DALHOUSIE UNIVERSITY
Inspiring Minds

Senate Self-Study

2012

FACULTY OF HEALTH PROFESSIONS

October 2, 2012.

Addendum to the Faculty of Health Professions' Self-Study for Senate Review

The Faculty of Health Professions respectfully asks the Senate Review Committee to consider in its deliberations the relationship of the Faculty of Graduate Studies and the Faculty of Health Professions in the governance of the graduate programs of the Faculty.

Currently the Faculty of Graduate Studies has responsibility for academic oversight of all graduate programs in the Faculty of Health Professions, including approval and recommendation to Senate of new graduate professional programs and modifications to existing professional programs and courses, and for the administration of graduate professional programs with respect to matters such as student admissions, student progress, student satisfaction, student appeals, student graduation requirements, etc. It is responsible for the quality review of graduate programs, and also approves the qualifications of faculty members who have responsibility for teaching in these programs. The Faculty of Health Professions has responsibility for administrative matters such as space, overall faculty and staff complement, budgets, student complaints, academic integrity, accreditation, alumni relations, etc. Graduates from the graduate professional programs in the Faculty of Health Professions are presented to Convocation by the Dean of the Faculty of Graduate Studies, not the Dean of the Faculty of Health Professions.

The Schools of Human Communication Disorders, Physiotherapy, Occupational Therapy and Health Administration and the Program in Clinical Vision Science offer exclusively or predominantly graduate professional programs. This means that the programs of study in these 5 academic units are controlled by a Faculty other than Health Professions, and indeed the Dean of the Faculty of Health Professions is not involved directly with the academic/professional aspects of these programs except indirectly as part of his administrative responsibilities described above. The same situation exists with respect to the graduate professional programs offered in the Schools of Nursing, Social Work and Health and Human Performance, schools which in addition offer major and successful undergraduate programs which are in the exclusive bailiwick of Health Professions.

In our experience, the Faculty of Graduate Studies sees itself as controlling and serving as gatekeeper for the development and approval of new graduate programs that would respond to professional needs in the community. Concerns have been expressed about whether the Faculty of Graduate Studies is in fact in a position to do this adequately and to serve the interests of the University in this regard. Although the thesis-based non-professional graduate programs may have more in common with research based graduate programs in other Faculties, nonetheless there are concerns about whether the Faculty of Graduate Studies adequately understands the context in which such programs within the Faculty of Health Professions are developed and offered.

Whether the situation as outlined here is as was intended by Senate, this is how it has evolved and how it has been for some years. The Council of the Faculty of Health Professions respectfully asks that the Review Committee include in its deliberations consideration of this program governance question, and specifically whether it would be appropriate for Senate to initiate a jurisdictional review of the Faculty of Graduate Studies vis-à-vis professional Faculties like Health Professions, and if so, what some options might be for ensuring that the needs and interests of the Faculty of Health Professions and its stakeholders (including students and potential students) are well served. As the University is looking to support greater innovative programming, greater responsiveness to community needs and improved nimbleness of action, we respectfully suggest that a different governance structure regarding graduate programs within this Faculty is required. In the opinion of Faculty Council, the current one is not satisfactory.

Faculty of Health Professions

Dalhousie University

Senate Review 2012

Faculty Self-Study

Prepared by the Office of the Dean

January, 2012

(Endorsed by Faculty Council, January 26, 2012)

Table of Contents

Table and Figures Index

Tables

Figures

1. OVERVIEW OF THE FACULTY OF HEALTH PROFESSIONS

A distinguishing feature of Dalhousie University is that it is the health university of the Maritime provinces and, arguably, of Atlantic Canada. Its major health-related Faculties are the Faculty of Medicine, Faculty of Dentistry and Faculty of Health Professions. In addition, the Faculty of Science is home to the Clinical Psychology program; Computing Science to Health Informatics; and Law to the Health Law Institute.

As described in the University's Strategic Focus document for 2010-2013, the vision for Dalhousie University is that it "will become Canada's best university, committed to advancing provincial and regional development by attracting and offering a diverse student body an outstanding personal experience at a national university built around an excellent learning environment, acclaimed research strengths, broad program choices and successful career preparation in cooperation with supportive external stakeholders."

As will be returned to throughout this self-study, through its 9 Schools/College with entry-to-practice health professional programs, post-professional programs and research based graduate programs, the Faculty of Health Professions aligns well with the University vision:

- Each of the 9 Schools/College has as its primary mandate the education and preparation of well qualified health professionals who, through the critical leadership role they play in the promotion of broadly defined health and well being, impact directly on provincial and regional economic and social development.
- The Faculty has well prepared, experienced and committed faculty and staff members through whom it offers professional and academic programs that, by all indicators, are both appropriate and of excellent quality. In addition to their teaching activities, faculty members contribute to the scientific foundation of the health professions and engage in community service that enhances the health and well-being of Nova Scotians.
- Being the most profession-diverse health sciences Faculty in Canada, the Faculty offers broad professional program choices. The diversity of program offerings will increase once the new Interdisciplinary Health Studies program comes on stream as an undergraduate liberal arts and science program with a theme of health and with paths that lead to a variety of vocations and professions particularly in the health sector.
- Our programs depend critically on the direct involvement and support of external stakeholders including District Health Authorities; community health and social service agencies and institutions; School Boards; government policy makers; and especially the many individual health and social service

professionals who work closely with our students in supervising fieldwork and clinical practicum placements.

- We have seen a six fold increase in annual research grant support over the past decade, with major foci in Health Outcomes and Health Promotion. Since the previous review, the Faculty has provided support for 3 Canada Research Chairs, 1 CIHR/CHSRF/NSHRF Chair, a Killam Chair, an impending UNESCO Chair, and for the Atlantic Health Promotion Research Centre. Over these years, the Faculty has been highly effective in mobilizing interdisciplinary research teams.
- There is no shortage of well qualified applicants for most programs. Enrollment in the Faculty has been slowly increasing when possible on a regular basis, and student retention is strong. Students graduate from most of our programs into well-paying, secure, and socially prestigious positions in health and social services, and enjoy considerable mobility options. Counterbalancing this positive situation, however, is that the fact that students in most of our programs have the highest tuition levels in Canada (see section 1.7) and many graduate with heavy burdens of debt incurred through their successive undergraduate and graduate programs of study.

1.1 Vision and Mission of the Faculty

The Vision and Mission of the Faculty of Health Professions were reviewed by Faculty Council in 2006.

Our Vision is "Inspiring ideas, research innovation and leadership to enhance global health and well-being."

Our Mission is "Inspiring research, scholarship, teaching, learning and professional activities that contribute to knowledge and to the preparation of skilled and caring professionals and leaders of tomorrow."

The focus of the Faculty is on the health professions outside Medicine and Dentistry/Dental Hygiene, and includes not only clinical professions but also disciplines with a focus on health policy and health administration and management. The latter part of the mission statement is meant to imply that the mission is not limited to the preparation of graduates who are ready for professional licensure and practice but extends to the education of undergraduates who aspire to enter a professional program or to pursue a health-related vocation after graduation.

Appendix A is a discussion document that was in preparation to become a strategic plan for the Faculty. Further development of the document was suspended in the spring of 2011 when the Faculty learned that it needed to reduce the gap between revenue and

expenditures by 10%, making the maintenance of accreditation for the professional programs and the continuation of some development of interprofessional education the only strategic priorities for the Faculty. Much of what is discussed in this self-study is derived from the Appendix A document as it outlines the directions the Faculty may move in as it comes to grips with the new fiscal realities.

1.2 Constituents of the Faculty

The Faculty has 8 Schools, 1 College, and 2 programs (Clinical Vision Science and Disability Management, the latter of which is being phased out). The College of Pharmacy is referred to as a College for historical reasons and is operationally indistinguishable from a School. Each School/College and Program is headed by a Director who is similar to a Department Chair but is not in the DFA Bargaining Unit. As will be discussed later, all Schools are accredited (in the case of Health and Human Performance, accreditation is available only for the Kinesiology program). The significance of accreditation is that students must graduate from an accredited program to be eligible to be licensed to practice their profession.

As summarized in Table 1, through these academic units, the Faculty of Health Professions offers 6 diploma, 15 undergraduate and 20 graduate degree programs in the health professions. Academic study for entry-to-practice in Occupational Therapy, Physiotherapy, Human Communication Disorders (Speech-Language Pathology and Audiology), Health Administration, and Clinical Vision Science is at the Masters degree level. These programs are different from the graduate programs in these Schools which are research focused. In the case of Nursing, Pharmacy, Kinesiology, Health Promotion, Therapeutic Recreation, Social Work, Respiratory Therapy, Diagnostic Cytology, Radiological Technology, Nuclear Medicine Technology and Diagnostic Medical Ultrasound Technology, entry-to-practice is at the undergraduate level (degree or diploma, depending on the profession). Nursing, Social Work and Health and Human Performance offer graduate programs that are an advance over entry-to-practice, and provide opportunities to develop advanced practice (e.g., Nurse Practitioner) and research skills. The Occupational Therapy post-professional degree provides an advance over entry-to-practice for practioners who have an undergraduate degree.

In addition to our Masters level thesis programs, the School of Nursing offers a PhD program in Nursing and the Interdisciplinary PhD program offered through the Faculty of Graduate Studies provides opportunities for advanced study and research for students from the health professions. As discussed in Section 2.6, a proposal for a PhD in Health Research is in development.

Table 1: Diploma and Degree Programs Offered in the Faculty of Health Professions

Unit	Program	Diploma	Undergraduate Degree	Graduate Degree
Health Administration	Health Services Administration	E		
	Emergency Health Services Management	E		
	Health Administration			E, T
	MHA/JD			E
	MHA/MN			E, T
Health and Human Performance	Kinesiology		E	T
	Health Promotion		E	T
	Therapeutic Recreation		E	
	Recreation		E	
	Leisure Studies			T
Health Sciences (Dalhousie/CDHA)	Diagnostic Cytology Technology	E	E	
	Diagnostic Medical Ultrasound Technology	E	E	
	Medical Laboratory Technology (post-diploma)		E	
	Nuclear Medicine Technology	E	E	
	Radiological Technology		E	
	Respiratory Therapy		E	
Human Communication Disorders	Speech-Language Pathology			E
	Audiology			E
	Human Communication Disorders			E, T
Nursing	Registered Nurse (incl. Yarmouth sites)		E	
	Registered Nurse (Arctic Nursing)		E	
	Master of Nursing			
	Nurse Practitioner			E
	Health Policy Stream			C
	Research stream			T
	PhD program			T
Occupational Therapy	Occupational Therapy			E
	Occupational Therapy (Post-Professional)			C, T
Pharmacy	Pharmacy		E	
	Pharmaceutical Science			T
Physiotherapy	Physiotherapy			E
	Rehabilitation Research-Physiotherapy			T
Social Work	Social Work		E	E
	Mi'kmaq Maliseet BSW		E	
Clinical Vision Science (Dal/IWK)	Orthoptics and Ophthalmic Medical Technology	(Graduate) E		
	Clinical Vision Science			T

Legend: E: Entry to practice degree or diploma (mainly course based and fieldwork/practicum). T: Thesis (research) based program. C: Coursework based program.

1.3 Student Numbers

Tables 2 to 4 relate to program enrollment and changes in enrollment since the last Senate review. Table 2 shows a continuous increase in total enrollment of nearly 400 students during the past five years.

The drop in undergraduate enrollment between 2006 and 2007 and the corresponding increase in graduate enrollment reflect the change from undergraduate to graduate entry-to-practice qualifications required in Occupational Therapy and Physiotherapy.

Table 2: Student Enrollment by Degree Program from 2006 to 2011

Level	Program		1-Dec-06	1-Dec-07	1-Dec-08	1-Dec-09	1-Dec-10	1-Dec-11
Undergraduate	B Sc(Kinesiology) Honours Conv		2	1	1	1	2	1
	B Science (Health Education)		1					
	B Science (Health Promotion)		54	53	72	75	70	92
	B Science (Kinesiology)		339	321	329	341	358	421
	B Science (Pharmacy)		359	359	357	351	344	347
	B Science (Physiotherapy)		47					
	B Science (Recreation)		52	50	51	75	82	103
	B Science in Occu Therapy		48	1	1			
	Bachelor of Health Science		166	184	184	180	186	202
	Bachelor of Science (Nursing)		593	585	621	640	681	734
	Bachelor of Social Work		204	181	188	188	200	235
	BSC(Hlth Prom) Hon Conversion					1		
	D Nurs Prac St-Rem&Undserv Com		8					
	Dip in Disability Management		44	40	29	25	21	11
	Dip in Emergency Hlth Serv Mgt		8	5	5	7	9	7
	Diploma in Health Science		56	110	99	97	41	
	Diploma in Health Serv Admin		30	27	32	22	26	31
	Post-Graduate Pharmacy		4	4	4	4	6	6
	Special-Health Professions			1				
	Special-Undergraduate		5	2	4	5	16	7
	Visiting-Undergraduate		32	19	34	8	7	18
Total			**2052**	**1943**	**2011**	**2020**	**2049**	**2215**
Graduate	Doctor of Philosophy		10	14	18	19	20	18
	M App Health Services Research		8	7	6	9	9	9
	M Health Serv Admin (Int'l)		8					
	M Int'l Health Services Admin			2				
	M Nurs & M Health Admin				3	2	4	3
	M Nurs & M Health Serv Admin		2	3				
	Master of Arts	Health Promotion	19	27	34	24	21	23
	Master of Arts	Leisure Studies	8	12	10	8	3	6
	Master of Health Admin				41	55	55	62
	Master of Health Serv Admin		41	37				
	Master of Nursing		87	89	91	80	82	92
	Master of Science	Audiology		21	23	23	24	28
	Master of Science	Clinical Vision Science	23	22	24	18	20	26
	Master of Science	Human Comm. Disorders	98	14	10	5	9	9
	Master of Science	Kinesiology	10	10	13	13	11	14
	Master of Science	Occu Ther.Post Professional	28	30	31	25	20	19
	Master of Science	Occupational Therapy	50	97	94	102	118	121
	Master of Science	Pharmaceutical Sciences					2	3
	Master of Science	Physiotherapy	48	97	100	105	112	113
	Master of Science	Rehabilitation Research	3	6	6	3	3	3
	Master of Science	Speech-Language Pathology		63	68	70	68	66
	Master of Social Work		146	154	154	182	183	196
	Qualifying Year Grad Studies		2	1		1	1	
	Special-Graduate Studies		12	17	11	13	8	3
	Visiting-Graduate Studies		4	2		6	3	
Total			**607**	**725**	**737**	**763**	**776**	**814**
Grand Total			**2659**	**2668**	**2748**	**2783**	**2825**	**3029**

Table 3 shows that over half of the enrollment increase occurred between December 2010 and December 2011, an increase of 7.22%, and reflects the concerted effort made by the Faculty to increase enrollment.

Across all units, a serious constraint on enrollment expansion is the fact that students are required to complete several fieldwork or practicum placements, each of several weeks duration (4-12 weeks), in professional settings outside the university. These experiences are supervised by preceptors who are employees of the settings. The type and extent of acceptable fieldwork/practicum experiences is typically set by the accreditation bodies. Finding qualified preceptors continues to be a struggle. That situation might change if the Government of Nova Scotia were to require each DHA to supervise a certain quota of students and if, as in Ontario, it provided the University with funds that would flow to the DHAs in recognition of the costs involved in student supervision. Those changes would not be sufficient to support enrollment increases without the issue of student accommodations (and in some cases local travel) being dealt with either through the rural DHAs and rural social service organizations or through the University making accommodation costs associated with non-HRM placements part of the costs of attending Dalhousie (see Section 1.7).

A second issue is employment prospects for an increased number of graduates. It is very difficult to get a good handle on this factor but right now it is not clear that there would be reasonable employment prospects in Nova Scotia for an increased number of graduates. Without evidence of need, it would seem unlikely that the government of Nova Scotia would align itself with the university in seeking more clinical placements in rural DHAs.

The School of Nursing has undergone a substantial expansion in its enrollment in recent years (from 135 to 185 admissions per year) but expansion has occurred only through special funding from the government—the expansion would not have been possible based solely ERBA flow. It is still unclear whether the Government of Nova Scotia will continue to fund the expansion beyond 2014. The School of Health and Human Performance has also seen a significant increase in enrollment, particularly in Kinesiology, and for this increase to be sustainable additional resources, particularly space will be required.

Table 3: Student Enrollment by Degree Program in 2011 Compared to 2010

Program		1-Dec-10	1-Dec-11	change	% change
B Sc(Kinesiology) Honours Conv		2	1	-1	-50.0%
B Science (Health Promotion)		70	92	22	31.4%
B Science (Kinesiology)		358	421	63	17.6%
B Science (Pharmacy)		344	347	3	0.9%
B Science (Recreation)		82	103	21	25.6%
Bachelor of Health Science		186	202	16	8.6%
Bachelor of Science (Nursing)		681	734	53	7.8%
Bachelor of Social Work		200	235	35	17.5%
Dip in Disability Management		21	11	-10	-47.6%
Dip in Emergency Hlth Serv Mgt		9	7	-2	-22.2%
Diploma in Health Science		41		-41	-100.0%
Diploma in Health Serv Admin		26	31	5	19.2%
Doctor of Philosophy		20	18	-2	-10.0%
M App Health Services Research		9	9	0	0.0%
M Nurs & M Health Admin		4	3	-1	-25.0%
Master of Arts	Health Promotion	21	23	2	9.5%
Master of Arts	Leisure Studies	3	6	3	100.0%
Master of Health Admin		55	62	7	12.7%
Master of Nursing		82	92	10	12.2%
Master of Science	Audiology	24	28	4	16.7%
Master of Science	Clinical Vision Science	20	26	6	30.0%
Master of Science	Human Communication Disorders	9	9	0	0.0%
Master of Science	Kinesiology	11	14	3	27.3%
Master of Science	Occu Therapy-Post Professional	20	19	-1	-5.0%
Master of Science	Occupational Therapy	118	121	3	2.5%
Master of Science	Pharmaceutical Sciences	2	3	1	50.0%
Master of Science	Physiotherapy	112	113	1	0.9%
Master of Science	Rehabilitation Research	3	3	0	0.0%
Master of Science	Speech-Language Pathology	68	66	-2	-2.9%
Master of Social Work		183	196	13	7.1%
Post-Graduate Pharmacy		6	6	0	0.0%
Qualifying Year Grad Studies		1		-1	-100.0%
Special-Graduate Studies		8	3	-5	-62.5%
Special-Undergraduate		16	7	-9	-56.3%
Visiting-Graduate Studies		3		-3	-100.0%
Visiting-Undergraduate		7	18	11	157.1%
Total		**2825**	**3029**	**204**	**7.22%**

Table 4 shows the breakdown of full time and part time students. The vast majority of students at both the undergraduate and graduate levels, approximately 90%, are full time. Although not shown in the table, many of the part time students, particularly in Social Work, are completing their degree by distance. When part-time enrollment involves courses in the spring/summer session it has a negative financial impact on the Faculty because of the manner in which ERBA is calculated. Students who take 6 half credit courses in the fall and winter sessions are treated as full-time students whereas students who take 6 half credit courses distributed over the fall, winter and spring/summer sessions are treated as part-time and therefore have significantly less ERBA value.

Table 4: Distribution of Full- and Part-time Enrollment by Degree Program in 2010 and 2011

Program		1-Dec-10				1-Dec-11			
		Undergraduate		Graduate		Undergraduate		Graduate	
		FT	PT	FT	PT	FT	PT	FT	PT
B Sc(Kinesiology) Honours Conv		1	1			1			
B Science (Health Promotion)		68	2			83	9		
B Science (Kinesiology)		354	4			415	6		
B Science (Pharmacy)		342	2			347			
B Science (Recreation)		78	4			98	5		
Bachelor of Health Science		159	27			164	38		
Bachelor of Science (Nursing)		622	59			698	36		
Bachelor of Social Work		142	58			181	54		
Dip in Disability Management			21				11		
Dip in Emergency Hlth Serv Mgt		2	7			1	6		
Diploma in Health Science			41						
Diploma in Health Serv Admin		11	15			9	22		
Doctor of Philosophy				20				18	
M App Health Services Research				6	3			6	3
M Nurs & M Health Admin				4				3	
Master of Arts	Health Promotion			13	8			15	8
Master of Arts	Leisure Studies			2	1			3	3
Master of Health Admin				29	26			35	27
Master of Nursing				21	61			30	62
Master of Science	Audiology			24				28	
Master of Science	Clinical Vision Science			19	1			24	2
Master of Science	Human Comm. Disorders			9				9	
Master of Science	Kinesiology			10	1			13	1
Master of Science	Occu Ther.-Post Professional			2	18			1	18
Master of Science	Occupational Therapy			114	4			119	2
Master of Science	Pharmaceutical Sciences			2				3	
Master of Science	Physiotherapy			112				113	
Master of Science	Rehabilitation Research			2	1			2	1
Master of Science	Speech-Language Pathology			68				66	
Master of Social Work				33	150			35	161
Post-Graduate Pharmacy		6				6			
Qualifying Year Grad Studies				1					
Special-Graduate Studies					8				3
Special-Undergraduate		3	13			1	6		
Visiting-Graduate Studies					3				
Visiting-Undergraduate		1	6				18		
Total		**1789**	**260**	**491**	**285**	**2004**	**211**	**523**	**291**

1.4 Faculty and Staff Positions

Table 5 shows the distribution of tenured/tenure track positions, limited term faculty positions, and staff positions by unit for the fall term, 2011. The limited term faculty numbers include the faculty at the Yarmouth Nursing site who are employees of the Southwest District Health Authority, the faculty in the School of Health Sciences who are

employees of the Capital District Health Authority, and the faculty associated with the Clinical Vision Science program who are employees of IWK and/or CDHA. These particular limited term faculty members all hold adjunct faculty appointments in their respective Schools, but other adjunct appointments are not included in the numbers. Faculty members holding cross-appointments are counted only in their home unit. 64% of the faculty hold PhD degrees which is an indication of eligibility to apply for research grants. The table shows the distribution of PhDs across Schools.

Most limited term faculty members are experienced clinicians who are appointed into primarily teaching positions. The teaching complement is further enhanced by the appointment of sessional course instructors. In contrast to other parts of the university where sessional instructors are more likely to be senior graduate students or recent PhD graduates, sessional instructors in health professions are typically active professionals in the clinical or community field and appointed on a continuing basis year after year.

Table 5: Distribution of Faculty (by Appointment Type) and Staff Across Academic Units (Fall Term, 2011)

School/College	Tenured and Tenure Stream (FTE)	Limited Term (FTE)	Number of faculty with PhD	Staff (FTE)
Clinical Vision Science	0	11	4	0
Health Administration	5	2	6	4
Health and Human Performance	18.8	4	18	6
Health Sciences	1	18	1	3
Human Communication Disorders	9	2.1	9	3
Nursing	20.8	28.05	19	9
Occupational Therapy	10	5.5	11	6
Pharmacy	7.5	5.8	14	8
Physiotherapy	10	4.6	10	6
Social Work	10	3	10	12.3
Dean's Office	2	1	3	7.35
Dean's Office (0ther)	0	1(ACEWH)	1	3 (2-AHSI, 1-AHPRC)
TOTAL	**93.6**	**85.45**	**106**	**67.65**

Numbers of faculty include all regular faculty, permanent adjuncts (Yarmouth Nursing, School of Health Sciences, Clinical Vision Science) and EXAD (Dean, Directors). ACEWH: Atlantic Centre of Excellent for Women's Health. AHSI: Aboriginal Health Sciences Initiative. AHPRC: Atlantic Health Promotion Research Centre.

1.5 Accreditation and Other Program Reviews

In all professional programs, students become eligible for licensure if they have graduated from an accredited School or program. Accreditation of academic professional programs is significant as it is essential to attract students for admission to the program. Similarly, an accredited program is vital to attract well-qualified faculty in a highly competitive market for health professions faculty. Accreditation reviews are conducted by professional associations in collaboration with the Schools/College and the Dean's Office. As shown in Table 6, all our programs currently meet accreditation standards and are accredited.

Faculty Council has made provision for Special Reviews to be carried out of Schools or Programs when there is some specific issue of concern. Two such reviews have been carried out in recent years, one involving the School of Health and Human Performance and the other the School of Nursing. The outcome of each Special Review was constructive in resolving issues.

Table 6: Accreditation Status of Programs

School/College or program	Accreditation Body	Date of last accreditation	Date of next anticipated accreditation or review	Comment
Clinical Vision Science	Canadian Medical Association	2007	May 2013	Fully Accredited
HA (Health Administration)	CA+HME (Commission on Accreditation of Healthcare Mgmt Ed)	2005	Spring 2012	Fully Accredited
HHP (Kinesiology)	CCUPEKA, Canadian Council of University Physical Education and Kinesiology Administrators	2006	2012	Fully Accredited
Human Communication Disorders (Audiology and Speech Language Pathology)	Council For Accreditation of Canadian University Programs in Audiology and Speech-Language Pathology (CACUP-ASLP)	2006	2012	Fully Accredited
Health Sciences (Radiological Technology)	Canadian Medical Association	2008	Winter 2014/site review Fall 2013	Fully Accredited
Health Sciences (Diagnostic Cytology)	Canadian Medical Association	2008	Winter 2014/site review Fall 2013	Fully Accredited

Table 6: Accreditation Status of Programs con't

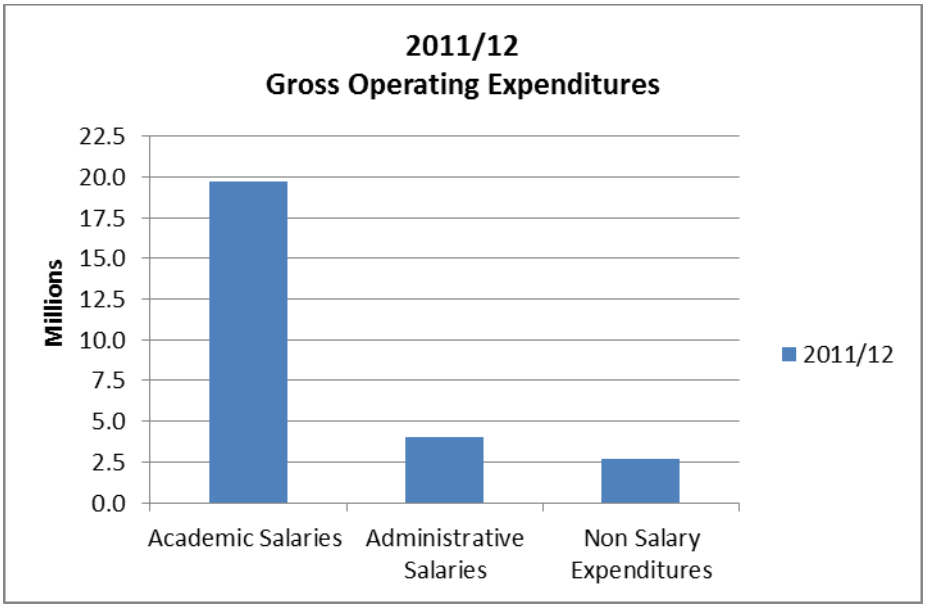
Health Sciences (Diagnostic Ultrasound)	Canadian Medical Association	2008	Winter 2014/site review Fall 2013	Fully Accredited
Health Sciences (Nuclear Medicine Technology)	Canadian Medical Association	2008	Winter 2014/site review Fall 2013	Fully Accredited
Health Sciences (Respiratory Therapy)	Canadian Society of Respiratory Therapists (CSRT),Council on Accreditation for Respiratory Therapy Education (CoARTE)	December 2008	Fall 2014	Fully Accredited
Nursing	Canadian Association of Schools of Nursing (CASN) & Nova Scotia College of Nurses (CRNNS)	October 2010	March 2012	Halifax site: 5 year term with recommendations Yarmouth site: 5 year term with required actions Undergraduate program: 7 year term with recommendations and an interim report for all streams.
Nursing (MN/Nurse Practitioner)	Nova Scotia College of Registered Nurses	November 2010	November 2012	Fully Accredited
Occupational Therapy	Canadian Association of Occupational Therapists (CAOT)	2008	2014	Fully Accredited
Pharmacy	CCAPP Canadian Council for Accreditation of Pharmacy Programs	2009	2016	Fully Accredited
Physiotherapy	Physiotherapy Education Accreditation Canada	2008	May 2014	Fully Accredited
Social Work (BSW)	CASWE (Canadian Association for Social Work Education)	July 2011	July 2013	Fully Accredited
Social Work (MSW)	CASWE (Canadian Association for Social Work Education)	March 2007	March 2014	Fully Accredited

Because of the regular accreditation reviews of Schools and programs, the Faculty has not made a practice of carrying out periodic academic reviews separate from accreditation.

1.6 Financial Issues

1.61 Overview of Current Position. The gross operating budget of the Faculty of Health Professions is $26.6 million for the Year 2011/12. Currently the budgeted gross expenditures of the Faculty are composed of: Academic Salaries $19.8 million (74%), Administrative Salaries $4.0 million (15%), Non Salary Expenditures $2.7 Million (10%), and transfers $0.2 Million (1%), as portrayed in Figure 1 below. (Note: for clarity of presentation, transfers are excluded).

Figure 1

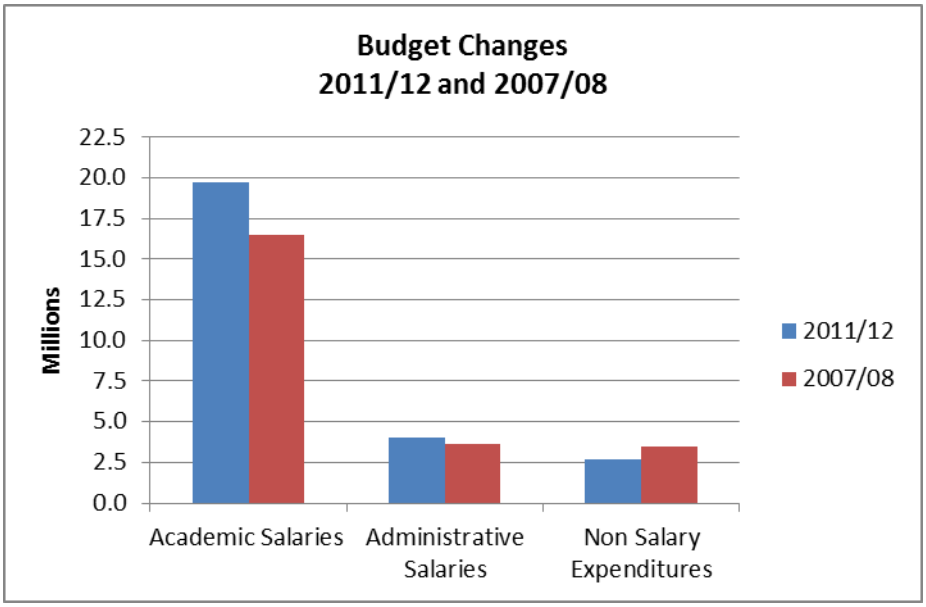


In the current 2011/12 year the funding of the gross expenditures is $22.9 million (86.1%) from base budgeting provided by the University and $3.7m (13.9%) provided from external funding sources e.g. province of Nova Scotia and other external contracts.

1.62 Background 2007/08 to 2011/12. Some observations are made when comparing the 2011/12 and 2007/08 gross operating budgets of the Faculty.

- Budget Changes – Between 2007/08 and 2011/12, gross operating expenditures of the Faculty increased by more than $3,000,000 or 12 %. As shown in Figure 2, the clear majority of this increase occurred in spending on Academic salaries -$3.3 million – representing a 20% increase. There were increases of $373,000 in Administrative salaries - a 10% increase - and transfers of $192,000 representing increased spending by the Faculty. These increases were offset by reductions of a $0.8 Million in non salary expenditures.

Figure 2



- The 20% increase in academic salaries does not represent the acquisition of an additional 20% of academic resources. Significant cumulative rate increases have been included in the University's collective bargaining agreements. As examples under the terms of the current DFA contract, Professor Salary rates have increased 18 % since July 1 2007; Lecturer rates have increased 22.6 % during the same period.

- In 2007/08 gross expenditures of $23.5 million were funded by a base budget of $18.8 million, external revenue of $3.4 million and previous years' unspent resources of $1.3M. Funding $1.3 million of the Faculty's ongoing operating expenditures with previous years' unspent resources was unsustainable and placed the activity level of the Faculty at risk as unspent resources are not "renewable"—they are not provided each year. On an ongoing basis, the Faculty's spending plans were in $1.0 million in excess of its base funding.

  The Faculty has managed its financial position so that in 2011/12 activities are now NOT funded using previous year's unspent resources, but are funded within its base.

1.63 Adjustments to Base Budget - ERBA and "Reallocations" and Adjustments. The Faculty is funded by the University through a series of annual adjustments to a base budget, including significant adjustments for wage increases, ERBA ("Enrolment Related Budget Adjustments") and Strategic Reallocations/Budget adjustments.

- Wage increase adjustments are based on collective bargaining settlements.
- ERBA is based on the *change* in overall enrollment in Faculty programs and the *change* in enrollment in undergraduate courses offered by the Faculty. If overall enrollment in Faculty programs and classes increases over the immediate prior year, then there is a positive ERBA funding adjustment. If overall faculty enrollment decreases, then there would be a reduction in the Faculty's base budget as a result of ERBA.
- Strategic reallocations and adjustments. Strategic reallocations are essentially adjustments to the Faculty's budget to fund priorities of the University. "Adjustments" are reductions in Faculty base budgets in order to meet overall global University fiscal pressures that support program delivery.

Since 2007/08 the Faculty has received $1.5 million in ERBA funding and had reallocations or reductions applied to its budget in the cumulative amount of $2.3million.

This unfavourable financial situation was anticipated in the 2005 Self-Study prepared by the previous Dean. In the context of a number of programs with original business models based on 100% ERBA and most programs having limited opportunities for significant enrollment expansion, the changes made in the ERBA allocation combined with the regular 2% base budget cuts made financial sustainability of the Faculty problematic.

1.64 Financial Challenges

In 2012/13 a further 3% reduction is anticipated to be applied as a result of fiscal cost pressures facing the university. There is anticipated ERBA revenue in excess of $600,000 mostly as a result of planned increases in enrollment in the School of Nursing and substantially increased enrollment in the School of Health and Human Performance.

While the substantial increase in ERBA revenue over the past years has assisted the Faculty in addressing reductions and reallocations, there is considerable risk in basing the financial sustainability of the Faculty on continual significant growth. This risk will be realized in 2014/15 as between 2013/14 and 2016/17 enrollment in the School of Nursing is intended to decrease by 200 from 740 to 540 FTE students. This decrease will result in sustained downward pressure on both ERBA revenue and external revenue beginning in 2014/15 - one year after enrollment in the School of Nursing is intended to begin to decrease. Continued growth in the School of Health and Human Performance is also constrained by adequate facilities (large classrooms, classrooms for labs) and sufficient academic staff. Both of these elements will create considerable fiscal pressure on the Faculty in the near future.

It is unlikely that other schools will be able to increase revenue to offset these planned enrollment losses. All schools other than Health and Human Performance and Health Administration are entry to practice programs, that is, graduates are prepared to receive a license to practice their associated health profession. Significant components of curriculum

in these programs are small group, labour intensive clinical or learning settings with a limited capacity to generate additional marginal revenue. In addition there is a reluctance to increase enrollment significantly beyond labour market demand.

The implications of the gap between revenue and expenditures are significant, and have led to and continue to lead to positions not being filled with tenure track appointments (meaning a decrease in research capacity), an overall decrease in faculty complement, a decrease in support staff, and an increase in the reliance on sessional instructors. There is concern that these changes in personnel will impact the quality of the programs, although it is difficult at this stage to document that potential impact beyond teaching evaluations and graduate student surveys.

Similarly we have concerns that the financial gap will restrict opportunities around interprofessional health education. Although our approach has been to minimize costs by building on what is already in the curriculum, there are necessarily additional administrative and instructional costs. The senior administration has provided some one-time funding to help establish these initiatives and we hope that this funding will become base funding so we can sustain initiatives.

1.7 *Tuition for FHP Programs*

Tuition and fees for programs in the Faculty of Health Professions are among the highest in Canada. For Pharmacy, the $37.2K program cost is lower than Toronto ($49.6K) and Waterloo ($56.1K) but higher than the rest of Canada. For PT and OT, the $27.6K tuition and fees is the highest in Canada with the next highest being at Queens ($21.3K). Similarly with Human Communication Disorders, its $30K program cost is highest with University of Toronto and University of Alberta following well behind with tuition and fees of 13K and 11K, respectively. The $15K for Health Administration lies between $17K for Toronto and $6K for Montreal, the other two accredited programs in Canada. Despite comparatively high tuition levels, there is no shortage of well qualified applicants to most programs.

1.8 Research Grants/Awards

The total research funding for grants administered through Dalhousie University and associated with Health Professions faculty has increased significantly in the past several years and reflects an ever increasing commitment of Faculty to secure external research funds (see Table 7 and Figure 3). The table does not capture the involvement of faculty members with research programs and grants administered through other universities. Although there is an apparent decrease in research funding for 2010-2011, two large grants were funded in 2011 and will appear in the figures for 2011-2012. These grants include the CIHR Networks Environment grant for Aboriginal health research to Fred Wien

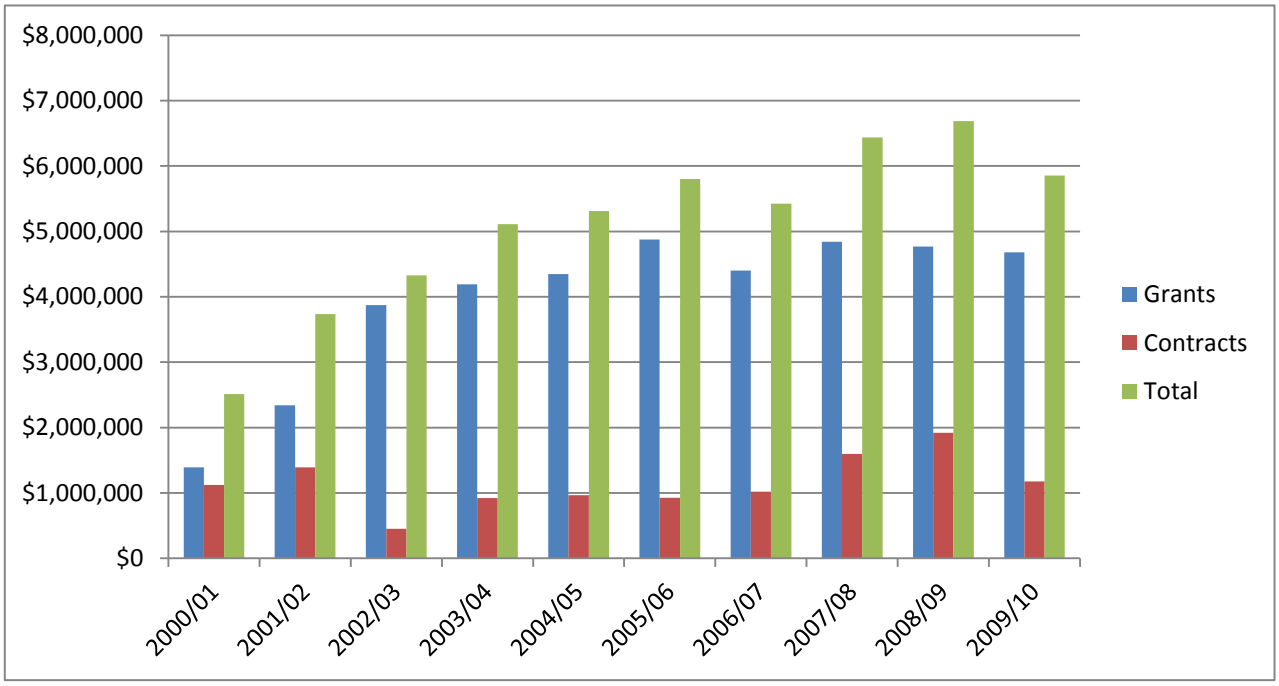
(Professor Emeritus, Social Work) ($9.3 M for 2 years) and a CIHR National Centre of Excellence – Knowledge Mobilization grant for Children and Youth in Challenging Contexts to Michael Ungar ($1.6 M for 4 years).

The Faculty has supported Canada Research Chairs in Health Promotion (Dr. Renee Lyons, 2004-2010), Health Services Research (Dr. Sara Kirk, 2006 continuing); and Women's Health (Dr. Brenda Beagan, 2007-2012, completed). In addition, it supported the CIHR-CHSRF-NSHRF Chair in Health Services Research (Dr. Ingrid Sketris, 2000-June, 2011). Dr. Michael Unger was awarded a Killam Chair in 2011, the first of such chairs in FHP.

Table 7: Total Research Grant Funding by Year

2003-04	2004-05	2005-06	2006-07	2007-08	2009-10	2010-11
$5,109,664	$5,312,944	$5,795,055	$5,422,113	$6,432,518	$6,686,545	$5,855,850

Figure 3: Grants and Contracts in the FHP During the Past Decade



Research grants are one measure of research productivity; research publications are another measure of research accomplishment. Appendix B provides the Research Catalogue for the Faculty for the five years encompassed in annual reports of faculty for the years 2006 – 2010. The reported publications include peer-reviewed papers, books, book chapters, and published reports as submitted by faculty. Figure 4 summarizes this publication data for all faculty together and by faculty separated by their position as tenured/tenure track or limited term.

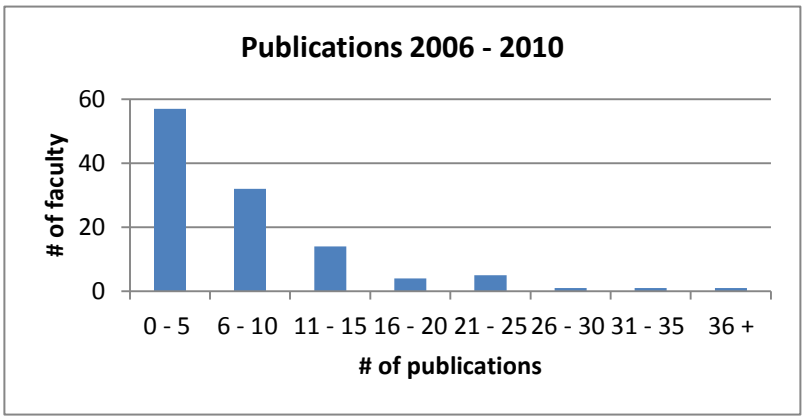
Figure 4: FHP Publications 2006 – 2010

(Derived from the FHP Research Grants and Publications 2006 – 2010 document)

All Faculty <u>Listed in Catalogue</u>

n=115

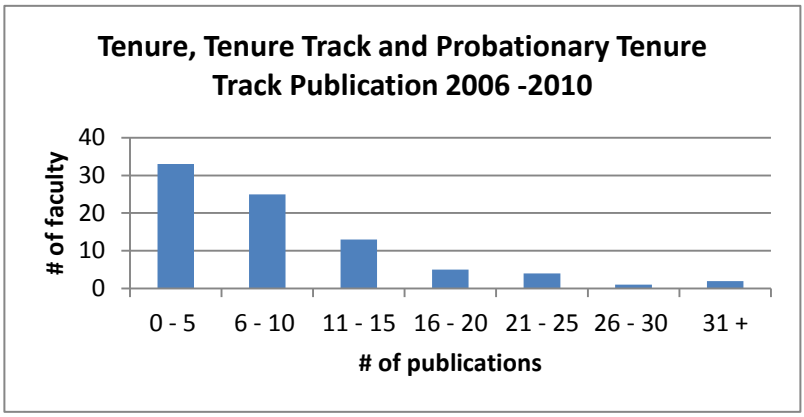
# of Publications	Frequency	%
0 - 5	57	49.6
6 - 10	32	27.8
11 - 15	14	12.2
16 - 20	4	3.5
21 - 25	5	4.3
26 - 30	1	0.9
31 - 35	1	0.9
36 +	1	0.9
	115	100.1



Tenure Track and Equivalent

n=83

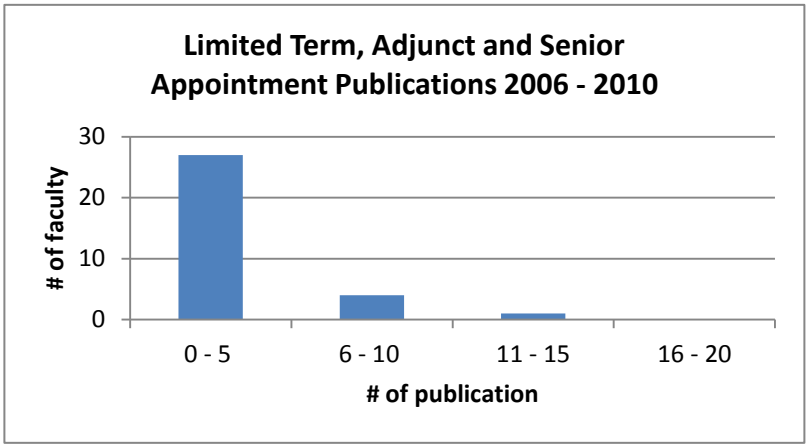
# of Publications	Frequency	%
0 - 5	33	39.8
6 - 10	25	30.1
11 - 15	13	15.7
16 - 20	5	6.0
21 - 25	4	4.8
26 - 30	1	1.2
31 +	2	2.4
	83	100



LTA and Equivalent

n=32*

# of Publications	Frequency	%
0 - 5	27	84.4
6 - 10	4	12.5
11 - 15	1	3.1
16 - 20	0	
	32	100



*this represents only those LTA's & equivalent that have publications listed there are ~36 LTA's who are not in the catalogue

This data reflect significant accomplishments by many faculty as well as the need to re-examine research productivity for others, through mentorship, performance reviews, workload re-evaluations and so on, where research productivity is modest.

It is noteworthy that the pattern of research publications for limited term faculty members indicates that many of these faculty are as active in publications as tenured and tenure track colleagues. In part, this finding may reflect a more recent pattern of hiring PhD faculty in a limited term position when a probationary track position has not been approved. In such cases, faculty are striving to ensure that they will be in a position to apply for a tenure-track position.

More information about specific research programs and researchers in the research themes and core research concentrations (described in Section 3) is available at School/College and faculty websites and at the websites of the following Centres/Units:

Atlantic Aboriginal Health Research Program (www.aahrp.socialwork.dal.ca)
Atlantic Health Promotion Research Centre (www.ahprc.dal.ca)
Atlantic Centre of Excellence for Women's Health (www.acewh.dal.ca)
Atlantic Regional Training Centre (www.artc-hsr.ca)
Applied Research Collaborations for Health (www.archonline.ca)
Gender and Health Promotion Studies Unit (www.gahps.hhp.dal.ca)
IMPART - Initiative for Medication Management, Policy Analysis, Research & Training (www.impart.pharmacy.dal.ca)
Network for End of Life Studies (www.nels.dal.ca)
Resilience Research Centre (www.resilienceproject.org)
WHO Collaborating Centre on Health Workforce Planning and Research (www.whocentre.dal.ca)

Select reports have been included in a separate Research Reports Binder as illustration.

1.9 Key Faculty Relationships

The key Faculty relationships internal to the University are with the Faculty of Medicine and Faculty of Dentistry. The three Deans meet on a regular basis as a Health Deans' Council to discuss matters of common interest. The three Faculties have been collaborating closely on the development of interprofessional education initiatives, including the planning of the Interprofessional Health Education Building, the Health Mentors initiative and the First Year Event, all of which will be discussed in more detail in Section 2. The three Faculties also collaborate in supporting the Atlantic Health Promotion Research Centre (for

budgetary reasons, the Faculty of Medicine recently withdrew its financial support to the Centre, but remains an active participant) and the Aboriginal Health Sciences Initiative.

On a research level, the three Faculties collaborate along with CDHA and IWK to support the Interdisciplinary Health Research Training Partnership (IHRTP) which is an initiative of the Associate Deans of Research of Medicine (G. Johnston), Dentistry (M. Filliaggi) and Health Professions (previously G. Turnbull, now A. Unruh in an Acting position), and the Vice-Presidents of Research of the Capital Health District Authority (R. LeBlanc) and the IWK Health Centre (P. McGrath). The objective of IHRTP is to provide interdisciplinary health research training opportunities for staff of the health centres and faculty and students of the health Faculties. Diverse formats are used such as seminars, webinars, grant mentoring days, presentation days or half days for summer students (fall term) and graduate students (winter term). Associate Deans from the health Faculties, and the VPs of Research for CDHA and the IWK, form the IHRTP Management Committee. Faculty from each of the three Faculties (and external) contribute to seminars and workshops. FHP and Medicine also jointly support a qualitative researcher (R. Bassett) as a resource for faculty for the academic health partners on qualitative research methodology and analysis.

Partners Information Exchange (PIE) is an informal monthly meeting of the Associate Deans of Research (Medicine, Health Professions, Dentistry) with the two Vice-Presidents of Research to share common concerns, problem-solve, and develop workable strategies.

The Deans Research Advisory Council (DRAC) is a Council of Assistant and Associate Deans of Research with the VP of Research. DRAC meets monthly. A. Unruh worked with G. Johnston (Medicine) to revise the Health Studies section of the Dalhousie Strategic Research Plan.

IHRTP, PIE and DRAC provide formal and informal opportunities for the Associate Deans of Research to collaborate on areas of mutual concern. The Health Mentors program and the Aboriginal Health Sciences Initiative are similar collaborative efforts directed towards academic and learning related issues of the three health Faculties. Through its Associate Dean (Research and Academic), the Faculty also works collaboratively with academic representatives from other Faculties on the Council of Associate/Assistant Deans for Students Affairs, and the Council of Associate/Assistant Deans Academic. The Faculty of Medicine has for some years been teaching anatomy and physiology courses to students in Nursing, Health and Human Performance, Occupational Therapy, and Physiotherapy, together with a number of biomedical sciences courses to students in Pharmacy and Nursing. We are anticipating a change in arrangements in the coming year or two, with undergraduate anatomy and physiology being taught through the School of Health Sciences.

Secondary relationships exist with the Faculty of Law and the Faculty of Science. The FHP provides financial support to the Health Law Institute, and in return faculty from the Institute teach health law in several clinical programs. The School of Health Administration also has a close working relationship with faculty members in Law. The Faculty of Science has for some years taught courses to students in Nursing, Health and Human Performance, and Pharmacy, in the areas of Chemistry, Biology, Psychology and Statistics. As well, students in Clinical Psychology are included in various interprofessional education initiatives.

The key relationships external to the University are with the District Health Authorities. On a formal level this is manifest in the meetings of the Academic Health Council, comprised of Deans of health faculties throughout Nova Scotia, CEOs of the District Health Authorities and IWK, and the Deputy Ministers (or their delegates) of Health and Wellness, Labour and Advanced Education, and Social Services. On a more informal level, the Dean maintains a close working relationship with most of the CEOs, in particular CDHA, IWK, Pictou County, Cape Breton, Southwest Health, Southshore Health, Annapolis Valley and the Guysborough-Antigonish-Strait Health Authority. He also serves in an ex-officio capacity on the Board of Directors of the Capital District Health Authority, and serves as a member of its Health Human Resource Committee.

Secondary external relationships include the Nova Scotia Department of Health and Wellness and the Nova Scotia Community College. There are clearly significant opportunities that need to be explored for the development of articulation agreements with the College to facilitate laddering so that students can move from a college diploma to a university degree with minimal impediment. For example, the Therapeutic Recreation program has a framework that has been developed in discussion with NSCC to enable students formerly from NSCC to transfer some NSCC courses to their therapeutic recreation program at Dalhousie.

It should be noted that in addition to these Faculty-based relationships, individual Schools/College have key relationships with specific organizations in the community, often related to student practicum placements. For example, the School of Human Communication Disorders has critical relationships with the Nova Scotia Hearing and Speech Centres and the School Boards whose professional employees supervise students in their placements. The School of Health and Human Performance has key relationships with sports and recreation organizations and with some commercial partners that support research. Similar relationships exist between other Schools and their professional counterparts in the health centres, community agencies and programs, government and professional associations.

Individual faculty have also contributed significantly to administrative activities at Dalhousie beyond the Faculty level. For example, 8 faculty have been FHP representatives to Senate, and 13 faculty have been (since 2005), or are currently, members of either the Social Sciences or Health Sciences REB (two of them as Chairs). Other faculty have participated on Review Committees of other Faculties, Search Committees for Deans, or other Senate level Committees.

1.10 Space

Since the last Senate review, the quality of teaching and office/administrative space has improved substantially in the Schools of Health Administration, Human Communication Disorders and Social Work, all of which have been relocated into new facilities (RBC Building on George Street, Thompson Building on Barrington Street, and Mona Campbell Building on campus, respectively). Unfortunately the Mona Campbell classroom space is not adequate to meet the needs resulting from increased enrollments in Social Work. With current faculty complement and student enrollments, space for meeting the basic teaching needs of the Schools of Occupational Therapy and Physiotherapy and the College of Pharmacy is generally adequate. The Pharmacy Library which was located in the Burbidge Building has been consolidated with the Kellogg Health Sciences Library, but the impact has been more on the Kellogg Library than on the College of Pharmacy. The space for the School of Health and Human Performance, spread among the Stairs House, the Dalplex and the Studley Gym remains as unsatisfactory as noted in the previous Senate Review. Indeed, with its expanding enrollment the classroom and teaching lab space for that School is totally inadequate and will need to be addressed immediately and on a longer term basis. Similarly classroom space for Nursing, with its expanded enrollment, remains highly problematic. The School of Health Sciences continues to occupy space in Capital District Health Authority on the 6th floor of the Bethune Building, and the Clinical Vision Science program is located in the IWK. When one adds to the mix the Atlantic Health Promotion Research Centre, located in City Centre Atlantic on Dresden Row, the Atlantic Centre of Excellence for Women's Health located on Granville Street, the WHO Collaborating Centre on Health Human Resources located in the offices of the Nova Scotia Health Research Foundation on Hollis Street, and the Resiliency Research Group located on Coburg Road at Oxford, it becomes readily apparent that the geographic dispersion of units is a significant barrier to the full realization of potential in the Faculty for interprofessional education and interdisciplinary research.

The proposed Interprofessional Health Education Building (IPHEB) planned for the corner of University and Summer Streets and connected with links to the Tupper Tower and the Forrest Building represents a most exciting development for the three health-related Faculties and the Faculty of Health Professions in particular. It is being designed to encourage students from different programs to bump into one another and rub shoulders, and in turn to facilitate and support the many interprofessional health education activities

being developed by the Faculties. Simulation is assuming an ever increasing role in our individual professional programs and in developing the knowledge, skills and attitudes required for interprofessional teamwork and collaboration. This building will provide technologically up to date facilities to do simulation. It should also provide flexible classroom space with small group breakout pods as currently found in the LINC classroom in the Killam Library. Of equal importance, through its shared lounge and eating areas and possibly library facilities, the building will serve as a magnet to support informal non-curricular interactions among students from different programs. It is unclear at this time whether the Library will be relocated to the new building. The desirability of doing so will be influenced by the nature and location of proposed enclosed links between the Burbidge/Forrest Building and the Tupper complex and between the Tupper Complex and the IPHEB. Unfortunately the potential size of the building is not sufficient to create an optimal interprofessional and collaborative learning environment for students and faculty, but it will provide some basic interprofessional education facilities.

Research space continues to be highly problematic for this Faculty. Some research groups (Pharmacy and Human Communication Disorders) have space within their units that is currently adequate but there is no room for growth as research and graduate programs develop. Research space in other units, particularly Health and Human Performance, is simply inadequate. In most units, active researchers often share their faculty office with research staff which is an unsatisfactory arrangement. Some large research programs are located in temporary rented space off campus (Atlantic Health Promotion Research Centre, Atlantic Centre of Excellence for Women's Health, WHO Collaborating Centre). As envisaged by the former Vice-President Academic and Provost, the solution for our research space needs and those of other Faculties would be the construction of a building with open, flexible dry lab space that can house graduate students, research assistants, post-doctoral fellows, and the occasional visiting professor or scholar from another institution.

2. STRATEGIC ACADEMIC DIRECTIONS OF THE FACULTY

2.1 Interprofessional Health Education

The major strategic thrust for the Faculty of Health Professions during the past 6 years has related to interprofessional education and the development of knowledge, skills and attitudes that will foster collaborative practice and patient/family-centered care. It is also one of the pillars, for the health-related Faculties, of Dalhousie's "Bold Ambitions" Capital Campaign. The current status of IPE can be divided between initiatives and activities internal to the university and those external, primarily in student practicum placement sites.

Appendix C contains a manuscript prepared by the Dean and submitted to the *Journal of Interprofessional Care* summarizing the history of interprofessional education at Dalhousie, the current objectives of IPE, the approach being taken and the curricular requirements for the various programs. The approach to the development and implementation of IPE activities internal to the Faculty has been decentralized, with the responsibility for initiating collaborative, IPE activities resting with the Schools/College (with support provided by the Dean's office in the form of the Interprofessional Experience Coordinator position or in the form of start-up funding). That said, Faculty Council has approved a mandatory requirement for all students entering FHP programs in September, 2011. Students are required to complete a certain number of IPE experiences, which are recorded in a 0-credit hour course required for graduation. The students, with the approval of their Schools/College, can participate in a menu of IPE options, most meaningful and relevant to their particular professions. Faculty members have responded to the challenge by developing a variety of classroom-based, online, simulation and or practice-related learning activities. To facilitate the coordination of these activities for students from different programs, the Faculty has recently agreed to a common time, during which only IPE activities can be scheduled.

Table 8 provides an overview summary of the results of various workshops held to consider objectives and principles for interprofessional health education as well as the requirements for IPE in the Faculty of Health Professions programs.

The FHP liaises with the Faculties of Medicine and Dentistry, and with the programs of Clinical Psychology (in the Faculty of Science) and Health Informatics (in the Faculty of Computer Science) in developing IPE activities that involve students from these Faculties. Communication with these partners has led to the development and implementation of two large-scale IPE activities (the First Year Event for students in all first year programs, and the Health Mentors Program) as well as activities for a smaller number of programs with a focus particularly relevant for those programs.

External IPE activities occur in collaboration with partners in the District Health Authorities in Nova Scotia and other healthcare organizations in Atlantic Canada, and have focused on developing interprofessional learning experiences for students completing practicum/fieldwork placements in the practice setting. The DHA's have welcomed these opportunities, seeing them as a means of: a) educating future practitioners for interprofessional, collaborative, patient/client/family/community-centred practice ; b) helping to change the existing culture within the organization; and c) recruiting health professionals to underserviced areas. The FHP has held a series of consultations and forums with partners in the District Health Authorities as well as other community agencies to facilitate the exchange of ideas and development of action plans around interprofessional education and collaborative practice.

While significant strides have been made in embedding IPE into the curriculum, there remain opportunities for further development. These opportunities include:

- Developing both medium-fidelity and low-fidelity simulation experiences
- Expanding IPE opportunities in the practice setting, including in long term care and community settings
- Exploring opportunities for virtual and online IPE experiences
- Offering more faculty development related to incorporating IPE into coursework and facilitating interprofessional collaboration
- Ongoing evaluation of the IPE mandatory requirement and means of monitoring successful completion

Table 8. Some Background Information on the Current Status of Interprofessional Health Education at Dalhousie University

1. University Calendar Statement on Interprofessional Health Education

Students in the Faculties of Dentistry, Health Professions and Medicine are required to participate in interprofessional health education activities. These activities, together with specific program requirements, are currently evolving and in transition and are integrated into the curricula of individual programs. Participation is mandatory. The objectives of interprofessional education include developing:

- knowledge and understanding of, and respect for, the expertise, roles and values of other health and human service professionals.
- understanding the concept and practice of patient/client/family-centred care.
- effective communication, teamwork and leadership skills applied in interprofessional contexts.
- positive attitudes related to the value of collaboration and teamwork in health and human service contexts.
- an understanding, from a multi-disciplinary perspective, of the Canadian health and social systems, the legal and regulatory foundation of professional practice, how health and human service institutions are organized and operate, and how different health and human service professions contribute to the systems and institutions.

As programs in the Faculty develop initiatives to achieve these objectives through successive steps of *Exposure, Immersion* and *Readiness*, they are being guided by the framework of the Canadian Interprofessional Health Collaborative (www.cihc.ca).

Table 8 con't

2. Directions Taken for the Development of IPHE Dalhousie in Recent Years

Over the past several years, we have convened a number of consultations and workshops around interprofessional education which demonstrated broad support for moving ahead with IPHE. From the earliest of these consultations, a number of key points emerged that have guided us and upon which we have been building:

- Maintain a universal program requirement for IPHE experiences.
- Develop a menu of appropriate, meaningful, engaging and relevant experiences from which students and/or programs of study can choose (i.e., one size does not fit all)
- Keep the bureaucracy simple and nimble—use a decentralized (School-based) bottom-up approach rather than one that is centralized or top-down in approach (i.e., focus on a network rather than a centre metaphor).
- Minimize add-ons to an already packed curriculum—build on existing curriculum and opportunities to the extent possible.
- Focus on "patient-centredness" (in other words, collaboration is all about the patient and family, not about the professions).
- Structure the IP experiences as close to the patient/client/family as possible (for example, incorporate into practicum/fieldwork placements).
- Interprofessional education is about "students in different professions learning about, from and with one another to enable effective collaboration and improve health outcomes". (WHO definition).
- Structure initiatives to be sustainable (i.e., to require minimal new resources)

3. Key Elements of IPHE Requirements for Students in the Faculty of Health Professions

The key elements of the new minimum requirements, which are intended to come into effect partially in September 2010 and fully by September 2011, are as follows:

- By the end of their program of study, students in all undergraduate programs and all entry-to-practice graduate programs are required to have completed a total number of different, meaningful and relevant interprofessional collaborative learning experiences (as determined and approved by each student's School/College) equal to two times the number of years or part years of study in the program.
- At least one of these experiences will be in a practice setting.
- The experiences are to include interactions with undergraduate and/or graduate students from a total of at least 4 different professions with which there are natural affinities or linkages in the professional environment, and these professions will be primarily from outside the student's home School/College in the case of Schools with multiple professions.
- The interprofessional experience requirement is implemented through a Calendar requirement that each student is to maintain registration in a 0-credit hour Faculty-based course, IPHE 4900 or IPHE 5900 for undergraduate and graduate students respectively. This course functions essentially as a shell course in which IPHE experiences are credited.
- Successful completion of IPHE 4900 or IPHE 5900 with a grade of PASS is a requirement for graduation in all programs, and will be recognized further with the awarding of a special *Certificate in Interprofessional Collaboration* to be presented by the Faculty of Health Professions.

For students in the Faculty of Medicine and the Faculty of Dentistry, an IPHE requirement is built into the specific courses in which the students register.

2.2 Interdisciplinary Health Studies

During the past three years, the Faculty of Health Professions, through the leadership of Katherine Harman, has been developing a proposal for a new undergraduate program, Interdisciplinary Health Studies. Based on the liberal arts and science tradition with a broad understanding of health as a focus of study, the program would complement the clinical programs in the Faculty and, among other goals, attract new students to the university to be prepared for admission into those programs. Of particular interest is attracting students from underrepresented groups (Aboriginal students and African Nova Scotia students in particular). As an alternative to admission to an entry-to-practice program, the IDHS can lead to graduate studies and research. We also see the program as being an end in itself for students who will pursue non-clinical health-related employment in the public or private sectors. The FHP Council has approved the proposal and it is now prepared to go forward to Senate with a first intake in September, 2013. First, however, the Faculty needs to determine the appropriate governance structure for the program, and at this time it appears that it may be most appropriately housed within the School of Health and Human Performance.

As currently envisaged, the IDHS program has two parts: (1) a first year course of study and, (2) a three year core curriculum.

Year 1 provides an entry point for students who are attracted to the health professions or other health careers because they have a particular scholarly aptitude and want to help people but who have limited understanding of the variety of educational and career choices available to them in the field of health. The flexible first year will allow students to take classes usually required for either a B.A. or a B.Sc., have space for electives, and to accommodate the courses that are prerequisite to apply to post-baccalaureate health professions programs. There will be two new required courses (HEALTH 1000/1001; HEALTH 1200) introducing students to the broad and complex study of health and exposing students to the many potential careers in health. This first year will be a gateway into the University, for students to learn about health careers, receive career counseling and begin to develop a broad appreciation for health.

Years 2 to 4 provide an academic home for students with a major program of study that, through 3 new interdisciplinary courses in health and a wide selection of elective courses throughout the university available to students, will address health, health systems, health care delivery and a familiarization with the many health professions involved.

2.3 Distance Education

The Faculty of Health Professions has been a leader at Dalhousie in developing and promoting in distance education, and indeed a number of its programs are now based largely or wholly on a distance education platform. The Occupational Therapy post-

professional Masters degree has been offered exclusively as a distance education program since 1998. The BSW and MSW programs in Social Work are available in both formats (campus and online), as is the Master of Health Administration program. Programs which are offered exclusively on-line are the Diploma in Health Services Administration, the Diploma in Emergency Health Services Management, the Diploma in Disability Management, and the proposed new graduate program in Healthcare Management. The Faculty has had an active Distance Education Committee which, over time, has morphed into a University Committee that is providing leadership as the University grapples with how to respond to the demand for more on-line courses and programs. During the recent past, the committee has been dealing with the impact of copyright reform on distance education, the use of technology in the classroom, the use of e-signatures for Student Ratings of Instructors, the potential expansion of on-line learning because of events such as the H1N1 pandemic, a survey of students taking courses from other universities on letter of permission and a draft plan for the expansion of on-line learning at Dalhousie.

2.4 Internationalization

Despite its interest in issues of internationalization of global health, the Faculty's direct involvement with these issues has been limited. Currently there are only 17 international graduate students enrolled in Heath Professions programs. However, the School of Health and Human Performance has had a student exchange relationship with Botswana for some years, and several Schools (OT, Nursing, PT, Pharmacy,) have had students participating in international student placements in the Gambia and Tanzania through the Global Health Office of the Faculty of Medicine. The School of Health Administration under its previous Director, Dr. Tom Rathwell and previous Dean Lynn McIntyre, initiated an International Health Services Administration degree intended for students from China and offered from 2006 to 2008. Unfortunately, international recruitment of students primarily through the School's own efforts did not attract sufficient numbers of qualified students with sufficient English comprehension to sustain this program. Efforts were also made to develop the Diploma in Disability Management for students in China, but these efforts were not successful. Through its limited forays into the internationalization realm, the Faculty recognizes that although there are many positives to international initiatives, substantial infrastructure is required to properly support such initiatives. To keep the door open to new initiatives, A. Unruh serves as an invited member of the Dalhousie International Strategy Committee.

Our best prospect for greater internationalization may be through distance education offered through the School of Social Work, School of Health Administration, School of Occupational Therapy and School of Health and Human Performance, all of which have considerable experience and interest in international education and on-line learning.

2.5 Aboriginal Health Sciences Initiative

The Aboriginal Health Sciences Initiative (AHSI) is a tri-Faculty initiative that grew out of the recommendations of the 2010 Final Report of the Aboriginal Health Sciences Advisory Committee, comprised of members from the three health Faculties, faculty and staff from Cape Breton University and leaders from Aboriginal communities in Nova Scotia, Prince Edward Island and New Brunswick. Dalhousie received funding for this project through the Aboriginal Health Human Resources Research Initiative from Health Canada.

The Office of the Vice-President Academic and Provost and the three health-related Faculties committed funds for three years to support the AHSI. The purpose of AHSI is to increase the number of Aboriginal people admitted to, and graduating from the health sciences. The workplan for the Initiative together with its budget and staffing is overseen by the Aboriginal Health Sciences Management Committee comprised of the Associate Deans of the three health-related Faculties, the co-Chair of the Aboriginal Health Sciences Advisory Committee and the Associate Vice-President International Programs. The Committee is co-chaired by A. Unruh and D. Martin. The Aboriginal Health Sciences Advisory Committee (AHSAC) (co-chaired by Professor Emeritus Fred Wien from Social Work) assesses and makes recommendations on specific initiatives to be undertaken by the University to increase the educational interest and success of Aboriginal people in health sciences.

The Atlantic Policy Congress of First Nation Chiefs recently funded a proposal to develop a Bridging program to provide supportive opportunities for Aboriginal students to take preparatory science courses prior to application into a health professions degree program. Development of the bridging program is a priority for 2012.

In September 2010 and 2011, a Mawio'mi celebration was held to celebrate Mi'kmaq History Month and to recognize and welcome Aboriginal students on campus. In 2011, this celebration was accompanied by a flag raising ceremony. The Mi'kmaq flag was raised alongside the Canadian flag by Chief Leroy Denny and Dalhousie Vice-President Academic Dr. Carolyn Watters.

In support of curricula enhancement, the Medicine Wheel Speaker Series was launched in 2011. The series brings in speakers with expertise in Aboriginal health issues to examine western and indigenous approaches. The first course in a suite of courses, Introduction to Aboriginal Peoples Health (IPHE 2201) in September 2011, and two mini courses have been proposed as part of IPHE offerings.

2.6 PhD in Health Research

During the past year, substantial progress has been made in developing a PhD program in Health Research to be housed largely in the Faculty of Health Professions. Although some FHP faculty have supervised PhD students either through departments to which they are cross-appointed and/or through the Interdisciplinary PhD program, these options have not met significant needs and interests in the Faculty and do not allow for discipline specific research in the various health professions.

The program will encompass a broad range of topics in disciplines/professions of health and social well being, and will capitalize on recruiting high quality trainees, increased scholarship and research funding, increased research output, and ultimately improved reputation that will facilitate faculty recruitment and influence in the province. The program as it is envisaged will also meet societal needs for more PhD prepared people to serve as faculty in professional programs both in Canada and internationally and to support the heightened emphasis in health care on evidence-based practice.

The proposed doctoral program in Health Research will train health scientists, scholars and clinicians to conduct high quality research in specific health disciplines and professional areas. The WHO Definition of Health and the International Classification of Function (ICF) will provide the contextual framework for the program. Hence the program will include research on body structure and function, activity and participation, and contextual factors with respect to health. Dalhousie University is the leading institution for research and training in the health sector in Atlantic Canada. The Faculty of Health Professions at Dalhousie University is the administrative home to the largest collection of educational programs pertaining to health and social well being in Canada. The proposed PhD program would offer a uniquely wide range of areas of expertise in health and social being, and will allow for i) discipline/profession-specific research and ii) collaborative research in identified areas of focus that cross the health professions/disciplines. We anticipate that the program will be operational in September 2013.

2.7 Master of Public Health

With the encouragement of the Nova Scotia Department of Health Promotion and Protection and with the understanding that the Department would provide financial support, the Faculty took a lead role in trying to develop a Master of Public Health (MPH) program. Unfortunately the initiative floundered when it became clear that the Department and the Faculty had different expectations for the proposed program and that funding would not be forthcoming. The Faculty of Medicine considered whether it could proceed with a program in this new climate but was unable to move forward.

We still believe that an MPH program would round out the health professions offerings of the university. In the context of nearly 25 MPH programs being offered in Canada (including one at Memorial), some with distance education options, a Dalhousie program would need to be distinctive, offer added value, and be financially sustainable without external government funding. We are currently exploring options for proceeding with a new proposal, but it is premature to outline the options being considered at this time except to comment that there may be merit to building on the Specialty Certificate in Public Health offered through the School of Health Administration.

2.8 New, Modified and Eliminated Programs and Course Offerings

Program/Courses	**Comments**
MSc in Physiotherapy	Introduced in 2006 to replace former undergraduate program.
MSc in Occupational Therapy	Introduced in 2006 to replace former undergraduate program.
Interprofessional Health Education 4900 and IPHE 5900	Requirement for all students entering the Faculty as of Sept.2011.
Master in International Health Services Administration	Admitted first students in 2006. Admissions suspended in 2008.
MBA/MHSA	Terminated September 2009
Master in Applied Health Services Research (ARTC)	Admitted first students in 2001. Admissions suspended in 2011
Post-diploma BScN	Admissions suspended 2011.
PhD Nursing	Admitted first students in 2002. Reviewed in 2011. New admissions suspended in 2011 with status to be reassessed in 2012.
PhD Health Research	Proposal in development
Interdisciplinary Health Studies	Proposal in development
Diploma in Disability Management	To be terminated. Last students graduating October 2012
Msc Pharmaceutical Science	Approved by Senate 2010
Certificate in Disability Management	Approved by Faculty Council September 2011
Certificate in Magnetic Imaging Technology	Approved by Faculty Council January 2011
School of Health Sciences Anesthesia Certificate	Approved by Faculty Council 2006
BSc (Recreation) with Honours	Approved by Senate 2011
BSc (Recreation)/Bachelor of Management with Honours	Approved by Senate 2011

3. STRATEGIC RESEARCH

Health Professions has an academic and research vision that is focused on global health and the health and social well-being of individuals and their communities. Research related to the social and environmental determinants of health and well-being, and community-based strategies to promote health and well-being are central foci along with research that examines health systems, health policies, health care, management of chronic disease, and the biological structures and processes of health and function. Health and social well-being are local and global issues that concern health professions researchers across the spectrum from biological function and impairment to the macro structures of human engagement and resilience. In addition to quantitative expertise, Health Professions is well-situated to provide strong interprofessional leadership particularly in qualitative and applied research methodologies with particular expertise in community-based research and community engaged research.

A strategic research plan serves the following objectives:

- to identify primary research themes, current and emerging research strengths, under-researched areas, and current responsiveness to regional and national priorities
- to provide critical support to proposals for CRCs, CFIs, nominations, awards
- to be a resource for attracting new faculty, retaining faculty, providing career reorientation and new opportunities for existing faculty
- to be an element in the faculty hiring decisions of search committees
- to provide support and direction for retaining and developing new graduate degree programs
- to enable potential graduate students to identify research opportunities and potential supervisors
- to set a path and priorities for future directions
- to inform internal and external groups of the health research expertise within Health Professions

To achieve these objectives, a strategic research plan needs to represent the current and emerging strengths of the Faculty and assist in setting research goals and objectives that challenge Health Professions faculty to become global research leaders in our core areas. Towards this end, a research scan was conducted to identify the Faculty's current and emerging strengths. The process used began with keywords that were chosen by faculty to represent their research areas. Keywords were then clustered into Research Themes in consultation with the FHP Research Committee. A smaller working committee revised these Research Themes and identified Core Research Concentrations from the themes. Further consultations with the working committee, Research Committee, the Management Advisory Committee, Faculty Council, the PhD Committee and faculty through the

Schools/College led to further refinement. The outcome of this work is summarized here and included in Appendix D.

3.1 Thematic Areas and Core Research Concentrations

The research scan identified four broadly constructed thematic areas of current research activity and interest in the Faculty:

- Determinants and Promotion of Health and Well-Being
- Clinical Person-Oriented Interventions (Health and Social Outcomes; Health and Social Services Systems and Policies; Informed Decision Making).
- Biological Systems and Functions
- Professional and Interprofessional Education Research

In practice, research programs cut across these themes. Further, research programs vary in how well established they may be with respect to collaborators and access to funding. The research scan also identified specific areas of strength described as core research concentrations.

The Core Research Concentrations are identified as:

- Child and family across the lifespan
- Chronic social disparities (Aboriginal Health; Gender and sexual orientation)
- Chronic disease
- Obesity
- Musculoskeletal health
- Pharmaceutical development, management and policy
- Health human resources and services
- Communication and sensory processes

There are four notable strengths of the identified Themes and Concentrations.

- Child and Family is supported by researchers in all FHP units and has strong collaborations across the Health Faculties and with Sociology and Psychology. Child was identified as a Dalhousie strength in the bibliometrics survey conducted for Dalhousie Research Services.
- These areas of concentration connect strongly to provincial issues and concerns related to children, obesity, chronic disease (esp. mental health, cancer, stroke), and drug and patient safety.
- Most of the core research concentrations are well-connected to research priorities of NSHRF, CIHR and SSHRC. NSERC provides some of the funding related to musculoskeletal health, and speech, vision and hearing. There are increasing numbers of research collaborations of health profession researchers across the

units and with other Faculties or departments (especially Medicine, Dentistry, Sociology and Psychology), other universities, non profit associations, community groups and associations, health care associations, along with multiple partnerships with government.
- The strong interprofessional interconnections in the themes and core research concentrations support their preparedness for multi-year and multi-site research initiatives. The concentrations vary in their capacity and readiness.

3.2 Challenges for the Future

As we move ahead in developing the research mandate of the Faculty, we face a number of challenges related to the themes and concentrations:

- Health Professions faculty have access to graduate students primarily through Masters' programs in audiology, clinical vision science, health promotion, kinesiology, health promotion, leisure studies, nursing, occupational therapy, physiotherapy, social work, pharmaceutical science, and speech language pathology. The majority of Health Profession students are in entry to practice degrees and do not complete a thesis. The number of students in thesis programs is variable; some programs admit three or fewer students per year or none at all. The MSc in Pharmaceutical Science is a new program. The most active graduate thesis programs at present are in nursing, occupational therapy, health promotion and kinesiology.
- There is only one PhD program in the Health Professions (Nursing). PhD students working with Health Professions faculty are usually enrolled in the Interdisciplinary PhD program, or doctoral programs in other Faculties or through other universities. Limited access to PhD students is a constraint for faculty applying for grants where PhD trainees are heavily weighted.
- Some concentrations (and other research programs) (e.g. obesity, health human resources) are emerging areas of strength that are centered on the research of a small number of well-funded researchers. They are vulnerable if faculty leave.
- Pharmaceutical management and policy researchers have had access to graduate students through a program that has suspended admission of students. The Masters programs in Health Informatics and Community Health and Epidemiology provide training opportunities. The new graduate program in pharmacy, the MSc in Pharmaceutical Science will graduate its first students in 2013.
- Recruitment of faculty prioritizes teaching competence. Competitiveness for high quality research faculty is also affected by start up funding, critical mass of existing researchers, opportunities for spousal employment and other issues.
- Research space is at full capacity with no room for expansion. Some research programs are currently located away from the Carleton campus.

4. RECOMMENDATIONS FROM 2005 SENATE REVIEW

We have made substantial effort as a Faculty to address the recommendations from the 2005 Senate review.

a. That the FHP strengthen its external relationships with regional health agencies, which have broadly defined educational and research interests.

FHP has responded to this recommendation in multiple ways. Establishing and maintaining strong and positive relationships with external stakeholders has been a priority for the current Dean. In 2008, an Associate Dean position for Policy and Planning was created and filled by Mr. Merv Ungurain who brought with him extensive experience with the Nova Scotia Department of Health and who had recently been Acting Director in the School of Health and Human Performance at Dalhousie University. A significant part of this position was to enhance relationships with the District Health Authorities and the Nova Scotia health system. Unfortunately the position ended in June, 2011 due to financial constraints. The position of Interprofessional Education Coordinator, created in 2006, was similarly structured to enhance relationships with the health community that would support interprofessional education. At this time, all indicators are that the relationship with external stakeholders has changed dramatically for the better since the last Senate review.

b. That the FHP continue to foster strong relationships with its alumni.

Primary responsibility for alumni relations has continued to rest with the individual Schools/College which is the level with which alumni identify and relate most closely. However, the Faculty has collaborated with the University Alumni Office by creating a shared position of Faculty Alumni Officer. Work had begun to keep alumni informed of Faculty activities and to engage those alumni in the HRM area through participation on the Dean's Alumni Circle, but unfortunately these initiatives have been put aside for the time being due to financial restraint. We are currently working with the Development Office to negotiate a new plan for alumni relations and development.

c. That the FHP surveys students in their graduation year and beyond to determine their level of satisfaction with the education they receive.

Most Schools in the Faculty carry out regular surveys of either graduating students or recent alumni. Only one School (Social Work) does not survey its students. The form of the survey varies across units and the information is used to inform curricula and prepare for accreditation.

d. That the FHP strengthens its relations with other Faculties at Dalhousie University.

As detailed earlier, the FHP has strengthened its relations with the other Dalhousie Faculties in leadership and management activities, interprofessional education endeavours, and research activities. Many of the teaching and research collaborations are among the three health Faculties but research collaborations have also involved the Faculties of Arts and Social Science, Science, and Computer Science. Collaboration in teaching activities has been challenging because of the many professional programs involved in the Faculties and the constraints each face in delivering their programs that typically also include clinical components with other agencies. Nevertheless, the Health Mentors program, the IHRTP, and the support for the Interprofessional Health Sciences degree are evidence of collaboration.

e. That the FHP strengthen its working relationship with the central administration of Dalhousie University.

By all accounts the Faculty has positive and constructive working relationships with the central administration of the University, most notably the President's Office, Financial Services, Human Resources, the Equity Office, Facilities Management, and Research Services. The Dean and Acting Associate Dean have active representation on multiple senior Councils and Committees as detailed in other sections of this document.

f. That the FHP assume a leadership role in the development of new inter-disciplinary research and academic programs.

Interdisciplinary leadership of new research and academic programs is a collaborative partnership primarily among the three health Faculties often also involving the academic health centres and other Dalhousie Faculties. Some of the outcomes (IHRTP, AHSI, Health Mentors etc.) have been detailed. The Interdisciplinary Health Studies degree is in development and led by Health Professions.

Many of the research programs developed by Health Professions faculty as noted in Appendix C and D are interdisciplinary. Two significant recent examples are the newly funded (CIHR-NCE) Child and Youth in Challenging Contexts (M. Ungar, Social Work) (Health Professions, Psychology, Sociology), and the 2011 CIHR funded Aboriginal Health Sciences Research Network (F. Wien, Social Work) (Health Professions, Law, Management). A third example is the Neuromuscular Control in Orthopedics program (C. Kozey, physiotherapy) (Health Professions, Medicine). This team, led by C. Kozey, is pursuing a substantial CFI - New Initiative Fund and involves collaboration also between the Associate Deans of Health Professions, Medicine and the VP Research of CDHA to ensure that space and resources are addressed in this application.

g. That the FHP continues to work with the FGS to develop strong graduate programs that are naturally accommodated within one or more units of the FHP.

At the time of the previous review, two units were moving from undergraduate entry-level degree programs to graduate level degrees (occupational therapy and physiotherapy). We are currently developing a new Masters of Healthcare Management which is of critical importance for the future the Faculty, and we are considering attempting again to establish a Master of Public Health program.

h. That the FHP pursues teaching and research initiatives that integrate its constituent parts. The possibility of integrating courses across units where increased efficiencies can be achieved should be explored aggressively.

The FHP has been reviewing all of its graduate research methods and statistics courses to determine where increased efficiencies are possible. An advanced graduate statistics course is now (2011-2012) offered through Health and Human Performance and is available to all FHP students. An instrumentation and measurement course is taught alternately in physiotherapy and kinesiology depending on the number of students and workload of the course instructor. Graduate research methods courses are open to students outside of the unit in which the courses are offered, and we are examining the feasibility of offering an IPE graduate research methods course that would be offered online and on-campus in alternate terms.

i. That the FHP review its budgetary allocation and principles.

Prompted in particular by the prediction in the previous self-study that the Faculty was not financially sustainable in the long run, considerable time and effort has been spent reviewing budget allocations and principles. The Faculty has moved away from a budget model that treated individual Schools/College in base budget allocations as autonomous and independent academic units. Budgeting is now carried out on a Faculty level which provides us with the flexibility that we need to respond to a rapidly changing landscape.

j. That the FHP reviews its administrative structure and practices to ensure that they are appropriate for its mission.

The Faculty has reviewed its School structure and considered options like amalgamating Schools, but has concluded that its current structure is appropriate.

k. That the FHP develops a long-term, many-phase plan to obtain space.

The Faculty works closely with Facilities Management to obtain teaching, research and administrative space which has resulted in the relocation of the Schools of Health Administration and Human Communication Disorders from the Fenwick Tower and the

School of Social Work into the Mona Campbell Building. As well the Faculty has been active in the planning of the Interprofessional Health Education Building which will provide teaching facilities that will enhance interprofessional health education. The Faculty currently contributes financially to the rent for the Atlantic Health Promotion Research Centre.

l. That the FHP works with Facilities Management and the central administration to address classroom needs, especially on Carleton campus.

The Faculty is an active participant on the Carleton Campus Space Advisory Committee, and works closely with Facilities Management to identify space issues that need to be addressed. Since 2005, enrollments have expanded particularly in occupational therapy, physiotherapy, nursing, and kinesiology and have put more pressure on Carleton campus for large classroom space.

m. That the FHP reviews the existing configuration of support positions.

In the context of significant budgetary pressures, the Faculty is reviewing support positions with an eye to consolidating functions and sharing resources among Schools wherever that is possible.

n. That the FHP establish an effective tracking mechanism for research outcomes.

Since the previous review, FHP has produced Research Catalogues (2003 – 2006, 2005 – 2008, 2006 – 2010) detailing the grants held by Faculty and their publications. The most recent catalogue (Appendix B) is available on-line. In addition, the University now has a database, ROMEO, which tracks the research grants held by Faculty.

o. That the FHP works with relevant parties to develop appropriate academic positions for practitioners.

The University has supported the Faculty's interest in greatly expanding its roster of adjunct professors, most of whom are practitioners, who contribute to the education and training of our students. We attempted to establish a new category of tenure-track faculty who are committed to the scholarship of practice but there was insufficient support among the faculty to persevere with that initiative.

5. CONCLUDING COMMENTS

The Faculty of Health Professions has a long and distinguished history of preparing well qualified health practitioners and leaders for the health systems of Atlantic Canada and beyond. In incorporating interprofessional education into their curricula, the Schools/College are looking to prepare students to enter an evolving health care system that is placing increased emphasis on teamwork and collaborative practice with leadership, authority, responsibility and accountability in teams being shared among professions. The completion of the planned Interprofessional Health Education Building will represent an important milestone in this transformation in the preparation of future health professionals.

In recent years the Faculty's commitment to research and scholarship has increased significantly, particularly in areas of health promotion and well being, health and social outcomes, health system organization and policy, biological systems and functions, and professional and interprofessional education research. The health and social issues that are the foci of the Faculty's research programs are front and centre in society, and there is every reason to foresee continued growth in indicators of research productivity including grants, contracts and publications. In this way, the Faculty will continue to increase the health research capacity of the province and hence be an important economic driver for Nova Scotia. Supporting this growth will be the strong relationships the Faculty has with stakeholders in the community and other parts of the University, although the Faculty needs to solidify those relationships through better public profiling of its activities and initiatives.

Major barriers to future Faculty development relate to financial resources, limited opportunities for significant increases in student enrollments in most programs, and qualitative and quantitative limitations of available academic and research space. Although there is uncertainty about whether the Government of Nova Scotia wishes to have Dalhousie continue with its expanded Nursing enrollment, we anticipate that the expansion will continue and foresee no overall decline in student enrollments despite the changing population demographics of Nova Scotia.

The Faculty is fortunate to have talented and committed faculty and staff together with a mandate that is more relevant than ever, factors that ensure its continued future success.

6. APPENDICES

Appendix A: Faculty of Health Professions Draft Strategic Plan

Appendix B: Faculty of Health Professions Research Catalogue

Appendix C: Manuscript "Cultivating Grass Roots IPE: The Dalhousie Experience"

Appendix D: Research Strategic Plan

Appendix E: Binder of Information About Research Centres and Programs

FHP SELF-STUDY APPENDIX A

DRAFT—JAN 24, 2011

FACULTY OF HEALTH PROFESSIONS
CHARTING OUR DIRECTIONS FOR THE FUTURE

A Discussion Document Prepared by the *Strategic Directions Ad Hoc Committee*

**(W. Webster, G. Turnbull, M. Ungurain, P. Sullivan, J. Byrne,
A. Fenety, J. Woodward, A.Unruh, S. Officer),**

The Faculty's Vision: Inspiring ideas, innovation and leadership to enhance global health and social well-being.

The Faculty's Mission: Inspiring research, scholarship, teaching, learning and professional activities that contribute to knowledge and to the preparation of skilled and caring professionals and leaders of tomorrow.

[QUESTION: Do you have suggestions about the vision and mission statement? The mission statement makes no reference to health. Suggestions??].
[QUESTION: No where have we included a conceptual framework for what we mean by health. Should we draw upon the WHO definition? The International Classifical of Functioning, Disability and Health (ICF)?]

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As described in the University's Strategic Focus document for 2010-2013, the vision for Dalhousie University is that it "will become Canada's best university, committed to advancing provincial and regional development by attracting and offering a diverse student body an outstanding personal experience at a national university built around an excellent learning environment, acclaimed research strengths, broad program choices and successful career preparation in cooperation with supportive external stakeholders".

A distinguishing feature of Dalhousie University is that it is the health university of the Maritime provinces and, arguably, of Atlantic Canada. Its major health-related Faculties are the Faculty of Medicine, Faculty of Dentistry and Faculty of Health Professions, and in fact most Faculties have significant interests in health. The Faculty of Science is home to the Clinical Psychology program; Computing Science to Health Informatics; Law to the Health Law Institute; Engineering to Environmental Engineering.

Through its 9 Schools/College with entry-to-practice health professional programs, post-professional programs and research based graduate programs, the Faculty of Health Professions aligns well with the University vision:

- Each of the 9 Schools/College has as its primary mandate the education and preparation of well qualified health professionals who, through the critical leadership role they play in the promotion of broadly defined health and well being, impact directly on provincial and regional economic and social development.

- The Faculty has well prepared, experienced and committed faculty and staff members through whom it offers professional and academic programs that by all indicators are both appropriate and of excellent quality. In addition to their teaching, faculty members contribute to the scientific foundation of the health professions and engage in community service that enhances the health and well-being of Nova Scotians.
- Being the most profession-diverse health sciences Faculty in Canada, the Faculty offers broad professional program choices. The diversity of program offerings will increase once the new Interdisciplinary Health Studies program comes on stream as an undergraduate liberal arts and science program with a theme of health and with paths that lead to a variety of vocations and professions.
- Our programs depend critically on the direct involvement and support of stakeholders including District Health Authorities; community health and social service agencies and institutions; School Boards; government policy makers; and especially the many individual health and social service professionals who work closely with our students in supervising fieldwork and clinical practicum placements.
- We have seen a six fold increase in annual research grant support over the past decade, with major foci in Health Outcomes and Health Promotion. The Faculty provides support for 3 Canada Research Chairs, 1 CIHR/CHSRF/NSHRF Chair, and an impending UNESCO Chair, and for the Atlantic Health Promotion Research Centre which over the years has been highly effective in mobilizing interdisciplinary research teams.
- There is no shortage of well qualified applicants for most programs, enrollment in the Faculty has been slowly increasing when possible on a regular basis, and student retention is strong. Students graduate from most of our programs into well-paying, secure, and socially prestigious positions in health and enjoy considerable mobility options. Counterbalancing this positive situation, however, is that the fact that students in most of our programs have the highest tuition levels in Canada and graduate with heavy burdens of debt.

The Faculty is well positioned for the foreseeable future because the provision of health services and the promotion of healthy lifestyles and healthy environments impact directly on population health status and individual and family quality of life, and indirectly on economic and social development of the community. Through its students and its various research endeavours, the Faculty is in a position to influence and shape how this province and the Atlantic region addresses the major health issues such as chronic disease prevention and management that affect quality of life. That said, the Faculty cannot be complacent or self-satisfied because there are clouds on the horizon with respect to changing demographics, increased competition for students and resources, and a changing health system.

As we look to the next five years, it is apparent there are a number of issues the Faculty must address if it is to remain vibrant and a number of initiatives the Faculty must undertake to be aligned appropriately with the University's strategic focus.

1. **The glue that holds the Faculty together** is a focus on evidence-based patient/client/family-centered practice, health outcomes and social justice, together with the understanding and promotion of health and social well being at both the individual and population levels. The orientation is informed and influenced by social determinants of health, including issues of diversity, and through current exemplars in the Faculty like Obesity and Diabetes, Chronic

Disease Prevention and Management, Cancer, Vascular Disease, Stroke and Musculoskeletal disorders.

[QUESTION: Does what follows needs to be updated? Are these priority areas current? Are they appropriate? How do they speak to faculty individually and collectively in Schools/College? How do they fit with the Faculty overall?}

In the Faculty's previous strategic plan, finalized in 2003, four research priorities were identified. Atlhough not all strategic directions were embraced by faculty, these priorities remain useful in framing current and future research opportunities. The four strategic priorities identified were **Health Outcomes, Health Promotion, Women's Health and Professional Education Research**. The following activities have resulted from these themes and are described below in order to illustrate the current meaning and operationalization of each theme.

a) **Health Outcomes:** The Faculty houses a Canada Research Chair in Health Services Research (Kirk) as well as a CHSRF/CIHR/NSHRF Chair in Drug Policy and Administration (Sketris). However, the term "Health Outcomes" has come to include Health Outcomes, Health Policy and Health Services research. Strong examples include:
   - Drug Policy and Administration – Sketris, MacKinnon, Zed, Bowles
   - Medication Errors – MacKinnon, Ackroyd, Zed
   - Drug Development – Cancer (Jakeman), Diabetes metabolism (Goralski), Vascular disease (Yeung)
   - Drug Delivery Systems (Agu)
   - Overweight and obesity and their role in chronic disease (Kirk)
   - Cancer prevention (Kirk, Keats, Basset, Dechman)
   - End of Life Studies (Johnston)
   - Health Human Resources Policy (Tomblin-Murphy)

b) **Health Promotion:** Until October, 2010, the Faculty has had a Canada Research Chair (Tier I) (Lyons) that has been an integral research component of the Atlantic Health Promotion Research Centre. The work of the Chair was heavily involved with the Canadian Stroke Consortium and Nova Scotia Stroke Initiative. This has included the development and uptake of strategies to reduce the incidence and improve the management of stroke. However, the term "Health Promotion" is far reaching and includes promoting the health of those who have experienced an acute event such as stroke or are living with a chronic disease diagnosis such as diabetes, osteoarthritis, chronic back pain or neurodegenerative disorders. Strong examples include:
   a. Conservative and surgical management of knee and hip osteoarthritis (C. Kozey)
   b. Rehabilitation following stroke (MacKay-Lyons, Westwood)
   c. The Built Environment – Architectural and activity barriers to a healthy lifestyle – (Lyons, Kirk), a subject with significant policy implications
   d. Parkinson's Disease (Turnbull, Hickey)
   e. Hearing and Balance (Aiken, Wang, Earl)
   f. Youth in Conflict (Ungar)
   g. Mental Health in the community, Homeless youth (Hughes)
   h. HIV/AIDS/Hep C (Gahagen, Jackson)
   i. Sex Industry (Jackson)
   j. Exercise, lifestyle (C. Kozey, Dechman, Keats, Hutchison)

k. Social Determinants of Health (Race, gender, poverty, sexual orientation--(Beagan, Jackson, Thomas-Bernard, Goldberg, Karabanow, Gahagan).
l. Vision Science (Tremblay)

c) **Women's Health**: The Centre of Excellence for Women's Health was a major pillar to support this research but has significantly faltered after Federal funding was terminated. However, the Centre continues in a greatly reduced role. In addition, much of the research conducted under the label "Nursing Research" has a Women's Health flavour particularly in the areas of birthing experiences and neonatal care. The Faculty also supports a Canada Research Chair (Tier II) in Women's Health (Beagan). Among other topics, this Chair is examining inequalities in personnel working in the health system and in their education.
d) **Professional Education:** This is an developing area. Research into the effectiveness of Interprofessional Education and Distance/Blended education are emerging areas of scholarship at Dalhousie and the Faculty of Health Professions is a leader in these initiatives. There are close relationships with the Centre for Learning and Teaching as well as with Continuing Health and Medical Education which will form a strong foundation for research in the Professional Education sector.

As we look to strategies to support research within the Faculty, we will place increasing emphasis on the identification and development of the "substantial, broadly conceived **centres of excellence** that measure up to all assessments" as called for in the University Strategic Focus document, and on supporting "research opportunities for excellence on a global stage". One such centre is the Atlantic Health Promotion Research Centre, which has a long history of research success and research capacity building. Other nodes of excellence are included in the listing above, but generally they do not exist in separate facilities and are not formally recognized by Senate but they do bring together active researchers from across the university. In the context of the current emphasis of the granting councils on interdisciplinary team applications, we will encourage faculty to align their research programs with one or more of these themes or centres or nodes where possible. We will set as a priority the relocation of the AHPRC onto the Carleton campus in closer proximity to the Schools/College so as to support greater faculty participation in the Centre.

We are at a time of **transition** in the Office of the Associate Dean (Research and Academic) with the impending retirement of Dr. George Turnbull and the appointment of Dr. Anita Unruh effective January 1, 2011 Dr. Unruh will be undertaking a strategic planning exercise for research which we anticipate will result in a renewed articulation of research strengths and priorities in the Faculty, including Canada Research Chairs, and new strategies for creating a culture of inquiry in the Faculty and the achievement of our research goals. The major limiting factor in this Faculty's research aspirations is space. We will need to include in the strategic plan a consideration of space leveraging and priorities.

It is important to stress that many of these research activities are interdisciplinary involving the Faculties of Health Professions, Medicine, Dentistry, Engineering, Computer Science, Science (Psychology). There is also significant involvement with Capital Health, the IWK Health Centre and other universities nationally and internationally. This points to the significance of our many key strategic linkages and partnerships internally within Dalhousie University and externally with Government, District Health Authorities, Professional Associations and Research Organizations.

- Internally, FHP collaborates with the Faculty of Dentistry and the Faculty of Medicine on Interprofessional Education, the Aboriginal Health Sciences Initiative, the Chronic Disease

Health Mentors project, the Research Methods Unit, the Interdisciplinary Health Research Training Partnership and the IPHE Building. These collaborations that reach across Faculties are significant for breaking down barriers and creating new opportunities and solutions.

- Externally, the relationship between Government and FHP has shown marked improvements and continues to grow. The Faculty has made significant contacts through representation on the Academic Health Council, meeting with Deputy Ministers of Health and Health Promotion and Protection, and participating on the Provincial Health Human Resources Strategy. The Faculty has also worked with the Department of Health and the District Health Authorities on holding Interprofessional Forums across the province to better link interprofessional collaboration in the practice setting with interprofessional education in the learning setting and to discuss other mutual objectives such as Retention and Recruitment, preparing for new Models of Care and Sustainability. The future of the Health System and sustainability for communities relies on both education and practice within these types of network discussions and relationships.
- In the area of research, provincially there are strong networks with the Nova Scotia Departments of Health, Health Promotion and Protection, the Nova Scotia Health Research Foundation, Capital District Health Authority, IWK Hospital, Faculty of Medicine, Cancer Care NS to mention just a few. Dalhousie University FHP has strong linkages with CIHR, PHAC, Canadian Cancer Society, and other National Health Organizations.

2) The Faculty of Health Professions is unique in Atlantic Canada and contributes to the **differentiation** of Dalhousie University from other Atlantic Canada institutions. Although many of its programs are regional in scope, we need to ensure that students in Atlantic Canada want to study at Dalhousie despite our tuition fees being the highest in Canada. We need to recognize as well that most health science Faculties in Canada conceptualize their orientation as we do around health outcomes and health promotion. What is it that makes our Faculty unique in Canada?

    a. With respect to our entry-to-practice programs, one major differentiator is **interprofessional health education**. Although most universities in Canada with health programs are attempting with varying degrees of success to introduce interprofessional education into their health-related programs, Dalhousie has a window of opportunity to be the leader in this movement if we can be nimble, and can use this pedagogy to differentiate ourselves from other similar Faculties and programs. The advantage we have grows out of the unusually broad diversity of health professions programs under one Faculty umbrella, a minimum of Faculty-based bureaucratic barriers, broadly based faculty support, and supportive partners and stakeholders in the University, government and practice settings. This combination is enabling the development of rich and sustainable interprofessional learning opportunities that can transform our programs if we fully allow that to happen. The Interprofessional Health Education Building, scheduled to open in September 2013, will facilitate students from different professions rubbing shoulders with one another on a regular basis and will provide a tangible focus for this differentiation.

        The Faculty has already identified the objectives for interprofessional education and has agreed upon program requirements that would embed interprofessional education into the various curricula, and the Schools/College are now continuing to develop initiatives to provide rich experiences for students in the classroom, labs, simulated learning environments and practice environments. To round this out we need to invest in faculty development for the coming year or two so faculty members become more aware of

practices here and elsewhere. To fully develop the full potential of interprofessional health education, we will need to garner additional resources or reallocate resources to support enhanced simulation activities and interprofessional fieldwork/clinical education activities.

Many of the issues facing society with respect to health are ones that must be addressed from an interdisciplinary and interprofessional perspective: Health inequities related to income, housing, food security, literacy; mental health; chronic disease prevention and management; health promotion. While these issues need to be considered in profession-specific contexts, they also need to be built into interprofessional experiences of students.

b. A second point of differentiation of the Faculty of Health Professions from most other similar Faculties is our **School of Health Administration** which has for many years has offered an accredited Master of Health Administration program (both on-site and on-line), an undergraduate Diploma in Health Services Administration, and an undergraduate Diploma in Emergency Health Services Management. There is a vast potential market nationally and internationally of students seeking preparation in health administration/management approached appropriately from a health rather than business perspective, and this Faculty is well positioned to respond to that because of how the School of Health Administration is situated. The School has already started to offer its MHA program on-line for middle managers wishing to position themselves to move into senior roles in the health system while continuing to work. The school is proposing to establish an on-line Master of Healthcare Management degree designed specifically for alumni from our professional programs who are licensed health professionals and seeking preparation to move into middle management positions. As well there are opportunities for the School to explore to develop an Executive MHA program ,perhaps offered as part of a joint E-MBA and E-MHA package. And finally, there are opportunities for graduate diploma programs to be structured to meet the specific needs of groups in the community including health professionals and Emergency Health Organizations like the Red Cross. There are opportunities for significant enrollment growth based on engagement of our alumni and other health professionals.
c. Our **other Schools/College** also contribute to the differentiation of the Faculty from other similar Faculties, and each School/College will identify one or two major foci (educational/pedagogical, research excellence, service innovation, etc.) that can be used to profile the program. We cannot be all things to all people, and so we need to support each focus strategically so it flourishes.
e) **Inter disciplinary Health Studies program**. The Faculty is in the process of developing an interdisciplinary health studies program at the undergraduate level that we believe will reinforce the differentiation of Dalhousie as the health university of Atlantic Canada, will enhance enrollment and will increase transfer students from other universities. We anticipate that many students from throughout Atlantic Canada interested in entering a health profession will come to Dalhousie for undergraduate studies with the hope and expectation that it will prepare them well for entering a professional program or for pursuing a health-related career in business or government. This program will enhance enrollment in all Faculties which is important in this time of declining demographics. The program also provides the Faculty with an opportunity to collaborate more with other educational institutions in Nova Scotia, including the NSCC with respect to laddering opportunities for its students in the License Practical Nursing, PT Assistants and OT Assistants programs. We may also be able to use this program to connect with Cape Breton

University to encourage aboriginal students to follow the first two years of the program at CBU using videoconference technology, followed by the students coming to Dalhousie to complete their undergraduate degrees (and hopefully carry on with professional training).

4. As noted in the University Strategic Focus document, "Differentiation makes sense only in combination with **excellence**". Our entry-to-practice programs of study are all accredited, and that is often interpreted as meaning that they are excellent and innovative. Regardless of whether this is the case, accreditation is not a point of differentiation. Every similar professional program in Canada is accredited. Accreditation means simply that a program meets certain minimal standards for acceptability which is not the same thing as meeting standards of excellence and innovation. In addition to accreditation reviews, the Faculty will organize regular academic reviews of our programs, carried out with the assistance of both internal and external reviewers. Schools need to be exercising professional leadership by considering not only how we can meet accreditation standards but how we can exceed them and prepare our students for practice in the future rather than just in the present. We need to educate practitioners for the future, but anchored in the present. We need to be acutely aware of how the workforce and the work environment are changing and the implications of such change for how we prepare students. This review process will also help us identify and elaborate our points of differentiation. Through these reviews we will be asking what evidence we have, apart from accreditation, that our programs and accomplishments are in fact as excellent as we would like to believe they are, and we will be identifying whom we should be benchmarking against and what criteria are appropriate. The reviews will also assist in identifying areas of research excellence in the various Schools that need to be cultivated and whether we are in fact preparing our students to understand and lead the transformation of the health system, understand health organizations and institutions where many will end up working, and understand how they will be "agents of change".

   We have not done a good job in sharing our points of differentiation and excellence with others in the university and the broader health community, and we need to consider ways in increase our media presence so we get our messages out in a planned and systematic manner. The university has a strong media relations office, but each School as well as the Faculty as a whole must include media promotion in the job description of at least one staff member with whom Directors and the Dean can work to develop appropriate and relevant messages.

5. **Enrollment and Budget Issues**. The programs in the Faculty of Health Professions are basically fixed cost programs designed to meet the requirements of accreditation bodies and they are also basically fixed enrollment programs due to constraints related primarily to clinical education. The University's budgeting strategy has involved regular reductions to the base budgets of all Faculties and this has led to the current budgetary shortfall. In considering strategies for dealing with the shortfall, we are mindful that the Faculty has no shortage of well qualified applicants seeking to enter professions with secure and well-paying positions. One approach to mitigate significant budget shortfalls would be to increase enrollments in the programs. For most programs this is not feasible due to the practicum placements that students complete in health and social service communities. Furthermore, the revenue that would come to the Faculty through the current tuition sharing formula does not cover the additional costs of expansion. An alternative is to increase tuition and fees on a regular basis.

This is the approach the Faculty is pursuing , but it is obviously contingent upon support from the Senior Administration and the Government.

6. **Trends Emerging**: The University's Strategic Focus document challenges Faculties and academic departments to "anticipate emerging themes and topics in their area and develop flexibility within their existing resources to innovate as those opportunities emerge".

    a. One such trend is the importance of **Aboriginal health** to the Faculty of Health Professions. The three major health-related Faculties and the Office of the Vice President Academic and Provost have joined together to create the Aboriginal Health Sciences Initiative which is consulting with the Aboriginal Health Science Advisory Council to implement the recommendations of the Council that challenge us to be far more pro-active in reaching out to First Nations communities in this region. Through Faculty Council, the Faculty has committed itself to issues around diversity which we need to address in collaboration with the rest of the University community.
    b. A second emerging trend is the significance of **rural health**. If we are to contribute to provincial and regional development, we must address how, in collaboration with rural communities and their district health authorities, we can be more successful in preparing students to work in those communities. How can we more successfully attract students from those communities and encourage them to return home after graduation? How can we encourage students from urban backgrounds to be introduced to rural communities and the advantages to working in those communities? Together with community partners, how can we ensure that students doing placements in those communities have positive personal and professional experiences that will encourage them to put down roots? How can we structure the curriculum to include a consideration of health-related issues that may be unique to rural communities? Health human resources in rural areas of this province and region remains a critical and poorly addressed issue, with chronic shortages and difficulties in staff recruitment and retention. As a target we will aim to have at least 80% of our students in all entry-to-practice programs have at least a two week practicum placement in a rural community, with the goal of having 25% of our graduates working in a rural community for at least a year upon graduation. This issue is even more acute in our First Nations communities. Through accepting and supporting students from these areas, preparing students for work in rural areas and providing students with outstanding experiences working and living in those areas, we can help meet those needs and advance development in this province.
    c. **Mental health** continues as one of the major health issues facing Canadians and we need to ensure that our programs are giving it due attention from both profession-specific and interprofessional perspectives. To this end, the Faculty will convene a planning workshop to review how each program in the Faculty is addressing mental issues and how mental health can be included in interprofessional education initiatives of the Schools.
    d. **New Professional and Research Program needs**. We have had the same entry-to-practice programs of study in this Faculty for the past decade. At a time of a rapidly changing health system delivering care in rapidly changing ways, we will explore both the feasibility of offering new professional programs (e.g., Paramedics, MRI Technologists, Midwifery), and how to expand those other programs where there is an obvious need for more practitioners, including Nurse Practitioners and Radiological

Technologists. Going hand in hand with the development There continues to be dissatisfaction about the opportunities for faculty and Schools in the preparation of Ph.D. students which suggests it is time to re-consider the establishment of a Faculty-based **Ph.D. program in Health Sciences**. A working group has been established to explore the feasibility of developing such a program modeled after that found in Engineering with multiple departmentally-based streams under a Faculty-based umbrella administrative structure.

[QUESTION: are there other trends emerging that are internal to your School/College that we have not alluded to here? Are there trends in the broad health and human services sector which are not represented in the Faculty and to which we should be sensitive when looking ahead 5 or 10 years?]

The real challenge in responding to these trends is the expectation in the University's strategic directions document that a response will have to be predicated on there being flexibility in the use of existing resources "to innovate as those opportunities emerge". Unfortunately serious constraints are associated with the combination of fixed cost programs, accreditation requirements and constantly diminishing base budgets.

Through its critical role in the preparation of health professionals in Atlantic Canada, the Faculty of Health Professions contributes significantly to the health and well being of Atlantic Canadians and through that process advances regional and provincial development. Expectations of the Faculty and the Schools within the Faculty by the broader health community and the university are in a slow but constant process of evolution to which we must all be attuned. This discussion document is intended to assist the Faculty in understanding the nature of the evolution and in charting directions for future development.

[QUESTION: What is your assessment of how this document aligns with the President's Strategic directions document?]

FHP SELF STUDY APPENDIX B

Faculty of Health Professions

Research Grants and Publications

2006 – 2010

A pdf copy of the catalogue can be found at:

http://healthprofessions.dal.ca/Files/2006_-_2010_FHP_Res_Catalogue_-_FINAL_Dec_19_2011.pdf

FHP SELF-STUDY APPENDIX C
Submitted to the *Journal of Interprofessional Care*. DO NOT QUOTE OR CITE

Cultivating Grassroots IPE: The Dalhousie University Experience

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Abstract
Dalhousie University has adopted a decentralized and menu-based approach to interprofessional education (IPE) for its students in more than 20 health professions programs spanning three health Faculties. Most students are now required to complete a certain number of IPE experiences offered at a program level and/or an individual student level, at least one of which must be in the practice setting. After outlining the context for IPE at Dalhousie University, the article describes the IPE objectives and guiding principles, program requirements for IPE, the use of a common time for IPE in the schedule, examples of the IPE menu items that are or will be available for students and reflections on process facilitators.

Keywords: Interprofessional education; teamwork; curriculum development; health professions; common time.

Introduction

Dalhousie University is the largest Canadian University east of Montreal, and serves as the health university of the Maritime provinces. In addition to the Faculty of Medicine, which prepares physicians at the undergraduate and post-graduate residency levels, and the Faculty of Dentistry, which prepares Dentists and Dental Hygienists, the 9 Schools comprising the Faculty of Health Professions prepare students to enter the professions of Nursing, Pharmacy, Social Work, Speech-Language Pathology, Audiology, Occupational Therapy, Physiotherapy, Health Administration, Kinesiology, Diagnostic Cytology, Radiological Technology, Respiratory Therapy, Nuclear Medicine Technology, Diagnostic Ultrasound, Health Promotion and Therapeutic Recreation. Other health-related programs in the University include Clinical Psychology, offered in the Faculty of Science, Health Law offered in the Faculty of Law, and Health Informatics offered through Computing Science.

Since the mid-1990s, the University has had an interest in promoting interprofessional education (IPE). To that end, the Faculties of Health Professions, Dentistry and Medicine created a centralized Tri-Faculty Interprofesisonal Academic Advisory Committee (Tri-IPAAC) with the purpose of developing and administering over a two year period a set of 2-hour modules on topics of disability, family violence, palliative care and diversity (Ho, K., Jarvis-Selinger, S., Borduas, F.,

Frank, B., Hall, P., Handfield-Jones, R., Hardwick, D., Lockyer, J., Sinclair, D., Lauscher, H., Ferdinands, L., MacLeod, A., Robitaille, M.-A. & Rouleau, M., 2008). Participation in these modules was required of students in most health programs. Each module brought together 350+ students at a time for some didactic instruction in a plenary session followed by a highly structured small group activity.

By the mid-2000s, it had become clear that although the modules had been an excellent start and had contributed to faculty awareness of the significance of interprofessional education, the approach was not achieving its goals of promoting and facilitating the acquisition of knowledge, skills and attitudes required for interprofessional collaboration. Indeed, a goodly number of students viewed the exercises as artificial and irrelevant and came to hold an attitude of actual hostility towards the basic concept of interprofessional education. A "one-size-fits-all" approach was clearly not effective. As well, despite considerable support for the concept of IPE, individual faculty members and Schools were not engaged in IPE development and took no steps to embed interprofessional education in the curriculum apart from the rather superficial module participation requirement. It was clear that because of the existence of Tri-IPAAC with its committee structure and secretariat, IPE was seen as someone else's issue.

The purpose of the present article is to describe the approach the University subsequently pursued, an approach that has emphasized cultivating IPE at the grass roots level rather than through a central Office of Interprofessional Education. We will focus as well on what appear to be some key elements that supported the implementation of this approach.

A Fresh Start

The first step in developing a different and more engaging approach to IPE involved a series of broadly based consultations and workshops with the University and health professional communities on what our goals should be for IPE and how to implement IPE.

The Objectives.

Emerging from these consultations was broad consensus about IPE objectives, and these objectives are similar to those that would be found at most universities with IPE for health professions. They include developing:

- knowledge and understanding of, and respect for, the expertise, roles and values of other health and human service professionals

- understanding the concept and practice of patient/client/family-centered care.

- effective communication, teamwork and leadership skills applied in interprofessional contexts.

- positive attitudes related to the value of collaboration and teamwork in health and human service contexts.

- an understanding, from a multi-disciplinary perspective, of the Canadian health and social systems, the legal and regulatory foundation of professional practice, how health and human service institutions are organized and operate, and how different health and human service professions contribute to the systems and institutions.

Guiding Principles.

Also emerging from the community consultation was a series of inter-related principles which continue to guide IPE development at Dalhousie:

- Maintain a universal program requirement for IPHE experiences. *[Despite the dissatisfaction with or indifference to the Tri-IPAAC modules, faculty and the professional community supported the concept that interprofesisonal education experiences should be a required part of the curricula of our health programs].*

- Work within the World Health Organization (2010) definition that "Interprofessional education occurs when students from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes" (p. 7).

- Develop a menu of appropriate, meaningful, engaging and relevant experiences from which students and/or programs of study can choose (i.e., one size does not fit all). *[This principle recognized that with the diversity of professional programs at Dalhousie, one size cannot fit all and instead, IPE activities and experiences must be geared to fit with the multitude of "naturally occurring" interprofessional collaborations in the health and human services realms. The principle also recognized that there is room for both IPE activities which students in a whole program may share and others of which individual students take advantage].*

- Embed in the menu the successive steps of Exposure, Immersion and Readiness (adapted from the University of Toronto, 2008) and be guided by the National Interprofessional Competency Framework of the Canadian Interprofessional Health Collaborative (2010).

- Keep the bureaucracy simple and nimble—use a decentralized (School-based) bottom-up approach rather than one that is centralized or top-down (i.e., focus on a IPE network metaphor rather than one of an IPE centre).

[This has been a key principle that has placed responsibility for the development and implementation of IPE not with a central university office but with the individual Schools which own the curricula and scheduling].

- Minimize add-ons to already packed curricula—build on existing curriculum and opportunities to the extent possible. *[Professional programs have full schedules, and so the emphasis has been on how to build IPE into the curricula of Schools to take advantage of the many curricular overlaps that exist among different programs].*

- Structure initiatives to be sustainable (i.e., to require minimal new resources) . *[From the start we have assumed minimal new resources, and this has reinforced the concept of building IPE into existing curricula and eschewing the development of an elaborate administrative structure and secretariat. This has been a realistic and useful assumption, but we do recognize that some additional resources are required if a rich set of meaningful and relevant experiences are to be offered].*

- Focus on patient/client/family-centered care, the cornerstone of collaborative practice and hence of interprofessional education. *[We try to build into all IPE experiences the implicit understanding that if the focus of one's attention is on the needs of the whole patient or client or family, interprofessional collaboration occurs naturally given that the knowledge, skills and attitudes are in place to support it. With a profession-centered focus, interprofessional collaboration will not occur regardless of what knowledge, skills and attitudes may appear to be in place].*

- Structure the IP experiences to be as close to the patient/client/family as possible (for example, include the use of standardized patients and families in interprofessional teamwork simulations, and incorporate IPE into existing profession-specific practicum/fieldwork placements). *[This principle reflects our observation that IPE and collaborative practice really come to life for students when they are experienced close to the patient or client or family].*

The Program Requirement for IPE.

Curricular change is facilitated when students push. And nothing creates more of a push for developing IPE experiences in the curriculum than student anxiety associated with having to fulfill an IPE requirement for graduation. As of September 2011, all incoming students to the Faculty of Health Professions must satisfy an IPE requirement which has the following elements:

- By the end of their program of study, students in all undergraduate and graduate entry-to-practice programs are required to have completed a total number of different, meaningful and relevant interprofessional collaborative learning experiences (as determined and approved by each student's

School/College) equal to two times the number of years or part years of study in the program. *(We anticipate that the number of experiences will be increased in the future and/or that different activities will count for differing amounts of IPE credit).*

- At least one of these experiences must be in a practice setting.

- The experiences are to include interactions with undergraduate and/or graduate students from a total of at least 4 different professions with which there are natural affinities or linkages in the professional environment, and these professions will be primarily from outside the student's home School/College in the case of Schools with multiple professions.

- The interprofessional experience requirement is implemented through a Calendar requirement that each student is to maintain registration in a 0-credit hour Faculty-based course, IPHE 4900 or IPHE 5900 for undergraduate and graduate students respectively. This course functions essentially as a shell course in which IPHE experiences are credited through a portfolio.

- Successful completion of IPHE 4900 or IPHE 5900 with a grade of PASS is a requirement for graduation in all programs, and will be recognized further with the awarding of a special *Certificate in Interprofessional Education.*

For students in the Faculty of Medicine and the Faculty of Dentistry, an IPE requirement is built into the specific courses in which the students register.

Common Time in the Schedule

Almost by definition, IPE requires a common time in the class schedule of all programs so students are available to participate in IPE activities with students from other professional programs. There was of course no time that worked well for everyone, and so a time was selected by the Dean of Health Professions so as to minimize conflicting courses that would need to be re-scheduled. The common time happens to be Tuesdays and Thursdays from 3:30-5:00 p.m. and so, as of September 2012, no School-based activities apart from ones related to IPE will be scheduled at those times.

Developing the Menu

The menu concept is central to our approach to IPE, and the menu will continue to evolve with the continuing admission of new student cohorts with an IPE program requirement. The menu includes both items that are organized at the program level required for most or all students in a program, and also ones that are offered to and selected by individual students to meet their IPE interests and needs.

IPE Menu Items at the Program Level

The Schools have responded to the challenge of working with one another to bring their students together for parts of courses with overlapping curricular elements (e.g., pain, stroke, disabilities) to work on meaningful and relevant joint projects. One example of many would be the students in a community Occupational Therapy course working in small groups with students from a community Social Work course to prepare poster presentations on how both professions working together could approach some community issue of interest.

As we look to bring IPE closer to the actual patient, Schools are developing interprofessional team work simulations both of a therapeutic nature (e.g., interventions) and involving team meetings for case planning or discharge planning.

An example of the former type of simulation is our Respiratory Therapy students working as part of teams with anesthesia residents and critical care nurses doing a 3 hour simulation lab using high fidelity manikins in the area of intubation and resuscitation. Completion of construction of a home care unit will facilitate more non-medical team simulations.

An example of student teams doing case planning comes from faculty members in OT, PT, Nursing and Pharmacy who bring together their students from those profession specific courses which include a consideration of Stroke. Information about a stroke case is provided on-line, following which the students are brought together in small group teams for interprofessional case planning and then debriefing. The OT and PT students then participate in an interprofessional teamwork simulation involving a standardized patient.

We have retained only two large-scale IPE activities that are directed to programs. The first is what we call our "First Year Event". All 1000+ first year students in all health programs come together in a theatre within the first two weeks of classes in September for two purposes: 1) so students can see first hand the diversity and size of the health programs at the University and realize that their program, no matter how important to them, is but one of many health programs; and 2) to introduce to students early in their programs the concept of patient/client/family-centred care and how the interprofessional education that they will experience ties into that concept. The session features an inspiring individual from the community who has experienced and understands the significance of interprofessional team work and the importance of family and friends in responding to major medical and rehabilitation issues.

The second is based on the Jefferson Health Mentors Program (Arenson, Necky & Lyons, 2009). Approximately 650 students (in 2011-12) from most programs participate and are divided into teams of 4 which, under the guidance of a faculty supervisor, work with a person from the community who is living with a

chronic condition. This person is the Mentor, and students learn from the Mentor the history of her/his chronic condition and what it means to live with a chronic condition. They then complete both team and individual assignments. The messages about patient/client/family-centered care reinforce those that are part of the First Year Event.

IPE Menu Items at the Individual Student Level

An important part of the rationale for a menu is that is provides opportunities for students to pursue IPE in the context of their individual interests, needs and aspirations. To this end we are developing IPE mini-courses of 6 to 9 hours duration which can be offered during the common time, and participation in these mini-courses will count towards fulfilling the requirements for IPHE 4900/5900.

Each mini-course focuses on a topic that is inherently interprofessional in nature such as one related to health conditions (e.g., chronic illness, pain management, brain injury, addictions, mental health, obesity, stroke, cancer); stages of life (e.g., palliative care, care of the frail elderly, falls prevention, maternal health, tobacco cessation); health system (e.g., long term care, organization of the health system, healthcare team management, dealing with challenging healthcare professionals, pandemic planning, health informatics, discharge planning, primary health care); professionalism (e.g., health regulation, health law, ethics--including the meaning of confidentiality and privacy); and communication (e.g., team building, conflict resolution, leadership). The mini-courses are planned by faculty members from more than one School so as 1) to maximize the likelihood that each mini-course will include students from at least three different professions with no one profession accounting for more than half the students, and b) to require students from different professions to work together on projects, problems, cases or simulations, or some combination. Simply sitting in a classroom together is not sufficient.

The usual format for these mini-courses includes 1) a relatively short plenary session to provide background material and perspective, 2) ample opportunity for small group student interaction around a case, problem, situation or simulation, and 3) a follow up plenary session where the results of the small group work are presented and discussed. It may be possible for students choosing to participate in a sequence of 3 related mini-courses in an area to be granted a special certificate acknowledging a higher level of IPE experience. Leading and facilitating mini-courses is generally contracted out by the Dean's Office to 2 or more instructors so as to obviate cross-School faculty workload issues.

Our approach to IPE in the practice setting is individually based and takes advantage of the fact that all our students do profession-specific practicum/fieldwork placements and usually there are other students from other professions at the same site at the same time (this may include students from the

community college or other universities). These students are being brought together as a team to get to know one another personally and professionally through working on a project that usually relates to a patient with whom they interact as part of their placement. The students then as a team present their project to the staff of the hospital or social service agency. Apart from the experience the presentation provides students, there is some thought it may help to fuel interprofessional culture change in the institution.

In cases in which a student is the only student on site, an individually-structured IPE experience is generated as part of the placement but it will take a form different from the student team.

In our experience with all these IPE contexts, differences in the level of students (diploma, baccalaureate, graduate) is not important for effective team functioning.

Reflections on Process Facilitators

Although Dalhousie has not created a central Office of Interprofessional Education, centralized vision and leadership have nonetheless been provided through its three health Deans who have been committed to IPE and have persevered in their pushing and prodding. It may be the case that the exercise of this leadership has been easier at Dalhousie than at some universities whose health professions programs are represented in six or eight different Faculties rather than just three.

As well as the Deans' push, a part-time Interprofessional Experience Coordinator has facilitated forward movement by connecting faculty members who have overlapping interests and in developing relationships with the practice community that would support IPE activities as part of practicum/fieldwork placements. However, the key element has been that, with the exception of the First Year Event and the Health Mentors program, responsibility for the actual development, implementation and embedding of IPE in the curriculum has been placed with the Schools, and it is in that sense that we have been cultivating IPE at the grass roots level. (Some might suggest that the Deans have provided the fertilizer! ☺). We would like to think that this approach has enhanced the sustainability of initiatives by engendering broad buy-in and ownership at the School and faculty member levels. This approach has also minimized direct administrative costs, leaving for programming most of the limited available resources. We recognize that in time as IPE is rolled out fully for multiple student cohorts it may be necessary to have some more centralized administrative support, but until it is clear that that is in fact the case, we will continue to rely largely on School-based support.

The University has facilitated the acceptance of the IPE initiative by sending two clear signals that IPE is of strategic importance to the University in its relationship with government and the broader health community.

First, it has approved in principle the design and construction of a new building committed to providing facilities for Interprofessional Health Education including shared technologically sophisticated simulation labs and classrooms with breakout pods for student teams, together with space for students in different programs to rub shoulders in common lounge/social/food service spaces, common study spaces, and a common area for student association offices.

Secondly, the University has provided seed money to support the development of initiatives, but long term financial sustainability of initiatives is a key consideration in how those funds are to be used.

Embedding IPE in the curricula of multiple professional programs is a long journey because of strong traditions of professional autonomy and independence. However, there is a growing understanding in both the academic and practitioner realms that we are in a new era of collaborative practice with shared leadership, shared authority and decision-making, shared responsibility and shared accountability, and it is only through interprofessional education that graduates from our programs will be prepared to participate fully and effectively and provide the required leadership in that new era.

Declaration of interest: The author is one of the three Deans referred to in the article. The author alone is responsible for the content.

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FHP SELF-STUDY APPENDIX D
Faculty of Health Professions

Research Scan[i] [ii]

January 2012

Our mission: "Inspiring learning, research, scholarship, teaching and professional activities that contribute to knowledge and to the preparation of skilled and caring professionals and leaders of tomorrow."

Our vision: "Inspiring ideas, research innovation and leadership to enhance global health and social well-being."

Introduction

Health Professions has an academic and research vision that is focused on global health and the health and social well-being of individuals and their communities. Research related to the social and environmental determinants of health and well-being, and community-based strategies to promote health and well-being are central foci along with research that examines health and social systems, health and social policies, health and social care, management of chronic disease, and the biological structures and processes of health and function. Health Professions adopts the WHO position that "Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity" (https://apps.who.int/aboutwho/en/definition.html). Health and social well-being are local and global issues that concern health professions researchers across the spectrum from the biological structures of function and impairment to the macro structures of human engagement and resilience. In addition to quantitative expertise, Health Professions has researchers with strengths in qualitative and applied research methodologies with particular expertise in community-based research and community engaged research. Researchers in Health Professions are well-positioned to address interprofessional local and global issues of health and social well-being.

This research scan lays the foundation for a strategic research plan. A strategic research plan will serve the following objectives:

- to identify primary research themes, current and emerging core research strengths, under-researched areas, and current responsiveness to global priorities
- to provide support for CRC proposals, CFIs, nominations, awards
- to be a resource for attracting new faculty, retaining faculty, providing career reorientation and new opportunities for existing faculty

- to be an element in the faculty hiring decisions of search committees
- to provide support and direction for retaining and developing new graduate degree programs
- to enable potential graduate students to identify research opportunities and potential supervisors
- to set a path and priorities for future directions
- to inform internal and external groups of the health research expertise within Health Professions

This research scan represents the current and emerging strengths of the Faculty and will assist in setting the strategic directions that will challenge Health Professions faculty to become global research leaders in core research areas.

Guiding Principles and Process

1. That the diversity of the research conducted by Health Professions researchers be respected;
2. That the focus be on the collective research strengths of the Faculty rather than individuals, units, professions or disciplines;
3. That the research strengths of the Faculty be supported to build leadership;
4. That funding priorities of agencies be recognized in determining priority areas.

The process used to develop this scan began with keywords chosen by faculty to represent their research areas. Keywords were clustered into Research Themes in consultation with the Health Professions Research Committee. A smaller working committee revised these Research Themes and identified Core Research Concentrations from the themes. Further consultations with the working committee, Research Committee, the Management Advisory Committee, the PhD Planning Committee, Faculty Council, and Schools/College led to further refinement.

Research Themes, Concentrations, Strengths and Challenges

Research Themes

The Faculty of Health Professions conducts research in four broadly constructed thematic areas:

1. Determinants and Promotion of Health and Social Well-Being

Social and environmental determinants of health and well-being, their implications for communities, families and individuals, and the promotion of health and well-being at all levels are central research foci in the Faculty. Special areas of research strength are childhood risks and resilience; gender and sexual orientation; Aboriginal health; and obesity, especially obesity in children. Other determinants research focuses on seniors, homelessness, disability, caregiving and parenting, language and literacy, post-traumatic stress, food security, drug and alcohol

addictions, prematurity and other reproductive markers, immigration, work and lifestyle-related risks, and, the impact of these issues on health and social well-being. There is particular interest in the health and social well-being of African Nova Scotians, and seniors.

Health promotion strategies are based at the community, and individual level with the intent to promote health and well-being, enhance participation, address social injustice, and prevent dysfunction and disease. Research in this area in Health Professions has addressed healthy and safe child and youth development, sexual health services, harm reduction strategies for drug users, HIV counselling, program planning and evaluation, strategies to promote healthy eating, workplace ergonomics and worker safety, poverty reduction, and strategies to reduce falls and strengthen participation of seniors in their communities. Researchers in this thematic area are located in each of the Schools but the theme is of special interest to researchers in Social Work, Health Promotion, Occupational Therapy, Leisure Studies and Nursing. Collaborations in this theme exist with faculty in Sociology, Psychology, International Development Studies, and Medicine.

2. Clinical Person-Oriented Interventions (client, consumer, patient-oriented)

There are three components of clinical person-oriented interventions:

a) Health and social outcomes

Health Professions has a strong research focus on: the use of exercise and physical activity to strengthen musculoskeletal health for people living with chronic disease; supportive care and self-management of chronic disease; end-of-life care; prevention and supportive care for cancer; evaluation of the effectiveness of pharmaceutical and non-pharmaceutical interventions; management of patient safety; treatment of speech, language, hearing and vision problems; and reproductive care. Health outcomes research has strong involvement from Nursing, Occupational Therapy, Physiotherapy, Human Communication Disorders, Health Promotion, Leisure Studies, Pharmacy, Health Administration, and Clinical Vision Science program, and strong collaborations with Medicine and Computer Science. An important component is the emphasis on interprofessional team-based care to the management of chronic disease.

b) Health and Social Services Systems and Policy Development

Research concerning person-oriented interventions have optimal impact when connected with research strategies addressing health and social services systems and policies. In this area researchers examine policies to improve pharmaceutical safety and drug-related morbidity, evaluate government health and social strategies and policies, access to services, and health human resources. This research has local and global impact and collaborations with government, health care facilities, social services and industry. Pharmacy, Health Administration, Nursing, Social Work, the Atlantic Health Promotion

Research Centre lead research in this area. There are collaborations with the International Development Studies, the Department of Economics, and the Faculty of Medicine especially the Population Health Research Unit.

c) Informed Decision-Making

Informed decision-making broadly concerns the way in which consumers, health professionals, health administrators and government use evidence to make decisions that are intended to improve health and social well-being. Knowledge dissemination to influence informed decision-making is typically a component of research endeavours about health promotion strategies or clinical person-oriented interventions. Research in drug and patient safety, and health human resources has been most closely associated with informed decision-making. Informed decision-making is also a focused area of research that is concerned with decision-making and the translation of knowledge to practice, and the ethics and values inherent in critical professional reflection associated with the person-centered provision of health and social services.

3. Biological Systems and Functions

There is current and emerging research in Health Professions that focuses on: neurological components of human functioning; musculoskeletal structures and their mechanisms as associated with function, dysfunction and disease; processes related to the production of speech, language, vision and hearing; and, the pharmacokinetics and the development of pharmaceuticals. The majority of researchers in these areas come from Human Communication Disorders, Kinesiology, Physiotherapy, Pharmacy, and Vision Science with strong collaborations between Health Professions and Psychology, Medicine, and Biomedical Engineering. Their work is support by grants from NSHRF, NSERC, CIHR, as well as by contracts from industry, and grants from professional foundations and foundations associated with diseases such as the Heart and Stroke Foundation. Much of this research has applications to health promotion, clinical interventions, and informed decision-making with respect to policy.

4. Professional and Interprofessional Education Research

Health Professions has an evolving program of education research that examines issues related to roles and responsibilities of a profession, interprofessional concerns related to accountability and the delivery of care, and evaluation of continuing education. Interprofessional education alongside excellence in training of profession-specific competencies involves the collaboration of units and the three health Faculties (Health Professions, Dentistry and Medicine). Research in this theme was first initiated through the Seamless Care Interprofessional Education Project funded by Health Canada. Diverse research methodologies are used by Health Professions researchers. Health Professions has strong leadership expertise in qualitative research methodologies, and community-based research with indigenous populations and social justice

methods. Some research in this thematic examines how research methodologies themselves address issues of health and social well-being.

Summary of Research Themes

The four Research Themes set out the broad areas in which health professions researchers conduct research. In practice, research programs also cut across themes. Further, research programs vary in how well established they may be with respect to collaborators and access to funding. In addition to these research themes, Health Professions has emerging strengths identified as core research concentrations.

Core Research Concentrations

The Core Research Concentrations are supported by both senior researchers who have received ongoing Tri-Council funding as principal investigators, and other Health Professions' researchers who are at various stages of building and advancing their research programs. The concentrations were derived from annual reports submitted by faculty, the ROMEO[1] research funding database, and scrutiny of School and faculty websites examining grants and contracts held by faculty. The core research concentrations were subsequently identified as: ***child and family across the lifespan; chronic social disparities; chronic disease; obesity; musculoskeletal health; pharmaceutical development, management and policy; health human resources and services; and, communication and sensory processes***. They are described below:

1. Child and Family across the lifespan is supported by Tri-Council funded mid-career and senior researchers, a Killam chair, and a newly funded National Centre of Excellence for Children in Challenging Contexts (knowledge mobilization grant). This concentration builds on linkages with the IWK Health Centre, has collaborations across the units of Health Professions, and is well connected outside the Faculty with Psychology, Sociology and Medicine. Research is this area examines multiple social and health issues related to resilience, transitions, homelessness, violence, and mental health. It has global impact through the Resilience Research Centre which examines how children, youth and families cope with adversity. This concentration has a strong emphasis on social and environmental determinants of health and well-being, and, health promotion and community-based strategies. A smaller component focuses on clinical patient-oriented interventions. The mental health of children is a current priority area of the NS Department of Health and Wellness (see ***(http://www.gov.ns.ca/health/reports/pubs/DHW_Statement_of_Mandate_2011_2012.pdf).***

A related secondary aspect of this concentration is a focus across the lifespan drawing in the aging process and its impact on health and social well-being related to determinants, health

[1] ROMEO is the funding database system used by Research Services at Dalhousie to track grants received by Dalhousie faculty.

promotion and chronic disease. ***NSHRF has identified changing demographics as a research priority in population health.***

2. Chronic Social Disparities research is concerned with the impacts of diversity on health and social well-being of historically marginalized populations. Related social services policy research is concerned with addressing and changing policies that have supported chronic social disparities at the community level. This research is led by researchers in Social Work and Health Promotion.

Multiple areas are of concern with two foci more fully developed. One is Aboriginal Health research that was developed through the work of a very successful senior researcher (now Professor Emeritus, Social Work) and a mid-career researcher (now located at the University of Victoria), and is continued through a new CIHR funded researcher and an NSHRF researcher. The Atlantic Aboriginal Health Research Program (CIHR) is the platform for this research, facilitating and supporting Aboriginal research and its uptake and dissemination in Aboriginal communities and beyond to health service agencies and policy makers. Aboriginal health is a CIHR and SSHRC priority area. The second diversity focus is Gender and Sexual Orientation. This work was previously partially supported by a CRC II in Women's Health, and has strong contributions from faculty in Nursing, Social Work, Occupational Therapy and Health Promotion. Similar to Child and Family research, most of the work in Chronic Social Disparities lies in social and environmental determinants, health promotion and community-based strategies, and clinical patient-oriented interventions, particularly reproductive and maternal health. ***Marginalized populations is a priority area in population health for NSHRF.***

3. Chronic Disease encompasses primarily cancer, stroke, cardiovascular disease, mental health and addictions with an emphasis on clinical, patient-oriented interventions as well as health promotion strategies. Additional developing areas include multiple sclerosis, pain, hepatitis and osteoarthritis. An underlying focus in this area is the inter-relationship of these conditions with aging. There is some emerging strength in this concentration in Biological Systems and Functions, and to a lesser extent with Health Services and Social Policy Development, and Informed Decision-Making. ***Continuing care models are a priority for NSHRF and patient-oriented care and reducing the burden of chronic disease are priority areas for CIHR. Both funding agencies emphasize mental health. Mental health and addictions is a current priority for the NS Department of Health and Wellness, along with developing targets to prevent and manage chronic disease beginning with hypertension.***

4. Obesity is an important and well-funded concentration carried out primarily by a CRC II in Health Services Research along with collaborations with other mid-career researchers in the Faculty of Health Professions and other Dalhousie Faculties. This concentration is supported through Applied Research Collaborations for Health and the Atlantic Health Promotion Research Centre. ***Obesity is connected to NSHRF priorities in disease prevention and the CIHR priorities to promote health and reduce the burden of disease, and manage existing and***

emerging threats to health. Prevention of childhood obesity is a current priority area for the NS Department of Health and Wellness.

5. Musculoskeletal Health is centered in biological processes and mechanisms of muscles and joints with the neurological system and sensory processes associated with movement. Musculoskeletal health is linked with clinical patient-oriented interventions (e.g. stroke, arthritis, Parkinson's disease) and health promotion with respect to physical activity, function and the ergonomics of work and lifestyle. This concentration is strongly supported by senior and mid-career researchers from Kinesiology and Physiotherapy, and new investigators in both groups. ***Musculoskeletal health is connected to patient-oriented care in CIHR priorities, the medical and health outcomes research categories of NSHRF, and the biological systems and functions of NSERC.***

6. Pharmaceutical Development, Management and Policy is concentrated on biological processes and mechanisms related to the development of new pharmaceuticals and non-pharmaceuticals. Significant research on drug safety, management and policy has been developed by researchers in Pharmacy and Nursing particularly through a 10 year CHSRF/CIHR Chair (2001-2011) jointly funded by the Canadian Health Services Research Foundation (CHSRF), CIHR and NHSRF. ***Drug and patient safety is well connected to NSHRF priorities in governance, sustainability and costs, to CIHR priorities in patient-oriented care and a high quality accessible health care system, and CHSRF priorities in health care financing and transformation.*** This core research area is led by researchers in the College of Pharmacy and has strong collaborations with the Department of Pharmacology in the Faculty of Medicine. It is linked with Health and Social Services Policy through research on drugs and patient safety.

7. Health Human Resources and Services

Health human resources focuses on health workforce planning nationally and internationally and was developed through Nursing with strong collaborations with Memorial, McMaster, Western and UBC. There are linkages with the Atlantic Health Promotion Centre through work on the mobility of the health care workforce. ***Health human resource planning is linked to priorities for NSHRF and CIHR concerning models of health human resources and a sustainable system of healthcare.***

8. Communication and Sensory Processes includes basic and applied research related to normal and disordered communication, hearing, and vision. Research in this area also addresses the development of speech, language, and literacy; speech, language, and cognition in neurological disease; client-oriented intervention; and aspects of cultural and linguistic diversity such as dialects or bilingualism. ***This research is led by researchers in Speech, Audiology, Clinical Vision Science, and Kinesiology and is supported by grants from NSERC, CIHR, SSHRC and NSHRF.*** Some of the work of this research concentration is linked with Child and Family, and Diversity.

The research conducted within these themes and concentrations is further elaborated in individual faculty websites and research websites of Schools/College. Of particular note are the following research programs:

Atlantic Aboriginal Health Research Program (www.aahrp.socialwork.dal.ca)
Atlantic Health Promotion Research Centre (www.ahprc.dal.ca)
Atlantic Centre of Excellence for Women's Health (www.acewh.dal.ca)
Atlantic Regional Training Centre (www.artc-hsr.ca)
Applied Research Collaborations for Health (www.archonline.ca)
Gender and Health Promotion Studies Unit (www.gahps.hhp.dal.ca)
IMPART - Initiative for Medication Management, Policy Analysis, Research & Training (www.impart.pharmacy.dal.ca)
Network for End of Life Studies (www.nels.dal.org)
Resilience Research Centre (www.resilienceproject.org)
WHO Collaborating Centre on Health Workforce Planning and Research (www.whocentre.dal.ca)

Strengths and Challenges in Identified Themes and Concentrations

Strengths

- Health Professions consists of 8 Schools and 1 College, trains 19 health professions and offers 9 Masters thesis degrees (or graduate degrees with a thesis option), and a PhD in Nursing. An Interdisciplinary PhD with opportunities for students from health professions is also available through the Faculty of Graduate Studies. A proposal for a PhD in Health is in development.
- Child and Family is supported by researchers in all Health Professions units and has strong collaborations across the Health Faculties and with Sociology and Psychology. Child was identified as a Dalhousie strength in the bibliometrics survey conducted for Dalhousie Research Services.
- These areas of concentration connect strongly to provincial issues and concerns related to children, obesity, chronic disease (esp. mental health, cancer, stroke, community-based primary care), and drug and patient safety.
- Most of the core research concentrations are well-connected to research priorities of NSHRF, CIHR and SSHRC[iii]. NSERC provides some of the funding related to musculoskeletal health, and speech, vision and hearing. There are increasing numbers of research collaborations of health profession researchers across the units, and with other Faculties or departments (especially Medicine, Dentistry, Sociology and Psychology),

other universities, non profit associations, community groups and associations, health care associations, along with multiple partnerships with government.

- The strong interconnections in the core research concentrations support their sustainability and preparedness to apply for multi-year and multi-site research initiatives. The concentrations vary in their capacity and readiness.
- Some researchers have access to research funds through their units or in association with their units to support smaller research projects.

Challenges

- Research space is at full capacity. There is currently no room for expansion. This problem exists for social science research and for basic science research requiring wet lab space or space to house equipment to support research.
- Health Professions faculty have access to graduate students primarily through Masters' programs (either as thesis based degrees or with a thesis option program) in audiology, clinical vision science, health promotion, kinesiology, health promotion, leisure studies, nursing, occupational therapy, physiotherapy, social work, pharmaceutical science, and speech language pathology. The majority of Health Profession students are in entry to practice degrees and consequently the number of students in thesis programs is variable; some programs admit three or fewer students per year or none at all. The MSc in Pharmaceutical Science is a new program. The most active graduate thesis programs at present are in nursing, occupational therapy, health promotion and kinesiology.
- There is only one PhD program in the Health Professions (Nursing). PhD students working with Health Professions faculty are usually enrolled in the Interdisciplinary PhD program, or doctoral programs in other Faculties or through other universities.
- There are limited opportunities for PhD supervision which may restrict funding opportunities where PhD training is heavily weighted (e.g. NSERC Discovery grant).
- Some concentrations (and other research programs) are emerging areas of strength that are centered on the research of a small number of well-funded researchers. They are vulnerable when faculty leave.
- Pharmaceutical policy and safety researchers have had access to graduate students through a program that has suspended admission of students. The Masters programs in Health Informatics and Community Health and Epidemiology provide training opportunities. The new graduate program in pharmacy will graduate its first students in 2013.
- Recruitment of faculty prioritizes teaching competence relative to curricular needs because of their immediacy. Competitiveness for high quality research faculty is also affected by start up funding, critical mass of existing researchers, opportunities for spousal employment and other issues.

Researchers associated with the Schools, College and other programs of the Faculty of Health Professions set a vision for their research programs as research groups, as professions and as disciplines. The role of the Research office at the Dean's level is to facilitate and enhance the research conducted by Faculty researchers to support leadership and excellence in their core research strengths. Consistent with the approach used to develop the Research Scan, the Strategic Research Plan will be developed in collaboration with the Health Professions Research Committee.

Endorsed by Faculty Council. January 26, 2012

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[i] The Faculty of Health Professions Strategic Research Plan (approved in 2003 and used until 2010) was developed by Dr. Lynn McIntyre and Dr. George Turnbull. It set out four strategic priorities: Health Promotion; Health Outcomes, Women's Health and Professional Education. The plan captured much of the important work of FHP faculty and resulted in three CRCs: Health Services Research (Dr. Sara Kirk, 2006 continuing); Health Outcomes (Dr. Renee Lyons, 2004-2010, completed); and Women's Health (Dr. Brenda Beagan, 2007-2012, completed). Research funding for FHP steadily increased from approximately $800,000 in the late 90's to approximately $6 million in 2011.

[ii] The revised Dalhousie Strategic Research Plan is in process. The Health Studies component currently has three subheadings: Biological Structures, Processes & Mechanisms; Clinical Research and Translation to Care, Health Services and Health Policy; and, Health Environment and Society.

[iii] For priorities of Tri-Council funding agencies, see http://www.cihr-irsc.gc.ca/e/40490.html , http://www.sshrc-crsh.gc.ca/funding-financement/programs-programmes/priority_areas-domaines_prioritaires/index-eng.aspx , http://www.nserc-crsng.gc.ca/Professors-Professeurs/RPP-PP/SPG-SPS_eng.asp#target_areas . For NSHRF, see http://www.nshrf.ca/initiatives/initiatives/health-research-priorities .

FHP SELF STUDY APPENDIX E

Binder of Information about Research Centres and Programs

The binder will be circulated to the Senate Review Committee