaceutical product prepared for release
D4 Collaborate in the release of the pharmaceutical product to the correct patient or the patient's agent

E. **Perform Distributive and Quality Assurance Functions to Ensure that the Patient Receives Quality Pharmaceutical Products**
E1 Participate in distributive and quality assurance functions.

F. **Communicate with Patients, Pharmacists, and Healthcare Providers**

F1 Communicate within the role to support optimal patient care and pharmacy services.

Things are moving along very well. The consultants have made tremendous strides. There are still some parking lot items, but the first challenge will be to prepare a report for Council of the Ontario College of Pharmacy that will include the final draft competency report and address any questions that will undoubtedly arise in Council.

Respectively submitted,

K. Wayne Hindmarsh

REPORT FROM THE ASSOCIATION OF DEANS OF PHARMACY TO THE AFPC ANNUAL MEETING, MAY, 2003

The Dean's held their annual meeting in October at Lake Louise. All Deans were present with the exception of Monique Richer. Dr. Robert Sindelar, the newly appointed Dean of the University of British Columbia attended his first Dean's Meeting.

The education session sponsored by Aventis was an inspirational speaker Mr. Dewight Jones. His focus was on change, innovative and leadership.

Dr. Jacques Turgeon presented a progress report on the University of Montreal's Ad-hoc Committee on the Entry Level PharmD. At that time a final decision had not been reached if Montreal would be moving in that direction.

The Deans met with Dr. Fred Remillard, Past-President, AFPC and Deb Saltmarche and Christine Bisanz from CACDS to discuss the Task Force on Experiential Education. The main agenda item was the funding request from AFPC to support the initiative. Fred Remillard agreed to update the request and revise the budget for the up-coming CACDS Board meeting.

Bruce Schnell, Executive Director of CCAPP, provided the Deans with an update on CCAPP activities and strengths and weaknesses of each faculty. ADPC decided to request CCAPP to begin the process to develop standards for accreditation of an entry level PharmD program in light of one or more faculties considering it.

Dr. Jacques Turgeon was elected President for an additional year long term.

I look forward to working with AFPC as your ADPC representative.

Respectfully submitted,

Rita K. Caldwell, BSc(Pharm), MHSA
Director
College of Pharmacy
Dalhousie University

May, 2003

TO: Association of Faculties of Pharmacy of Canada (AFPC)

FROM: Dr. Sylvie Marleau
Dr. Jake J. Thiessen
(AFPC members to the CCAPP Board of Directors)

RE: The Canadian Council for Accreditation of Pharmacy Programs (CCAPP)

CCAPP held both a Board meeting and its Annual General Meeting in Saskatoon on May 24, 2003. The following brief report summarizes the key developments.

This year marks the dawn of the second decade for CCAPP, and the prospects for the future include change and new opportunities. Dr. Bruce Schnell, the first and only Executive Director during the first decade will be stepping down as of June 30, 2003. At its meeting, the Board offered special tribute to Dr. Schnell for his resolute, visionary and pivotal role in bringing both CCAPP and the accreditation process to its present position.

Dr. Jim Blackburn, who has a wealth of knowledge and experience in all aspects of pharmacy, has been appointed as the new CCAPP Executive Director, effective July 1, 2003.

CCAPP President Deborah Boyle, in her report to the Board, highlighted the evolving role of the pharmacist, bringing with it an expanded scope of practice, and an increasing responsibility for ensuring effectiveness and appropriateness of medication use. Clearly, pharmacists need to be both better prepared for such tasks and freed to deliver their professional roles. The former would imply a higher level of education and the latter would signal a greater supporting role by pharmacy technicians. In keeping with this vision, and with the expressed encouragement by the Association of Deans of Pharmacy of Canada, the Board embraced a future that includes two major new developments:

- CCAPP will develop standards for a direct-entry Pharm.D. program.
- CCAPP will develop a pharmacy technician accreditation program.

Dr. Peter Vlasses, Executive Director of the American Council on Pharmaceutical Education (ACPE) attended the Board meeting as part of a Memorandum of Understanding forged between ACPE and CCAPP in the fall of 2002. This Memorandum signifies a joint commitment to future cooperation. Dr. Vlasses offered ACPE collaboration and assistance in the aforementioned major developments.

The Board also reviewed the CCAPP accreditation process and decisions. It was agreed that a new accreditation status will be added to the 3 existing categories ("Preliminary Accreditation", "Full Accreditation", "Probationary Accreditation"). The new status will be "Conditional Accreditation". It may be granted if major deficiencies in compliance with accreditation

standards and/or requirements are identified. "Conditional Accreditation" will initially be granted for a maximum of three years, extendable to a longer term (not exceeding six years), subject to receipt of a report convincing the CCAPP that the matters giving rise to the concerns are being adequately addressed.

Finally, CCAPP is grateful to all organizations, including the AFPC, which provide tangible financial support. This permits CCAPP to pursue its mission and to achieve a shared goal of advancing and improving pharmaceutical education with the ultimate aim of improving pharmacy practice for the benefit of all Canadians.

À: Jim Blackburn, Directeur exécutif
AFPC

De: Marc Desgagné

Date: 2003.05.29

Sujet: **Annual Report from CCCEP Delegate**

The Council of the Canadian Council on Continuing Education (CCCEP) met on two occasions during this year and hold 3 teleconferences.

Deb Barnhill (Halifax) is currently assuming the Presidency of the Organization. Suzan Lessard-Friesen (Manitoba) was recently appointed Vice-president. Dale Wright will replace Terri Schindel as the CSHP delegate later this fall.

The following points are of particular importance to AFPC:

Financial Situation:

The non-profit Organization registered to GST and paid the GST & interest accumulated since April 1997 (~$15,000). CCCEP ended its 2002-2003 budget with a surplus of $46,000. An increase of 33% in the number of programs submitted for accreditation in 2002-2003 explains this good financial result. The proposed 2003-2004 budget shows a deficit of $32,000. An investment policy was developed and approved by the Council in January 2003.

3rd Annual National CE Forum

CCCEP hosted the 3rd National Forum on Continuing Pharmacy Education in November 22-23, 2002. Given the success of this activity, a fourth National Forum will be organised under the direction of CCCEP on a cost recovery basis in November 2003.

Guidelines and Criteria for CCCEP Accreditation:

The *Guidelines and Criteria for CCCEP Accreditation* have continued to be subject to revision and amendment as necessary based on issues arising in their implementation. Guidelines and summary of the amendments are available on CCCEP Web site at www.cccep.org.

CCCEP has developed criteria, policy and procedures for a pilot project in accreditation of Continuing Education providers. Two organizations completed the process successfully. The results of this project are currently under review.

Home Study Program :

CCCEP has notified its current HSP external provider that it is not intended to enter into new negotiations for 2004. The situation regarding the provision of the Home Study Program is currently under review. CCCEP is evaluating a process to eventually select a new provider for the year 2004.

Others :

CCCEP has been invited to sponsor the 6th International Conference on Life Long Learning in Pharmacy. This Conference will be hosted by the College of Pharmacy and Nutrition in Saskatoon from June26-29 2005 under the theme *Practice, Academia and Industry - Building Bridges through Continuous Professional Development*..

AMERICAN ASSOCIATION
OF COLLEGES OF PHARMACY

2002-03 Outstanding Achievements Summary

Introduction

This report summary provides a quick overview of the most significant activities for the Association in the 2002-03 academic year. Highlights include:

- **AJPE Editorial change and on-line publication**
- **Education Scholar launch**
- **"Excellence in Pharmaceutical Education" papers**
- **Expanded legislative affairs activities**
- **Grassroots outreach and advocacy**
- **Institutional research expansion**
- **PharmCAS Launch**
- **Renewal of leadership development programs**
- **Surge in participation in research programs**
- **Women's health curricular resource development**

American Journal of Pharmaceutical Education –The flagship journal for pharmaceutical educators experienced a transition in editorial office upon the retirement of George Cocolas (North Carolina) after 24 years of service to the Association. AACP was fortunate to have Joseph DiPiro (Georgia) accept responsibility as the new editor. In addition, AJPE began publication in an on-line format with the first issue of 2003 in a publication partnership with the American Association of Pharmaceutical Scientists. A significant increase in manuscripts submitted insures continued excellent quality of peer-reviewed articles in AJPE.

Education Scholar Launch – A new resource for faculty members' development as educators can be found at www.educationscholar.org. In collaboration with seven other health professions education associations and Western University of the Health Sciences, AACP now offers six modules for self-study or small group interaction intended to enhance the abilities of educators to prepare, deliver and evaluate professional education to health professions students. Education Scholar is perfect for new faculty development, preparing graduate students and residents for careers in academia, and helping enhance the skills of faculty looking to keep pace with changes such as active learning and distance education.

Excellence in Pharmaceutical Education series –The AACP Board of Directors commissioned a series of papers intended to examine evidence related to critical issues of quality in higher education, and pharmacy education specifically. The four topics for papers released in July 2003 are curriculum development and assessment, creating and maintaining a culture of scholarship, distance and distributive education, and professionalization of pharmacy students. Each paper was prepared by a team of experts and peer-reviewed. They will serve as the basis for AACP comments on the on-going revision of ACPE's standards for professional degree programs in pharmacy and they will drive programming for forthcoming AACP meetings and related projects.

Expanded legislative affairs activities – AACP was able to secure passage of legislation authorizing demonstrations of the value of increasing pharmacists' participation in National Health Service Corps loan repayment programs. This will extend access to comprehensive pharmacy services for underserved populations and offer loan repayment to pharmacy graduates. In addition, the Pharmacy Education Assistance Act (S.1806) passed in the Senate in 2002 and came extremely close to passage in the House prior to the end of the 107th session of Congress. Bipartisan sponsors of the same legislation have reintroduced bills in both the House and the Senate in the 108th Congress. In addition, AACP has endorsed the work of the Pharmacy Provider Coalition and works closely with six other associations to secure recognition of pharmacists as providers in the Medicare program.

Grassroots Outreach and Advocacy – In addition to federal legislative efforts, AACP joined forces with several other national pharmacy associations and the Bureau of Primary Care to create the Pharmacy Services Support Center. The PSSC is a resource on comprehensive pharmacy services for community health centers and other service providers for the most vulnerable patients. Projects developed by the PSSC will involve pharmacy educators, practitioners, and state and national pharmacy leaders in activities that will improve medication use in virtually every community in America.

Institutional Research Expansion – AACP added additional staff capacity to expand our institutional research programs. Working collaboratively with ACPE, AACP has drafted new survey instruments for graduating students, faculty and alumni to gather data for program assessment. In addition, a school profile document was piloted for use as part of accreditation self-studies drawing upon AACP's current institutional data and in lieu of extensive institutional data gathering for purposes of accreditation.

PharmCAS Launch – Pharmacy education now has a centralized application service for prospective pharmacy students. 43 schools and colleges of pharmacy will be utilizing the service in this inaugural year. PharmCAS is intended to enhance the admissions process for participating schools by increasing the visibility of pharmacy as a career choice, streamlining the process of applying to one or more institutions, and conducting portions of the eligibility validation process for admission to the professional degree program. Admissions processing should be more efficient administratively, freeing school and college personnel to focus on selecting the most qualified candidates for admission.

Renewal of Leadership Programming – AACP President Barbara Wells made developing leadership the Association's highest priority for 2002-03. That theme drove programming for the 2002 AACP Annual Meeting and Seminars as well as the 2003 Interim Meeting. The latter focused specifically on the critically important function of development and fundraising activities. The standing committees for academic, professional, and research and graduate affairs all addressed various components of leadership in academic pharmacy. Finally, a new program designed to prepare academic pharmacy leaders for roles as deans, department chairs and other leadership roles will be announced during the 2003 Annual Meeting.

Surging Participation in AACP-sponsored Research Programs – The Merck Scholar program for undergraduate research saw a 69**%** increase in applicants for the 2003-04 review cycle. The New Investigator Program also enjoyed a substantial increase in applications. This suggests a heightened priority among member schools and current faculty for stimulating enthusiasm among Doctor of Pharmacy students and new faculty for careers in research.

Women's Health Curricular Resources Project – A contract from four agencies within the U.S. Department of Health and Human Services is supporting the development of a new curricular resource sharing system for faculty. The specific project will yield a framework for inclusion of content on gender-related differences in health and medication use in the pharmacy curriculum. In addition, several modules of specific curricular resources (e.g., syllabi, case studies, lecture notes) on priority topics in women's health will be available by September 2003. AACP believes this project provides a template for additional curricular resource sharing and is committed to building a platform for the development of additional priority content areas.

This overview of "topline" programs only begins to capture the exciting activities and programs of AACP during 2002-03. A complete report will be distributed to the AACP House of Delegates in July with a more comprehensive summary by goal of the Association's work in the past year on behalf of member institutions and faculty.

Lucinda Maine
Executive Vice President

REPORT OF THE OUTGOING EXECUTIVE DIRECTOR

MAY , 2003

President Lavern Vercaigne has outlined the priority issues that occupied the AFPC Executive and Council during the 2002 – 2003 year. It has been a very busy year for the Association and it has been a privilege to be involved with this Association for the past four years.

As the outgoing Executive Director, I look to the very exciting future of AFPC. We are so fortunate to have attracted Frank Abbott to assume the Executive Director position and this association is well positioned to provide outstanding leadership to Canadian academic pharmacy during this time of potentially great changes about to affect our profession. I believe there are four specific situations that merit immediate attention by AFPC:

1. It appears almost certain that one or more faculties will definitely go ahead with the development of the entry-level PharmD program in Canada. Therefore, AFPC must examine the current sets of competencies for the Bachelor's program as well as the Doctor of Pharmacy program to determine how the entry-level PharmD competencies will fit.

2. Both the federal and provincial governments seem to be seriously considering changes to the health care system as a result of the Romanow and other health reports. We need to work closely with other pharmacy organizations to plan a coordinated approach to the education and training of the pharmacist within the changing environment.

3. The consideration of developing standards or at least seriously looking at the pharmacy technician programs throughout our country. Although this does not directly affect AFPC, I believe it is important that AFPC participate in the process of standardizing technician training programs.

4. The HRDC Human Resource Project that we are hopefully will be formally approved by federal government this spring. We are very fortunate that President Lavern Vercaigne is a full participant in this project. The preceding three items will play a major role in the unfolding of the pharmacy human resource needs in the future. We need to convince all pharmacy components and organizations to actually work together towards the betterment of pharmacy for the Canadian population.

On the mundane side, AFPC currently is the owner of the following equipment and office equipment:

1. Dell Inspiron 2600 laptop computer (purchased in fall of 2002)
2. Brother Intellifax 1450 MC fax machine (purchased prior to 1998)
3. Zip Disk Unit (purchased prior to 1998)
4. Two four drawer black filing cabinets

The remainder of the office equipment is the property of Blackburn & Associates. This equipment will be turned over to Executive Director Frank Abbott within the next month. I bring this to the attention of the AFPC Council as there may be a real need for further purchases of equipment, etc. for the establishment of the new AFPC office.

I have enjoyed every minute of the time spent with AFPC. I wish to express my sincere appreciation to all the executives and councils that I had the opportunity to work with during the past four years. During my term, we have been blessed with an outstanding group of volunteer leaders for academic pharmacy in Canada. My personal thanks to Lavern and the current executive and council for their efforts in making this a great year for AFPC!

I also wish to express my appreciation to Jacques Turgeon, Sylvie Marleau and the Conference organizing committee for their great efforts in the planning and organization of the AFPC/CCCP Conference 2003. In spite of SARS and other difficulties, they are hosting a top notch conference.

If there is anything that I can do to assist the Association in the future, please do not hesitate to contact me.

This report is respectfully submitted.

Jim Blackburn

Association of Faculties of Pharmacy of Canada
Association des Facultes de Pharmacie du Canada
Annual General Meeting
Montreal, May 2003
Planning and Finance Committee Report

1. AFPC Financial Statement 2002

Audited financial statements will be distributed to each council member and copies will also be available at the AGM. The audited financial statements indicate a deficit of $1735 for 2002. It should be noted that a deficit of $10,601 had been budgeted to accommodate expenditure for upgrading of the AFPC website. The main factors that resulted in differences from actual and budget amounts for 2001 include:

Differences in income:
-Conference income was budgeted at $12,000 but actual income was only $4165
-Miscellaneous income was budgeted at $1500 but actual was $8950 reflecting primarily a grant for the SPEP task force

Differences in expenses:
- Meeting Expenses were $8845 over budget; $8812 of this in advances for 2003 meetings which were not included in the 2002 budget
- Operating Expenses were $4454 under budget resulting primarily from $8376 less than budget being spent on website maintenance and $3853 spent for advertisements for the executive director position which were not included in the budget.
- Other Expenses were $12,369 under budget due to $711 over budget spent on the human resource project, $4531 over budget spent on the SPEP task force and $18,000 under budget being spent on the Compendium of Pharmacy Practice/Pharmacy Education Student Research project. The completion of the expenses for the Compendium project will take place in 2003.

2. 2003 Budget

The 2003 budget is presented for consideration with a budgeted surplus of $ 357. Faculty fees have been increased permitting an increase in the executive director honoraria as the position will be shared with ADPC. The increase in fees also allow for continued development of the AFPC website and work on the Canadian human resource project.

Respectfully submitted,
Susan Mansour and Rita Caldwell

PART 4.0

AFPC FINANCIAL STATEMENTS

AFPC AUDITED STATEMENT OF INCOME AND EXPENSES FOR THE PERIOD JANUARY 1, 2002 TO DECEMBER 31, 2002

AFPC BUDGET FOR PERIOD OF JANUARY 1 TO DECEMBER 31, 2003

Association of Faculties of Pharmacy of Canada
Financial Statements
December 31, 2002

(This is a reproduction of the Audited Financial Statement prepared by Myers, Norris Penny)

(Actual Statement is included in printed proceedings and also available from AFPC Office)

MEYERS NORRIS PENNY LLP
CHARTERED ACCOUNTANTS & BUSINESS ADVISORS
306 – 3RD AVENUE SOUTH
SASKATOON, SK S7K 1M5

Association of Faculties of Pharmacy of Canada
Contents
For the year ended December 31, 2002

Auditor's Report

To the Board members of Association of Faculties of Pharmacy of Canada:

We have audited the balance sheet of Association of Faculties of Pharmacy of Canada as at December 31, 2002 and the statements of revenue, expenditures, and net assets, including supporting schedules, and cash flows for the year then ended. These financial statements are the responsibility of the organization's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these finacial statements present fairly, in all material respects, the financial position of the organization as at December 31, 2002 and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles.

Saskatoon, Saskatchewan

April 5, 2003

MEYERS, NORRIS PENNY LLP
Chartered Accountants

Association of Faculties of Pharmacy of Canada
Balance Sheet
As at December 31, 2002

	2002	*2001*
Assets		
Current		
Cash	**39,317**	43,718
Investments (*Note 3)*	**132,311**	129,643
	171,628	173,363
Net Assets		
Net Assets	**171,628**	173,361
	171,628	173,361

Approved on behalf of the board

Lavern Vercaigne ***Fred Rémillard***

Association of Faculties of Pharmacy of Canada
Statement of Revenues, Expenditures and Net Assets
For the year ended December 31, 2002

	2002	*2001*
Revenue *(Schedule 1)*	**178,593**	176,187
Expenditures *(Schedule 2)*	**180,328**	145,580
Excess of revenue over expenditures	**(1,735)**	30,607
Net Assets, beginning of year	**173,363**	142,756
Net assets, end of year	**171,628**	173,363

Association of Faculties of Pharmacy of Canada
Statement of Cash Flows
For the year ended December 31, 2002

	2002	*2001*
Cash provided by (used for) the following activities		
Operating		
Excess revenue over expenditures	**(1,736)**	30,607
Investing		
Purchase of investments	**(2,666)**	(4,157)
Increase (decrease) in cash resources	**(4,401)**	26,450
Cash resources, beginning of year	**43,718**	17,268
Cash resources, end of year	**39,317**	43,718

Association of Faculties of Pharmacy of Canada
Notes to the Financial Statements
For the year ended December 31, 2002

1. Intended purpose of the entity

The Association of Faculties of Pharmacy of Canada is an association of faculties of pharmacy whose members are committed to the promotion and recognition of excellence in pharmacy education and scholarly activities.

2. Accounting policies

These financial statements have been prepared in accordance with Canadian generally accepted accounting principles, and include the following significant accounting policies:

Investments

The Association's Investments are recorded at cost plus accrued interest to the date of the balance sheet.

Measurement of uncertainty

The preparation of financial statements in conformity with Canadian generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amojnts of assets and liabilities and disclosure of contingent assets and liabilities at the date of financial statements and the reported amounts of revnues and expenses during the reporting period. These estimates are reviewed periodically and, as adjustments become necessary, they are reported in earnings in the periods in which theyt become known.

3. Investments

	2002	***2001***
CIBC Flexible GIC – maturing Jan 03, 2002 4%	-	27,896
CIBC GIC – Maturing Jan 02, 2002 4.4%	-	14,038
CIBC Flexible GIC – Maturing Jun 27, 2002, 3.25%	-	5,591
CIBC Flexible GIC – Maturing Oct 16, 2002, 1.5 %	-	6,696
CIBC GIC – Maturing Oct 17, 2002, 1.75%	-	75,424
CIBC GIC – Maturing Oct. 28, 2003, 2 %	**20,092**	
CIBC GIC – Maturing Jan 03, 2003, 1.3 %	**14,222**	
CIBC GIC – Maturing Jun 27, 2007, 4.25%	**20,672**	
CIBC GIC – Maturing Jun 27, 2006, 3.75 %	**20,620**	
CIBC GIC - Maturing Oct 28, 2005, 3 %	**20,106**	
CIBC GIC – Maturing Oct 28, 2003, 2 %	**36,599**	
	132,311	129,645

Association of Faculties of Pharmacy of Canada
Schedule of Revenue
For the year ended December 31, 2002

	2002	*2001*
Membership		
Faculty	**55,799**	60,511
Affiliate	**19,000**	15,000
Associate	**450**	450
Other Income		
Annual Conference	**4,165**	15,693
History Book Grant	**-**	5,000
Interest Income	**2,667**	8,329
Rx & D Grant	**4,000**	4,000
Awards Income		
Apotex	**40,000**	40,000
AstraZeneca	**3,000**	3,000
Bristol-Myers Squibb	**1,476**	1,166
C.F.P. Student Grant	**10,000**	10,000
C.F.P. Best Poster	**1,000**	1,000
Janssen Ortho	**2,076**	1,154
Roche	**-**	1,472
Merck Frosst Travel Grant	**-**	3,185
Miscellaneous Income	**8,950**	6,227
Awards income – GlaxoSmithKline	**2,500**	
Other Income – history book sales	**1,510**	
Other income – Merck Compendium	**22,000**	
	178,593	176,187

Association of Faculties of Pharmacy of Canada
Schedule of Expenditures
For the year ended December 31, 2002

	2002	*2001*
Meeting Expenses		
AGM Council	**15,348**	13,623
Mid-Year Council	**11,160**	9,621
AACP AGM	**1630**	2,227
CCCEP	**1,000**	1,000
ADPC & Rx & D	**764**	-
CPhA	**500**	1,187
Current Chairs	**-**	196
Operating Expenses		
Audit Services	**1,091**	200
Bank Charges	**65**	139
Computer Expenses	**-**	2,564
Executive director honorarium	**29,583**	25,000
Exec. Director travel grant	**3,000**	3,000
Office supplies	**405**	379
Photocopies	**134**	224
Printing	**2,203**	771
Postage	**395**	248
Courier	**154**	86
Telephone/fax	**2,246**	1,862
Web site maintenance	**8,624**	1,280
Revenue Canada	**30**	30
Miscellaneous expense	**990**	1,000
Other Expenses		
CCAPP expense	**6,420**	5,885
Rx & D grant expense	**4,000**	4,000
CPhA Forum expense	**539**	130
History Book Expense	**1,570**	10,400
Awards Expenses		
Apotex Scholarships	**40,000**	40,000
AstraZeneca	**2403**	2,281
Bristol-Myers Squibb	**1,476**	1,199
CFP Travel Grants	**9,750**	9,990
CFP Poster Award	**1,000**	1,000
Janssen-Ortho	**2,076**	1,223
Roche Grad. Award	**-**	1,365
Merck Frosst Travel advance	**-**	3,185
Award recognition	**-**	285
Award expense – grad student	**1,734**	-
Other expense – human resources project	**3,711**	-
Other expense – task force – SPEP	**7,531**	-
Other expense – compend. project	**4,000**	-
Operating expense – E.D. advertisements	**3,853**	-
Meeting expense – advances	**8,812**	-
Meeting expense – transfer Novartis	**1,000**	-
Meeting expense – cert. Comm	**1,131**	-
	180,328	145,580

AFPC

BUDGET

2003

			2002	2003
INCOME		**BUDGET**	**ACTUAL**	**BUDGET**
Member ships				
	FACULTY	$55,799.00	$55,799.00	$74,657.00
	AFFILIATE	$20,000.00	$19,000.00	$20,000.00
	ASSOCIATE	$1,000.00	$450.00	$1,000.00
	TOTAL	**$76,799.00**	**$75,249.00**	**$95,657.00**
OTHER INCOME				
	ANNUAL CONF	$12,000.00	$4,165.27	$12,000.00
	Hist. Book sales	$1,400.00	$1,510.11	
	INTEREST	$2,000.00	$2,667.00	$3,000.00
	Rx & D GRANT	$4,000.00	$4,000.00	$4,000.00
	MerckCompend.	$22,000.00	$22,000.00	
		$41,400.00	**$34,342.38**	**$19,000.00**
Awards				
	Apotex	$45,000.00	$40,000.00	$45,000.00
	AstraZeneca	$3,000.00	$3,000.00	$3,000.00
	Bristol-Myers Sq.	$1,200.00	$1,476.38	$1,200.00
	CFP Stud. travel	$10,000.00	$10,000.00	$10,000.00
	CFP Best Poster	$1,000.00	$1,000.00	$1,000.00
	GlaxoSmithKline		$2,500.00	$2,500.00
	Janssen-Ortho	$1,200.00	$2,075.82	$1,500.00
		$61,400.00	**$60,052.20**	**$64,200.00**
Miscella.				
	Task Force SPEP		$6,794.40	$26,305.60
	CFP award reimb.		$166.35	
	Novartis donat. to conf		$1,000.00	
	Hotel-conf		$989.52	
		$1,500.00	**$8,950.27**	**$26,305.60**
TOTAL	**INCOME**	**$185,099.00**	**$178,593.00**	**$205,162.60**

EXPENSES	2002 BUDGET	2002 ACTUAL	2003 BUDGET
Meeting Expenses			
AGM Council	$15,000.00	$15,347.73	$20,000.00
Mid-year Coun.	$9,000.00	$11,159.93	$9,000.00
Advan.-MidYear 2003		$3,260.00	
Advance-Conf 2003		$5,552.12	
AACP AGM	$4,000.00	$1,630.05	$2,000.00
AACP mid-year			
CCCEP	$1,000.00	$1,000.00	$1,200.00
ADPC	$1,000.00	$763.81	$1,000.00
CPhA		$500.00	$1,000.00
Cert.comm.	$1,500.00	$1,130.99	
Trans. Novartis Conf		$1,000.00	
Grant			
Total	**$31,500.00**	**$41,344.63**	**$34,200.00**
Operating Expenses			
Audit services	$200.00	$1,091.40	$1,200.00
Bank charges	$150.00	$65.00	$150.00
Computer expenses	$500.00		$1,000.00
Exec. Dir. Honor.	$30,000.00	$29,583.33	$36,500.00
E.D. travel grant	$3,000.00	$3,000.00	$3,000.00
E.D. Advertisements		$3,853.00	$500.00
Office Supplies	$500.00	$404.99	$500.00
Photocopies	$250.00	$133.95	$250.00
Printing	$1,200.00	$2,203.02	$1,500.00
Postage	$300.00	$394.73	$400.00
Courier	$100.00	$154.00	$150.00
Telephone/fax	$2,500.00	$2,245.68	$2,500.00
Web site maint.	$17,000.00	$8,624.38	$6,000.00
Revenue Canada	$30.00	$30.00	$30.00
Miscellaneous	$1,500.00		$1,500.00
Total - operating	**$57,230.00**	**$51,783.48**	**$55,180.00**

	Other Expenses			
	CCAPP	$6,420.00	$6,420.00	$6,420.00
	Rx&D grant	$4,000.00	$4,000.00	$4,000.00
	CPhA forum	$300.00	$539.00	
	Hist. Book	$1,600.00	$1,570.09	
	Human Res. Proj.	$3,000.00	$3,710.86	$5,000.00
	Task Force SPEP	$3,000.00	$7,531.05	$26,305.60
	Comp. Project	$22,000.00	$4,000.00	$10,000.00
Awards				
	Apotex	$45,000.00	$40,000.00	$45,000.00
	AstraZeneca	$3,000.00	$2,402.75	$3,000.00
	Bristol-Myers Sq.	$1,200.00	$1,476.38	$1,200.00
	CFP travel grants	$10,000.00	$9,750.00	$10,000.00
	CFP best poster	$1,000.00	$1,000.00	$1,000.00
	Janssen-Ortho	$1,200.00	$2,075.82	$1,500.00
	GSK grad student	$1,250.00	$1,734.00	$2,000.00
	Merck Frosst	$4,000.00		
	Conf. Hotel to be reimbursed		$989.52	
	Tot. other expen.	**$106,970.00**	**$87,199.47**	**$115,425.60**
	TOTAL EXPENSES	**$195,700.00**	**$180,327.58**	**$204,805.60**
Surplus/ Deficit		-$10,601.00	-$1,735.00	$357.00