POSTER ABSTRACTS
2007 Medical Education Conference
Victoria

P-01	Engaging Aboriginal Communities as Classrooms for Undergraduate Medical Education *Joel Lanphear, Northern Ontario School of Medicine*

The foundation of the Northern Ontario School of Medicine is its specific social accountability mandate to provide medical education programs responsive to the educational needs of students and the health care needs of the people of Northern Ontario. The population of Northern Ontario is comprised primarily of Francophone Anglophone and Aboriginal peoples. While curricular objectives related to cultural content can be addressed and learned in the formal classroom setting attitudes and cultural awareness can only truly be learned through immersion in a cultural context. The Aboriginal communities of Northern Ontario provide “classrooms” for the cultural immersion of our students. Through ongoing dialogue collaboration and interaction educational partnerships have been created with Aboriginal communities in the North. Successful engagement of Aboriginal Communities began in 2003 with a community consultation with Aboriginal leaders which lead to a curricular pilot project in 2005. Full implementation of a four (4) week Aboriginal placement for fifty six (56) students on twenty eight (28) reserves occurred May – June of 2006. A community consultation workshop in August of 2006 was held to review the School’s progress. This poster will describe the process by Aboriginal community partnerships were created including: • The development of community partnership agreements • Creation of community classrooms • Identifying community readiness • Cultural experiences for students • Identifying community learning facilitators • Community assessment of their experience with learners and the school • Delivery of curriculum and courses in the community context • Lessons learned – some does and don’ts Note: This is one of a group of posters relating to community engagement for distributed undergraduate medical education.

P-02	Local NOSM Groups – A Forum for Community Engagement *Tim Zmijowskyj, Roger Strasser, Miriam McDonald, Northern Ontario School of Medicine*

The Northern Ontario School of Medicine (NOSM) has main campuses in Sudbury and Thunder Bay and seventy Northern Ontario communities participating as clinical teaching and research sites. Developed with a social accountability mandate to improve the health of the people and communities of Northern Ontario NOSM provides comprehensive undergraduate postgraduate and interprofessional health education programs. Recent advances in community-based education have immersed students in environments of greatest relevance to their future practices. However these initiatives often develop policy curriculum etc. without considering advice and opinions from the communities. The Local NOSM Group model representative of local NOSM faculty members health service interest groups and community leaders ensures substantive and regular feedback to the School at the most senior administrative levels. As such communities engaged in medical education are provided with a forum for ongoing dialogue to promote an awareness of their health status and ensure that this status is reflected in the development of the School’s curriculum and research activities. This poster describes the development implementation and activities of the local NOSM Group (LNG) Forum at the Northern Ontario School of Medicine a collaborative network of communities participating in educational and research activities enhancing the School’s social accountability mandate. The LNG Forum provides support for community-based initiatives relating to health education community capacity and health human resource planning that will ultimately influence clinical practice education and health outcomes.

P-03	Former des médecins dans des campus extérieurs et les enjeux de la vie étudiante, l'expérience de Sherbrooke *Jocelyne Faucher, Sharon Hatcher, Janice Cormier, Université de Sherbrooke; Renaud Thériault, Université de Québec à Chicoutimi; Roger Boulay, Université de Moncton; Lise Grenier, Charles Dussault, Laurence Alix-Séguin, Université de Sherbrooke*

Offrir l’ensemble de la formation médicale à 500 et 1000 km du campus universitaire principal représente un défi de taille pour tous les intervenants. C’est le défi que relève la Faculté de médecine de Sherbrooke depuis septembre 2006 avec ses sites de formation à Saguenay et à Moncton (NB). Les étudiants

s'attendent à des services de soutien comparables sur les trois sites. Ces services incluent les services de santé et psychologiques l'aide financière le choix de carrière le sport la bibliothèque. Ces services contribuent indéniablement au développement d'un environnement propice aux études et sont l'objet d'analyse lors des visites d'agrément. Des défis structurels organisationnels et logistiques ont dû être surmontés. De multiples acteurs sont impliqués tels les étudiants le vice-décanat à la vie étudiante les services à la vie étudiante des intervenants (professeurs et autres) les associations étudiantes des trois universités etc. Une planification élaborée permet d'assurer une synergie et une complémentarité de leurs interventions. Celles-ci peuvent être offertes par le personnel de l'Université de Sherbrooke par le recours aux TIC ou via l'offre de services de l'université partenaire adaptés aux spécificités des étudiants en médecine. Des services innovateurs comme la fonction d'adjoint à la vie étudiante sont offerts par des professeurs de l'Université de Sherbrooke sur place. L'association des étudiants en médecine a revu son organisation afin d'assurer la représentativité de tous les étudiants et le maintien d'un lien significatif comme du parrainage. Des évaluations statutaires seront réalisées afin d'apprécier les succès d'améliorer constamment et d'identifier de nouveaux enjeux.

P-04	Engaging Rural Communities for the Education and Training of Undergraduate Medical Students *Joel Lanphear, Marie Matte, Dan Hunt, Northern Ontario School of Medicine*

Abstract The foundation of the educational program of the Northern Ontario School of Medicine is its social accountability mandate. This is to provide medical education programs responsive to the educational needs of students and directed towards the health care needs of the people of Northern Ontario. The unique geography of Northern Ontario has contributed to the creation of medically under served Francophone Anglophone and Aboriginal peoples. A substantial portion of this population of Northern Ontario live in rural settings outside of reserves. These individuals and their families are an important focus of our curriculum directed by our mandate. In the words or our Founding Dean Dr. Roger Strasser the task of the school is "to translate the mandate into the recruitment of qualified students from the North and thus to aid in the education training and retention of future physicians to practice in Northern Ontario." The residents of the rural communities of Northern Ontario represent 7 % of Ontario's population. They provide a context health care role models and practice models ideal for the education and training of medical students to meet the health care needs of the residents of Northern Ontario. Engaging these communities and their citizens to provide community classrooms for medical students has been a major task for the Northern Ontario School of Medicine. This poster provides the viewer with insights about many aspects of community engagement Note: This is one of a group of posters relating to community engagement for distributed undergraduate medical education.

P-05	Sherbrooke MD Program Outside Campuses: Lessons After 8 Months of Implementation *Paul Grand'Maison, Mauril Gaudreault, Aurel Schofield, Réjean Hébert, Sylvie Lamarche, Guy Waddell, Marcel Couture, Université de Sherbrooke*

Sherbrooke Faculty of medicine and health sciences implemented by September 2006 two outside campuses to offer its whole M.D. program in regional sites: Moncton New Brunswick and Saguenay Québec. Both sites received in September their first cohort of 24 first-year medical students. The project was implemented after more than 2 years of extensive planning partnership building faculty and administrative development. After 8 months of implementation a series of concrete lessons are worth sharing. Partnership with stakeholders is complex and in constant change. Students are enthusiastic and helpful but maybe the most significant critics. Faculties are well prepared with faculty development activities and highly appreciate ongoing support for their teaching tasks regarding content and educational method. Assuring comparability of teaching and learning among sites needs numerous strategies; its comprehensive measure asks for innovative methods. Information technology holds attractive promises but many difficulties arise and do not only result from technology issues but from problems at the level of the curriculum the teachers and the learners. Program administration in 3 sites needs extensive clarification of tasks and rules of functioning but more importantly effective communication lines at all levels with a personal touch. Evaluation of the project must be done rigorously must emphasize collaboration of all partners and the use of their expertise; synergy among them should be assured. Costs are always higher than you thought they would be.

P-06	AFMC Affirmative Actions for Francophone Minority Communities: A Social Accountability Commitment *Paul Grand'Maison, Université de Sherbrooke; José François, University of Manitoba; Jean Roy, University of Ottawa; Aurel Schofield, Anne Leis, University of Saskatchewan; Marc Blainey, Northern Ontario School of Medicine; Dorothée Ouellette, Université de Sherbrooke*

As part of its commitment to social accountability AFMC established a number of initiatives with regards to francophone minority communities. Started in 2003 and completed in 2006 the $ 900 000 AFMC project “Des médecins et des soins de qualité pour les communautés francophones minoritaires du Canada” was funded by Health Canada. This project supported students from francophone minority communities enrolled in Canadian medical schools to complete clinical rotations in French in these communities or in Québec. Professional development and networking was addressed by organizing decentralized activities in these communities. In May 2006 an “AFMC Resource Group for Francophone Minority Communities” was officially established. Its mandate is to support the development of the medical workforce for francophone minority communities which in turn will ultimately improve the delivery of medical services and the health of the population of these communities. Many Canadian Faculties of medicine (Université de Sherbrooke University of Ottawa University of Manitoba Northern Ontario School of Medicine University of Saskatchewan University of British Columbia and others) have committed themselves to this objective and have implemented concrete and affirmative actions in this regard. In order to maintain these activities established in the 2003-2006 project AFMC is partnering with the “Société Santé en Français“ and the “Consortium National de Formation en Santé“ to ensure ongoing funding. More importantly it will also give way to complementary and synergistic actions. This AFMC experience is applicable to other minorities. It has been shared internationally and AFMC leadership in this regard is increasingly recognized.

P-07	Rural and Regional Medical Education in Newfoundland Programs and Outcomes *James Rourke, Memorial University of Newfoundland*

The Faculty of Medicine Memorial University of Newfoundland was established in 1967 with the first graduating MD class in 1973. It is a small community based Medical School responding to the needs of Newfoundland and Labrador within a national and global context with a comprehensive integrated rural and regional medical education focus. In 2006 Memorial MD graduates represent 56% of fully licensed RCPS(C) certified Newfoundland and Labrador specialists and 59% of fully licensed Newfoundland and Labrador family physicians. 40% of Memorial MD grads originally from Newfoundland and Labrador who graduated from 1973 – 1998 were in Newfoundland in 2004 (CMAJ 2006;175(4):357-60). Caper data shows 41.2% of physicians who did family medicine training in Newfoundland and Labrador went into rural practice compared to 13.4% from all Canadian family medicine training programs (www.caper.ca). In 2006 45% of Memorial grads chose family medicine in CaRMS match and the Memorial Family Medicine Training Program was 1 of only 4 in the country to completely fill in the 2006 CaRMS 1st iteration.

P-08	A Comparison of Clinical Procedures Experienced by Students in an Integrated Longititudinal Clerkship vs. Discipline Specific Clerkships *Marc Broudo, Joan Fraser, George Pachev, Gordon Page, University of British Columbia*

This study focuses on a comparison of the performance of clinical procedures by two cohorts of students who participated in a year long integrated longitudinal clerkship vs. those students in discipline specific (conventional) clerkship rotations. Each third year undergraduate medical student at the University of British Columbia is provided with lists of clinical procedures that they are expected to experience. Students had completed a web based log following the completion of each clerkship. Each log provided clerks with a list of the procedures which they were expected to experience or observe. The quantity and types of procedures clerks experience enable the evaluation of the following: 1) the effectiveness of the orientation courses offered; 2) the effects of multiple teaching hospital sites and services on students' clinical exposure; 3) help ascertain whether the stated objectives related to the performance of clinical procedures are being achieved. Preliminary findings indicate that students in the integrated clerkship program were found to experience more clinical procedures than the students in conventional clerkships.

P-09 | **Students' Performance in an Integrated Community-based vs. a Traditional Rotation-based Clerkship Program: Comparisons of Results from Two Cohorts**

George Pachev, Joan Fraser, Marc Broudo, Gordon Page, Jean Jamieson, University of British Columbia

Chilliwack a community of 80 000 was the site for an innovative program. The program provided core clinical clerkship education in a community-based setting to six third-year medical students in the first-year and five – in the second-year of the program. The aim of this study was to compare student performance in the integrated community-based clerkship to performance of students in the traditional clerkships within each cohort and to evaluate the stability of results across cohorts. Sixty-six students consented to participate in the study from the first cohort and sixty-eight – from the second cohort. Performance of the integrated clerkship students was compared to performance of the other students within each cohort as well as to matched groups of six and five students respectively in order to increase the power of the statistical tests and protect against heterogeneity of variance. To control statistically for base-line differences in achievement levels the comparisons were repeated with covariates: (i) second-year overall performance and (ii) second-year OSCE performance. Stability of results was evaluated by comparing the effect-sizes of the differences. The students in the Chilliwack clerkship performed at the same level and in some cases at a higher level compared to students in the traditional-format clerkships.

P-10 | **How Do You Assess Student Perfomance in Integrated Clerkships?**

David Snadden, Annie Docking, Amy Johnson, Geoffrey Payne, University of British Columbia/University of Northern British Columbia

Background The University of British Columbia Faculty of Medicine has developed a distributed undergraduate medical education program in response to physician shortages particularly in northern rural and aboriginal communities. In traditional programs medical students complete their first clinical year clerkship based around “core” rotations. However a pilot project is being developed whereby students undertake an integrated clerkship in a rural setting. Purpose of Study The purpose of this study is to determine appropriate methods of student evaluation and assessment to ensure required objectives of the curriculum are met within an integrated setting Method A systematic literature review was carried out to identify medical schools with established integrated clerkship streams to identify two programs with the most documented assessment and evaluation The assessment and evaluation methods used by these programs were reviewed using their published results to establish a framework for assessment applicable in BC. Results Flinders AUS and Cambridge UK were the schools chosen for further study. In both programs exams were identical to those in the traditional programs. Students in integrated programs performed as well as or better than their traditional counterparts but arrived at that point via a different learning modality and system of assessment. Students were able to obtain adequate exposure to all clinical specialties (Cambridge) and assisted in or performed six times as many procedures as students in the traditional stream (Flinders). In terms of student assessment and evaluation both schools reviewed have found success as measured by student performance.

P-11 | **Community Service Learning in a Distributed Medical Curriculum – Are We All Singing from the Same Songsheet?**

Michael Whitfield, Richard Lazenby, Mary Nixon, Elaine Lam, University of British Columbia

In 2005-6 we introduced a Community Service Learning (CSL) elective for the first time in the Second Year Medical curriculum in the 3 sites of our distributed medical programme ;Vancouver-Fraser (VFMP) 20 students Victoria (IMP) 1 student Prince George (NMP) 4 students. A detailed evaluation of the programme was carried out at the end of the academic year. Students were accepted to the CSL elective based on their proposal outlining the agency where they chose to volunteer and what they felt they could learn there. Agencies included a broad range of agencies meeting needs of disadvantaged and underserviced members of society. The CSL programme combined volunteering (2h+/week) with reflective journaling after each encounter with the agency and an agency deliverable to be provided to the agency at the end of the academic year. There was a broad range of agency deliverables specific to the agency and

were judged to be a substantive contribution to the work of the agency. Similar learning themes emerged from student reflective journals at the three sites however areas of student learning were individual for individual students in individual agencies. Although the programme was implemented using the same course documentation at the three sites differences in class size and other characteristics of the three sites influenced students' experiences. However it appeared that an educationally comparable experience was provided at the three sites. Community-University capacity building occurred at all three sites. Some areas for improvement were identified in the evaluation and have been implemented in 2006-7.

P-12	A Mandatory Community-based Longitudinal Clerkship *Tim Zmijowskyj, Dan Hunt, Joel Lanphear, Northern Ontario School of Medicine*

The students of the Charter class of the Northern Ontario School of Medicine began their studies in the fall of 2005. In 2007 these 56 students will undertake a mandatory 8-month clerkship known as the Comprehensive Community Clerkship (CCC) in one of ten Northern Ontario communities apart from the main campuses in Thunder Bay and Sudbury. Prior to the development of the CCC a variety of international third year clerkship programs were examined. Educational designs that provided integrated rather than separate discipline specific rotations were identified in select programs. Exploring these models allowed the School to engage in an iterative process of community engagement and feedback to design the CCC. During the CCC students will learn a range of clinical disciplines through local patient contact enhanced by local and visiting specialist teaching and distance learning. As this is a prolonged clinical attachment students become part of the health service connect to the local community and provide continuous and longitudinal care to patients and their families. This poster will describe the design development and implementation of the NOSM Comprehensive Community Clerkship (CCC). A discussion of potential evaluative research initiatives including student performance experiences and career choice faculty recruitment and community impact will also be provided.

P-13	Descriptive Study of the Traditional Healing Workshop: An Evaluation of a Medical Educational Experience in Aboriginal Health at the University of Manitoba *Gladys Stewart, Catherine Cook, University of Manitoba*

Aboriginal health is a priority issue for the health care community and medical schools. The pre-clerkship medical program at the University of Manitoba includes teaching sessions on Aboriginal Health and an awareness of patient diversity. Since the establishment of a curriculum in 1997 the first year medical students have participated in a traditional Aboriginal Healing workshop in the Community Health curriculum in the Clinical Skills course. The results of a descriptive study in October 2002 concluded that the workshop was successful in enhancing first year medical student's understanding of Aboriginal spirituality as a component of Aboriginal culture. In February of 2006 a follow-up questionnaire designed to explore the educational experience in Aboriginal Health was completed by 15 of the senior clerks in the Class of 2006. The results of the follow-up study indicated that 50% of the respondents felt "well prepared" to work with Aboriginal patients in Clerkship and the remaining 50% responded with "average" preparation. 66% of the respondents indicated that the content presented on Aboriginal Health through lectures tutorials and off site teaching sessions provided an understanding of the health issues in the Aboriginal community. Suggested changes to improve the educational experiences in Aboriginal Health included a lecture on colonialism and the need for more interaction and presentations from aboriginal people with medical experiences. The value of educational experiences in establishing a foundation of mutual respect between Aboriginal peoples and their health care physicians is important to recognize and enhance in medical education.

P-14	A Critical Anlaysis of the International Medical Graduate Experience *Mala Joneja, Queen's University; Linda Muzzin, Sarita Verma, University of Toronto*

There are increasing numbers of positions available for International Medical Graduate (IMG) physicians to enter the process of qualifying to practice in Ontario. These physicians apply to a screening and evaluation process and are deemed eligible for assessment regarding ability to go straight to practice or are given the opportunity to join a training program at the undergraduate or postgraduate medical education level. IMG physicians who have left their home country must integrate into Canadian culture in

general and into the Canadian medical learning environment including the medical school and its postgraduate programs. The integration of IMG physicians into this environment has not been examined from a critical perspective and such an examination would draw attention to the importance of race and culture in the IMG experience. In this qualitative study seven IMG physicians in postgraduate training programs at an Ontario medical school were interviewed using a semi-structured interview format. The interview transcripts were analyzed from a critical anti-racist perspective. Analysis of the interviews demonstrated: (1) a conflict between the IMG physicians' identities as foreigners and their professional identities and (2) a significant role played by 'difference' in the common themes which emerged. The results of this study will potentially contribute to policy changes by taking into account the IMG physicians' experiences in the Canadian learning environment and drawing attention to the role of 'difference' in medical education.

P-15	The Landscape of IMG's in Canada: A Preliminary Report *Rita Forte, Canadian Post-M.D. Education Registry*

CAPER is now developing the International Medical Graduates Database and data submissions for 2005 have been received. Varying entry points exist for international medical graduates who enter the medical assessment training and licensure pathways into practice. This poster explores the general characteristics and trends for three groups of data providers: assessment programs faculties of medicine and regulatory authorities. The research offers key findings relating to IMG's contribution to the Canadian physician workforce. The first part aggregates the data for regulatory authorities based on province/territory using variables which relate to geographical region of M.D. degree licence type and practice field. The second part aggregates the data for faculties of medicine based on field of post-M.D. training using variables which relate to geographical region of M.D. degree and post-graduate training year. The third part aggregates the data for assessment programs based on province using variables which relate to assessment processes specialty field being evaluated and practice readiness.

P-16	The Strongest Link: The Evaluation of an Innovative and Interactive CME Program *Doug Klein, University of Saskatchewan; Barbra McCaffrey, Merck Frosst; Heather Stenerson, University of Saskatchewan*

Purpose: The purpose is to assess differences in knowledge acquisition/retention and satisfaction between a didactic format and an innovative "Strongest Link" game format. The innovative program is designed to address perceived and unperceived educational needs in a competitive yet supportive environment. Methods: The project utilizes a mixed methods design. Family physicians recruited from four Canadian cities. All participants receive the same information related to Family medicine topics. The sites are randomized to one of two educational formats. Results from a pre-test post-test and follow-up tests are compared by format. Qualitative data from evaluation forms are combined with face-to-face interviews with study participants. Results: 24 programs were held in the four different sites. Preliminary results demonstrate higher knowledge gains from the Strongest Link format ($p < 0.01$). Participant satisfaction between both formats is not significantly different but participants mentioned the format significantly affected their retention of content ($p = 0.01$). Qualitative comments from the two formats show a preference for the innovative program. Conclusions: This project supports the theory that learning in a competitive format is more interactive and triggers greater awareness of participants' own knowledge gaps which leads to deeper learning. Innovative learning formats should be developed to address both perceived and unperceived education needs in a supportive environment that is both enjoyable and competitive.

P-17	Three Steps Approach to Motivate Faculty for CanMEDS *Serge Dubé, Bernadette Ska, Louise Samson, Serge Normand, Paule Lebel, Andrée Boucher, Isabelle Bayard, Université de Montréal*

«Three steps approach to motivate faculty for CanMEDS» The CANmeds initiative is born from a desire to reform medical education in order to ensure that physicians would be able to face the challenges of the third millennium. Implementation of the program has been linked to an accreditation process which constituted a strong incentive. Meanwhile our Faculty has been under strong pressure due to an increased

clinical work load more demanding teaching tasks and a perception of poor recognition for the work being done. In this report we present our three steps approach in order to make from this major transition a positive experience. First: a systematic revision of our longitudinal curriculum with emphasis on the broader perspective of program competencies. More specifically twelve competencies adapted from the seven original CANMeds 2005 were selected by various field specialists to design a new way of teaching both cognitive and clinical reasoning content to undergraduate students. Second: an on-line survey evaluating our Faculty needs with their suggestions and frustrations. Third: the elaboration of a Faculty development program. Based on these preliminary results from this survey we have prepared fifty physicians interested in medical education to assume the leadership of these changes implementation. These leaders were chosen by specialities previous commitment and hospital affiliation. One method to attract these potential leaders has been to provide local training close to their work environment. Commitment of the dean and a recurrent financial support has been guaranteed. This ongoing process presents success and pitfalls. The gloomy medical climate does not help. The perception of the involvement of the direction is improving. We hope that these three steps will facilitate the implantation and allow to perceive it as a positive experience rather than an obligation to obtain full agreement.

P-18	Medical School Admissions: Challenging the Eight Year MD Program *Stephen Aaron, Sarah Aaron, University of Alberta*

Requirements for Medical School admission ensure that students are academically emotionally and socially prepared to successfully complete a program of studies leading to a medical degree. They also have a significant effect on a larger group of students hoping to enter medicine and on the face of the profession as a whole. We studied the relationship between medical school admissions and medical manpower in North America. We conducted a review covering admissions policies age of admission to medical school age of physicians in practice and physician numbers. We used data from published papers cited in Medline and from publications of the AFMC and AAMC. From 1982 to 2005 the average of students entering Medical School in Canada increased two years. Almost all North American Medical Schools now demand or encourage four years of premedical College education. In contra-distinction we found wide variation in the demand for specific pre-requisites both in terms of semesters of study and with respect to the courses required. There was little evidence of an important relationship between the amount or nature of pre-medical studies and outcomes within medical school. Admission policies have led to an approximate 6% drop in the physician workforce by delaying medical careers by two years assuming no change in retirement age. This is at a time of great concern about physician manpower. Further studies will look at the effect of these same policies on the demographics of medical students and on the academic environment of the non-medical University faculties from which they come.

P-19	Advanced Medical Communications: Support for Our International Residents *Mark Goldszmidt, Claude Kortas, University of Western Ontario; Susan Meehan, Applied Language Associates*

Background and Purpose: Coping with the cultural and language differences in North America can be very challenging for Internationally Sponsored Residents (ISRs) and International Medical Graduates (IMGs). However they are often quite self-conscious when being singled out for special training. The purpose of this pilot was to assess the feasibility of offering to first year IMGs and ISRs a communications course focusing on communications theory language in context and cultural differences. Methods: In the fall of 2005 six IMGs and ISRs participated in a new program developed by the Department of Medicine in conjunction with an “English for Specific Purposes” education specialist. Post-course evaluation involved participant and instructor feedback. An instrument consisting of seven open and 24 seven-point Likert-scaled questions was used. Results: At the end of the course participants indicated that although their pre-course interest was low [x=3.3(2.3 SD)] they were now very satisfied with the course [x=6.0(0.9 SD)]. They also felt that their communication skills had substantially improved – self assessed mean pre-course skills were rated as 3.8 (0.4 SD) and post-course skills were rated as 6.2 (0.8 SD; p=0.03). Suggestions for course improvement included issues related to timing and types of additional topics to cover. All participants felt that the program should be offered to incoming ISRs and IMGs. Conclusions: A targeted communications skills program can be implemented with high levels of acceptance by IMGs and ISRs. Note: In this poster details about the newly developed curriculum will be presented.

P-20	Enriching and Linking CanMEDS Roles with the Northern and Rural Context of Training and Practice *Melissa Andrew, Andrea Berntson, Samantha Wallenius, Queen's University; Lynn Vandenberg, University of Toronto; Henry Leung, Northern Ontario School of Medicine; Brian Hodges, University of Toronto*

The CanMEDS 2000 Framework revised 2005 is currently used to guide curricular decisions at postgraduate training programs across Canada. Northern and rural rotations offer Psychiatry residents unique opportunities to develop expertise in the CanMEDS competencies by virtue of the non-tertiary health systems where this training is offered. Training objectives should reflect the elements of the CanMEDS roles that are particularly applicable to these rotations. This poster illustrates the process by which the Ontario Psychiatric Outreach Program (OPOP) has begun to identify those aspects of the CanMEDS roles most applicable to the northern and rural context. A SWOT analysis for training in each of the seven roles was undertaken utilizing the expertise of OPOP-affiliated northern-practicing clinicians and residents who have participated in rotations at several Northern Ontario sites. A framework was developed to delineate where northern rotations offer unique supplemental or enriched learning opportunities for specific role elements. The Health Advocate role will be used as an example of how curriculum might be tailored to reflect the nuances of training and experience unique to northern / rural settings. This information may be helpful in guiding training directors and supervisors in developing and evaluating rotations outside of traditional academic settings. The articulation of these variations and nuances of the competencies may serve to underscore the importance of these non-tertiary training opportunities for their intrinsic value and highlight the unique contributions that northern /rural preceptors may make to residents' development of competency in each of the CanMEDS roles.

P-21	Video Interviews for International Applicants: Validity, Convenience and Utility *Mohamad Alameddine, Kevin Imrie, Stephanie Akers, Sarita Verma, University of Toronto*

Background: The 71 Postgraduate Medical Education programs at the University of Toronto offer annually hundreds of international applicants an in-person interview as part of the selection process for residency and fellowship training. Many of the applicants experience difficulty in attending these interviews due to work-personal commitments high cost of travel and/or visa delays. With the advancement and proliferation of technology video conferencing interviews offer an alternative for in-person interviews but how do video interviews compare to in person interviews in assessing Postgraduate applicants' skills? Does the perspective of interviewers differ from that of interviewees? Methods: Two questionnaires assessing the interview experience of both interviewers and interviewees were developed and are currently being administered during all video interviews and selected in-person interviews. The collection process is expected to be completed by the end of 2006. The expected sample size is 30 interviewees and 90 interviewers. T-tests are being used to compare the means of these groups and significance levels are being analyzed. Preliminary Findings: The results of the first fifteen interviews were analyzed. No significant differences were found between in-person and video interviews. All interviewers and interviewees expressed high overall satisfaction with video interviews yet Interviewees had a significantly lower ($P < 0.05$) satisfaction rate with their ability to show their interpersonal skills and connect personally with interviewers. Conclusions: The early indications are very encouraging about the use of video interviews. They result in significant time and cost savings for international applicants and have potential implications for the CaRMS process as well.

P-22	Redeveloping a Patient-centered Learning Program: Student-faculty Collaboration for Curriculum Change *Teresa Chan, P. Guillaume Poliquin, Peter Flanagan, University of Western Ontario*

Background: In 2005-2006 an extensive needs assessment of the Patient-Centered Learning(PCL) course in the pre-clerkship Schulich MD Program identified student needs and perceptions. As a result we undertook the development of new methods and techniques for teaching Patient-Centered principles that would be valuable and engaging for students. Ultimately this resulted in the development of a new version of the PCL program newly entitled: Patient-Centered Context: Integration & Application (PCCIA).

Description: A needs assessment process gathered information from students and teaching faculty and the PCL program was remodeled in the Summer of 2006. This redevelopment involved a new Undergraduate Medical Education (UGME) Summer Studentship that placed students with teaching faculty members. This poster details: 1) Timeline of the program renewal; 2) Architecture of the new Year 1 Patient-Centered Context: Integration & Application (PCCIA) course; 3) Resources required & developed for the change; 4) Joint-reflection by the chief developers of the new PCCIA program 5) Preliminary methods of evaluation of this new program. Outcomes: The PCCIA development was one of the largest projects undertaken by the UGME Summer Studentship program. Student-faculty collaborative work performed during 2006 created a framework and resources for a new academic program for the Schulich MD program's pre-clerkship period focusing on fostering independent learning and professional development of medical students.

P-23	Leadership in Postgraduate Medicine: 1st Annual Chief Resident Leadership Workshop *Sarita Verma, Rachel Zulla, Susan Glover Takahashi, Jodi McIlroy, University of Toronto*

Within the context of postgraduate medical education chief residents play a significant multi-dimensional leadership role; they are mentors advocates teachers and managers to junior trainees. Many are expected to take on these additional roles under the assumption they currently possess the skills necessary to be an effective leader. In the spring of 2006 93 chief and senior residents were surveyed. Overall 32.3% had no prior contact with the previous chief resident. Among those who did prepare the majority (46%) consulted previous chiefs/seniors and/or program directors. A small number were enrolled in a leadership course/seminar. Eighty-five percent agreed that a leadership workshop would be beneficial for future chiefs. The 1st Annual Chief Resident Leadership Workshop was designed to develop and enhance leadership skills and provide tools to ease their transition into a senior administrative role. Seven sessions were offered: Mentorship Overview of the residents' work/education contract Personality Inventory (i.e. Myers-Briggs) Intimidation and Harassment Resident Wellness and Public Speaking. A keynote address on leadership in academic medicine was given by a well-known Canadian clinician leader. To reinforce the experience a resource binder and handbook was distributed to all participants. Each session was then evaluated by the participants on a 5-point Likert scale. Mentorship scored the highest (4.46) followed by Leadership in Academic Medicine (4.43) and Resident Wellness (4.13). Over 90% agreed that 1) a leadership program is necessary and 2) they would re-attend next year if they continued as chief. The results indicate that a formal centralized leadership workshop/seminar is valued by the Chief Residents and that orientation is needed to highlight the necessary skills required and provide Chief Residents with key resources.

P-24	Developing Multiple Mini Interviews for Selection of Residents *Marianna Hofmeister, Rodney Crutcher, Mo Verjee, Cayti Beyer, Claudio Violato, Jaelene Mannerfeldt, University of Calgary*

Interviews are an important source of non-cognitive information about applicants to medical school and to residency training programs. There is evidence that traditional unstructured and behavioral structured interviews fail to produce valid and reliable data raising questions about defensibility of current selection processes. The multiple mini interview (MMI) procedure developed at the Michael G. DeGroote School of Medicine at McMaster University and studied at both McMaster and the University of Calgary provides better evidence for validity and reliability. These studies provided compelling evidence for the Alberta International Medical Graduate (AIMG) Program to adapt the MMI to assess professionalism in 71 IMG applicants for family medicine residency training. This poster provides a guide to the process used by the AIMG program including: gaining buy-in from the two Alberta Faculties of Medicine determining the constructs to be measured developing the blueprint and scenarios developing the score sheet recruiting and training interviewers preparing applicants and organizing logistical support. Psychometric analysis of the data is currently underway. Early analysis of acceptability data shows that 89% percent of IMG interviewees preferred the MMI over other interview methods and that 100% of the interviewers were willing to participate in the MMI again in the future. The reliability (Cronbach's alpha and inter-rater) and criterion-related validity assessment of the data will be presented as will further results pertaining to MMI acceptability. A checklist outlining key tasks will be available to those interested as a process guide to interviewing using the MMI technique.

P-25	Rural & Regional Clerkships: Advantages & Opportunities *Matthew Wannan, Ken Harris, Raphael Cheung, University of Western Ontario*

Since September 2003 groups of third-year Clerks at the Schulich School of Medicine & Dentistry (SSMD) have participated in a 6-month or 12-month Clerkship in Windsor Ontario as part of the Southwestern Ontario Medical Education Network a joint collaboration between SSMD at The University of Western Ontario the University of Windsor and affiliated rural and regional hospitals throughout Southwestern Ontario. This study will examine the CaRMS placement success (first choice placement first choice location) of twelve 2003-2004 Clerks (who graduated in 2005) twenty-four 2004-2005 Clerks (who graduated in 2006) and twenty-four 2005-2006 clerks who will graduate in 2007. By comparing actual (i) CaRMS placement data for the three year period (2005 2006 and 2007) and (ii) transcripts of annual focus groups and interviews with graduating medical students who participated in the 6-month or 12-month program to average provincial and national CaRMS placement data this study will demonstrate that medical students who participate in the rural/regional clerkship at the Schulich School of Medicine & Dentistry are not disadvantaged in the placement process. Finally this study will highlight themes which identify anecdotal advantages to participation in and exposure to rural and regional Clerkship initiatives. It is believed that rural and regional training exposes medical students and resident physicians to a wide variety of opportunities for hands-on clinical experiences. Students work alongside one (or more) practitioners through the full range of their practice. Rural and regional training allows trainees to experience the lifestyle afforded in many communities throughout Southwestern Ontario.

P-26	Learning Through Community Service: An Inter-professional Pilot Project for Pharmacy and Medical Students *Meredith McKague, Bev Allen, University of Saskatchewan*

Abstract: First year health sciences students were invited to participate in this experiential learning project which was piloted from October 2005 to April 2006 and is now running in its second year. Community-based organizations (CBOs) primarily working with underserved individuals in Saskatoon's core communities partner with two health sciences colleges to offer longitudinal service-learning experiences to pairs of Pharmacy and Medicine students. Students meet in groups during the project to reflect on their experiences and share learnings. Program objectives for students include increased understanding of the health needs and resources of community members; increased knowledge of the services of specific CBOs; increased knowledge of inter-professional roles; increased sense of efficacy in identifying and responding to health needs; and recognition of community service as an important professional responsibility. CBO and Faculty objectives include experience in planning implementing and evaluating inter-professional programs; and increased capacity to work effectively together implement service-learning programs. The long-term goals for this project are to help health sciences students to recognize and better understand how the social determinants of health impact individual clients/ communities in order to ensure that graduates are willing and able to work sensitively with clients who face significant barriers to health. The pilot project was evaluated using mixed methods including a focus group; questionnaire completion; document review; individual interviews; and reflective journaling. Through qualitative analysis we have identified key themes related to the project objectives and processes. This poster will describe the program's structure and activities the evaluation methodology and the results of the evaluation including recommendations that will be relevant to other service-learning programs.

P-27	International Medical Graduates (IMGs) Needs Assessment Study: Comparison Between Current IMG Trainees and Program Directors *Sarita Verma, Rachel Zulla, Allan Detsky, Mark Baerlocher, University of Toronto*

International Medical Graduates (IMGs) experience unique challenges relative to their Canadian counterparts. Several studies note that IMGs encounter additional problems such as loneliness social isolation a decrease in self-reported status with an accompanying diminishment of self-esteem concerns related to family left behind lack of money and worries about visas/immigration (Kramer 2006; Whelan 2005 Majumdar et al. 1999 Char 1971). With a growing number of IMGs entering postgraduate training the need to address these challenges is crucial to ensure their educational experience is optimized. A needs

assessment study was conducted to determine what IMGs require from the perspective of current international medical graduate trainees and program directors. Both groups were asked to rate the importance of the following issues (on a scale of 1-5) in developing a horizontal curriculum for incoming IMGs: a review of basic clinical skills and knowledge communication macro issues (knowledge of Canadian Health System knowledge of the Toronto Hospital System and knowledge of pharmaceuticals hospital formularies etc.) work related issues (e.g. professionalism and intimidation and harassment) and other problems (e.g. cultural differences and stress management). The response rate for IMGs was 56% (66 out of 118) and 62% of the program directors responded (45 out of 73). Program Directors indicated that basic clinical skills and knowledge (58%) as well as communication with patients (52%) must be incorporated into a horizontal curriculum. This was followed by the need to address interprofessionalism among nurses students and other allied health care workers (67%) and relationships with other residents (57%). IMGs felt that marco issues were of the utmost importance in a horizontal curriculum namely learning about the Canadian healthcare system and Toronto hospital system (71% and 59% respectively) followed by career counseling (67%).

P-28	The Lecture: A Pedagogic Dinosaur or a Casualty of Educational Vogue *James Brawer, McGill University; Marc Lener, George Washington University; Colin Chalk, McGill University*

Medical course directors are under pressure to replace lectures with self-directed and interactive learning methodologies. According to current thinking lectures promote the passive acquisition of information and stifle the exercise of cognitive skills. Although this viewpoint is pervasive there is scant evidence to support it. Indeed many comparative outcome studies indicate that the efficacy of lectures is equivalent to that of self-directed and interactive approaches. What is missing from the literature however is the student perspective and it is this issue that we have addressed. Although medical and dental students in the first year neuroscience course at McGill are informed that the examinations are based entirely on a published set of notes lecture attendance is high. We distributed a questionnaire to the class (200 students) asking them to explain why they attend lectures. Thematic analysis of the 50 responses revealed a variety of themes the most common of which were that lectures: 1) provide focus and emphasis 2) explain difficulties and complexities in the notes 3) provide an additional modality (auditory) that reinforces learning 4) provide the “big picture” 5) impart depth insights and examples absent from readings 6) encourage structure and discipline 7) provide valuable exposure to and interaction with experts and 8) are a time-efficient way to learn. It appears therefore that from the student perspective the educational experience provided by lectures is neither passive nor primarily a means for acquiring factual information. These results indicate that students value lectures for the guidance and insight that they afford.

P-29	A Retrospective Study of Critical Incidents and Tutor Interventions in Problem Based Learning Tutorials *Christopher Grant, Steven Kulla, William Godolphin, Pawel Kindler, University of British Columbia*

This retrospective qualitative study was designed to determine what types of difficulties problem based learning (PBL) tutors commonly encountered during tutorial sessions what interventions were used and whether or not these interventions were successful. Thirteen tutors were interviewed using the critical incident technique. Fifty critical incidents were recorded interview summaries were transcribed and the data was assessed thematically. The five most common incident types were: 1. Dealing with quiet or non-participating students; 2. Dealing with dominant students in group interactions; 3. Negotiating the role of the tutor within the group (i.e. how involved should the tutor be in the tutorial process?); 4. Dealing with students presenting anecdotal or dubious information and; 5. Difficulties relating to having students provide honest and constructive self-reflections and group feedback. These five types of problems constituted 56% of all critical incidents recorded in this study. The results of this study show that 10% of the types of incidents reported comprised over half of the problems encountered by tutors. By focusing on these five issues tutors can be forewarned about what commonly causes problems in tutorials. Looking beyond the frequency of incidents the types of problems that tutors found the most difficult to resolve were incidents related to student/tutor interactions and specifically issues rooted in disagreement over how the PBL process should work. This is interesting in that it may be possible to focus resources on both tutor

training and student expectation-setting to help preempt these types of difficult process-related issues from developing.

P-30	Elderly Patients are Underrepresented in a Problem-based Learning Curriuculum *Janet Gordon, Dalhousie University*

Background The problem-based learning (PBL) method of medical education has been widely adopted. At Dalhousie University a student expressed concern that the ages of the patients in the cases did not reflect the older patients she expected to care for in her future practice. Methods A review was undertaken of the 2004-5 first and second year PBL cases at Dalhousie University. Results The average age of the PBL case patients was 33 years only 7% were 65 or older and none were over the age of 70. Interpretation Frail elderly patients are the present and future reality of health care and yet their under-representation in the curriculum is not unique to Dalhousie University. There are many factors that likely contribute to this including lack of awareness of the problem case authors' lack of expertise in geriatric medicine and the false belief that inclusion of elderly patients will make the cases too complex to achieve objectives. The under-representation of older patients is a common but not inevitable consequence of PBL as successful case modifications have subsequently been made at Dalhousie. Medical schools have a responsibility to their students and to society to provide education that is relevant for the population they will serve.

P-31	Medical Admissions Panel Interview at UBC: Prediction of Second-year Performance in the Program *Carol-Ann Courneya, Michael Fabian, George Pachev, University of British Columbia*

Medical Admissions panel interview at UBC: prediction of second-year performance in the program. C.A. Courneya M.C. Fabian G Pachev. Faculty of Medicine University of British Columbia. In 2004 a new panel-interview was adopted as part of the admissions process within the Faculty of Medicine at UBC. In a previous study we looked at correlations between the criteria measured during the panel interview and a number of performance indices collected in the first-year of the program. We found sporadic predictive value between interview sub-scores and PBL tutorial grades (Preparation Participation and Professional Behavior) from the first year results. In this present study we looked at the predictive value of the panel interview for PBL tutorial grades and other performance indices collected during the second year of the program. The correlations between the interview and performance measures in second year were obtained. In addition we obtained the partial coefficients and regression coefficients for the interview and second-year performance (with admissions academic index partialed out of the correlation). Corrections for reliability were applied to the statistics. Results were interpreted and will be presented in terms of the relative utility of the interview within the UBC admissions process.

P-32	Developing Learning Objectives for Complementary and Alternative Medicines: A Community's View of Needs *Denise Donovan, Marianne Xhignesse, Université de Sherbrooke*

Context: The use of complementary and alternative medicine (CAM) is so widespread that medical schools should take account of it in their training programmes. However there is as yet little consensus on what physicians should know about CAM. The training needs assessment should take account of the needs and expectations of the community. Objective: To profile the use of CAM in the community and to identify people's expectations of their physicians in relation to CAM. Methods: Two questionnaire surveys on convenience samples of adults in Sherbrooke Québec carried out by medical students as their community medicine clerkship project. Results: 424 people (response rate 66%) replied to the use profile survey; 335 (response rate 55%) to that on expectations of their physicians. In the year prior to the survey 66% of respondents used CAM while 82% had used them at least once in their lifetime. Perceptions which support the use of CAM are effectiveness and naturalness. Users also say that CAM allows them control over their health. Reasons for using CAM include health maintenance and improvement (61% of users) and pain relief (43%). Forty percent (40%) used them in conjunction with mainstream therapies. Almost all respondents (96%) would like physicians to be more informed about CAM and a large majority (85%) want physicians to be more open to discussing them. Conclusion: Medical schools should provide training that allows students to identify patients likely to use CAM and discuss their advantages disadvantages and

interactions with mainstream therapies.

P-33	Collaborating with Medical Informatics for Better Patient Education *Pierre-Paul Tellier, Marius Wolfe, Kathryn Andrews, Kim Crosbie, Shie Kasai, McGill University*

Medical Informatics at McGill University has been used exclusively for the development of educational tools used by health care students. Sex & Contraception is a CD-Rom developed to meet the need of adolescents and young adults for accurate information on sexual health. It is an innovative tool created by a team of illustrators programmers and medical professionals at Molson Medical Informatics and McGill Student Health Services. It represents the first collaborative effort at McGill to develop a patient education tool. The CD-Rom brings together up-to-date medical information with contemporary learning methodology based primarily on corporate e-learning. It is designed to allow users to learn at their own pace and uses voice animation and text to guide the learner through the range of contraception option available. It can be used not only by patients but also by health care students to learn about reproductive anatomy and physiology and contraception. It will be distributed to students on campus and evaluated for its impact using a web-based questionnaire targeted to students living in residence. The purpose of this poster will be to demonstrate the CD-Rom the questionnaire being used for evaluation and some of the preliminary results of the evaluation.

P-34	How Well Have We Translated the State-of-the-art?: An Audit of Continuing Education Events *Deborah Hebert, Mary Bell, University of Toronto; Linda Sugar, Sunnybrook and Women's College Health Science Centre; Suzan Schneeweiss, Hospital for Sick Children; Lee Manchul, Princess Margaret Hospital; Sandra Leith, Ivan Silver, University of Toronto*

BACKGROUND: Health professional educators have had the benefit of a decade of research to guide effective course planning. To date there is little known with respect to how well this knowledge has been translated into the design of current courses. This paper explores this question through reviewing an audit of courses offered by a university continuing medical education and professional development department. METHODS: An audit tool sampling selected pedagogical and course delivery features was used to examine 98 course proposals for continuing education offerings in 2005 from a continuing medical education and professional development department. Areas evaluated included types of pedagogy types of objectives length and timing of course delivery provision of materials and follow-up type and method of feedback and course outcome evaluation. RESULTS: Results indicated that areas such as needs assessment and objective setting demonstrated an application of current best practice recommendations. Areas such as choice of effective pedagogy feedback and meaningful levels of evaluation have shown little evidence of translating the state-of-the-art practices with the exception of some unique courses. CONCLUSIONS: Gaps exist between best evidence and actual course delivery particularly for pedagogy feedback follow-up and evaluation. When knowledge was successfully translated as in the case of effective objective setting and needs assessment this was attributed in part to the use of examples and education in the course proposal forms. This suggests that the proposal stage is an optimum time to translate best practice through proposal form instruction modeling and accreditor feedback.

P-35	CanMEDSification - The Role of Postgraduate Medicine Office in Supporting the Learning and Teaching of CanMEDS Roles *Susan Glover Takahashi, Rachel Zulla, Sarita Verma, Loreta Muharuma, University of Toronto*

ABSTRACT The postgraduate medical education office at the University of Toronto has implemented a range faculty development initiatives targeted at supporting the full implementation of CanMEDS roles and competencies in the day to day learning teaching and evaluation of residents across the highly distributed postgraduate medicine training programs. Background In October 2005 the Royal College of Physicians and Surgeons of Canada (RCPSC) released a revised version of the CanMEDS roles. In June 2006 the RCPSC accreditation standards for postgraduate medicine changed some standards which result in an increased expectation of implementation of the CanMEDS roles in teaching and evaluation of residency programs. Postgraduate medicine at University of Toronto includes almost 70 RCPSC programs and 4

College of Family Medicine of Canada using an increasingly distributed educational approach. Methods & Results A general workshop and extensive syllabus on the learning and teaching of CanMEDs roles was attended by over 70 program directors and faculty. A second workshop course syllabus and electronic resource on the expectations of accreditation standards related to CanMEDS roles was attended by over 70 program directors and faculty. Exemplar teaching materials and peer to peer coaching are provided to program directors on a case by case basis. The CanMEDS roles have been widely integrated into teaching and evaluation at the University of Toronto. The high attendance rates at workshops and positive workshop evaluations indicate the value of centralized faculty development initiatives and also indicate an increasing confidence in using CanMEDS. The workshop evaluations also indicate a need for additional faculty development in evaluating the non Medical Expert roles.

P-36	Development of Online Cases Using a Web Content Management System for the Family Medicine Clerkship *Weikai Huang, Wayne Weston, University of Western Ontario*

It is no longer acceptable for the “curriculum as experienced” to be defined by the type of patients that show up in the office or on the wards. To assure that students have experience with cases representing the full range of core content curriculum planners are developing realistic simulations with standardized patients or web-based cases. We will describe the design and development of a web content management system for the creation of online cases to support learning in the family medicine clerkship. The development of the system adheres to the following objectives: 1) Create case-based coverage of core curriculum content; 2) Develop a platform for the future multi-institutional development and utilization of online cases; 3) Provide an effective and interactive online learning methodology; 4) Permit authoring by faculty teachers and students with only basic computer skills. This presentation will cover the architecture and features of the web content management system which has the following components: 1) Database server – storage for all the cases; 2) Web server – accepts and responds to requests from clients; 3) Scripting – computer coding to run the case templates. The system consists of the following functionality: Web-based cases Authoring system Administration tool and add-on search engine. We have developed ten cases and would like to gain more expertise in this area to assist both students and faculty teachers through the further development and evaluation of the system.

P-37	Evaluation of Medical Education Initiative Addressing National Workforce Issues: Application of GIS – Needs Assessment Results *Alain Vanasse, Université de Sherbrooke; Chris Lovato, University of British Columbia; Maria-Gabriela Orzanco, Paul Grand'Maison, Université de Sherbrooke; Joanna Bates, University of British Columbia; Steve Slade, Association of Faculties of Medicine of Canada*

Of particular concern in Canada is the striking imbalance between the number of doctors practising in rural remote and northern (RRN) areas in relation to the percentage of the population living in those areas. At present very little is known about how the physician workforce flows geographically both before and during the medical education process. Some Faculties of Medicine are implementing new programs designed to improve the likelihood of future physicians practicing in RRN areas. Our project aims to conceptualise develop and implement a medical-education geographical information system (MEd-GIS) to provide information on the spatiotemporal trajectories of medical students in Canada. The first step of this project seeks to assess the information needed by policy-makers and educators to address the imbalanced geographical distribution of physicians as a base to the conceptualisation and design of the MEd-GIS. The needs assessment proceeds with a mixed sampling (maximum variation and critical cases) including policy-makers and educators potentially interested in using such a MEd-GIS. Semi-structured interviews followed by content analysis provide the research team with empirical information to design the MEd-GIS. This poster presents the preliminary results about: a) who are the policy-makers and educators interested in using MEd-GIS b) what information is needed to make informed decisions (i.e. geographic and student variables that influence the choice of the site for undergraduate and postgraduate medical training as well as the choice of the type and location of practice) c) conditions to the utilisation of MEd-GIS and d) appropriate organization(s) to host the MEd-GIS.

P-38	Evaluating a Patient-centered Learning Program: A Student-driven Needs Assessment Project *Guillaume Poliquin, Paul Martin, Teresa Chan, Katherine Monkman, Peter Flanagan, University of Western Ontario*

Background: During the 2005-2006 academic year the Undergraduate MD Program at the Schulich School of Medicine & Dentistry undertook a self-study analysis. The student-led portion of the self-study identified the Patient-Centered Learning (PCL) course as having several weaknesses which were perceived to have a negative impact on student learning. Description: In the spring of 2006 we gathered information from students and teaching faculty and the PCL program was remodeled and redeveloped in the Summer of 2006. Our poster describes the methods of the needs assessment including: the institutional self-study and a student-run evaluation and survey process (Best-Curriculum-On-Earth - BCOE) as well as student-led focus groups student-developed surveys of students & PCL faculty facilitators). Outcomes: The data and suggestions gathered by students and faculty provided a robust needs assessment. As a result a substantial realignment of the PCL course was carried out during the summer of 2006 and the course was renamed Patient-Centered Context: Integration & Application (PCCIA) to emphasize its overarching integrative goal. A keystone of the re-aligned course is a built-in mechanism for continual student-driven improvement.

P-39	Measurement of Student Self-learning and Collaborative Learning by Means of an Online Discussion Board *Peter Flanagan, Sahar Ghorayeb, University of Western Ontario*

Background Patient-Centered Learning (PCL) focused on the Patient-Centered Clinical Method is a small group learning program for all pre-clerkship medical students at the Schulich School of Medicine. Most students participate in face-to-face groups but some have the opportunity to do their discussion online (ePCL). Methods Forty five first- and second-year medical students participated in a study of achievement of self-learning and collaborative learning in ePCL. Discussions were carried out asynchronously online. Phrases and statements of self-learning and collaborative learning were identified by the investigators and by students and faculty in the program (criteria phrases). The text of the online discussions was searched for the criteria phrases by three independent readers for evidence of self-learning (prioritizing learning identifying gaps in personal knowledge etc) and collaborative learning (group contribution helping the group to focus etc). Achievement of learning was assessed by using a backward stepwise logistic regression model to determine which factors best predicted achievement of self-directed and collaborative learning. Results Students achieved the following (frequency): prioritized learning (93%); identified gaps in knowledge (28%); identified areas of interest (40%); used resources to support posts (73%) and critically appraised resources (10%) and all of these predicted self-learning in the regression model. Students also demonstrated (frequency): contributed to discussion (97%); assisted the group to focus on task (23%); identified areas of insufficient knowledge for further study (27%); contributed to the learning of others (93%) acknowledged learning from others (36%) and provided a supportive environment (20%) and all of these predicted collaborative learning in the regression model. Conclusions The results demonstrate online achievement of learning objectives which underlie self-learning and collaborative learning.

P-40	Student Perceptions of the Characteristics of an Ideal Bedside Teaching Experience *David Cook, Yousef Al-Weshahi, Dwight Harley, University of Alberta*

While there are a variety of instruments that can be used to report the effectiveness of individual instructors in a clinical setting there has been less work which attempts to delineate the characteristics of an ideal experience particularly in the context of bedside teaching. To determine the students' perspective of the characteristics of effective bedside teachers a questionnaire was administered to 84 final-year medical students. The items were constructed to examine the various behaviours of the instructor in terms of "modifiable characteristics" such as being good listener giving constructive feedback and respecting patient confidentiality. There were also items that examined characteristics such as gender academic rank and language of the teacher. A teaching characteristics index was constructed by summing the positive characteristics identified. Factor analysis suggested that the greater part of the variance could be explained by three factors the "modifiable characteristics" and two other factors one of which involved the career path of the instructor and the other such factors as gender and language. The "modifiable characteristics" were

much more important determinants of effective bedside teaching than the other factors. The study confirmed the existence of the proposed distinct domains. The results for the “modifiable characteristics” domain echo the findings from more general clinical education research and suggest the transferability of findings from a general observation to the more specific situation of bedside teaching. Clearly effective bedside teaching depends critically on behaviours than can be changed.

P-41	Clinical Teaching in Complementary and Alternative Medicine *Michael Epstein, Deirdre Bonnycastle, Marcel D'Eon, Louise Gagne, University of Saskatchewan; Scott Irwin, Saskatchewan Acupuncture Association; Flo Lavallie, Circle Centre Chiropractic; Meredith Mckague, Joseph Schnurr, University of Saskatchewan*

1 – Background In response to widespread use by the general public and a growing evidence base complementary and alternative medicine (CAM) is now included in the undergraduate medical education (UME) curriculum within most Canadian medical schools. The process of integrating CAM content into UME however is complex and challenging and the most effective strategies for achieving this integration remain unclear. This presentation describes the use clinical teaching as an effective method for introducing CAM into UME curricula in a Canadian medical school. 2 – Rationale The relationship of CAM practitioners with the conventional medical community has historically been characterized by misunderstanding mistrust stereotyping and sometimes downright hostility. Attempts to engage CAM practitioners as guest lecturers in a classroom setting within medical schools have met with limited success. It has been suggested that knowledge skills and attitudes regarding complementary healing systems are best acquired through pedagogical strategies involving active self-directed experiential learning. 3 – Description of clinical teaching program Lecture-based introduction to CAM; group assignment involving site visit; clinical teaching skills workshop; list of CAM practitioners; student-initiated visits; shadowing of CAM practitioner; short report for credit. 4 – Perceived benefits Opportunity to ask “difficult” questions in a safe learning environment and to build the understanding trust and respect necessary for interprofessional collaboration. Establishing communication bridges between divergent paradigms of health care. Experientially based appreciation of paradigm-specific concepts such as yin-yang chi energy meridians. Self-care and physician wellness. 5 – Issues and challenges Quality assurance for CAM practitioners. Evaluation of the learning experience.

P-42	Technology Enabled Academic Detailing versus Academic Detailing in Diabetes Management *Kendall Ho, Sandra Jarvis-Selinger, Anne Nguyen, Keith Dawson, University of British Columbia; Malcom Maclure, University of Victoria; Robert Woollard, Morgan Price, Michal Fedeles, University of British Columbia*

Purpose: Academic detailing (AD) provides unbiased face-to-face information from a health care professional to a physician. The use of information and communication technologies to provide academic detailing is termed technology enabled academic detailing (TEAD). The purpose of this study is to examine the impact of TEAD and face-to-face AD sessions on physicians' behaviour. TEAD will be compared with face-to-face AD and also compared to the combination of TEAD and AD to determine their effects on the care of diabetic patients. Method: Physicians in this study have been assigned to one of three interventions: AD only TEAD only or a combination of TEAD and AD. Impact in the three groups will be measured by self-evaluation questionnaires focus groups and individual interviews completed by both pharmacists and physicians. In addition to that impact will also be examined from patient data recorded by physicians. Results: Currently there are 103 physicians and 9 pharmacist academic detailers enrolled in this study. This study is at its midpoint data collection. To date 30 physicians have participated in focus groups. Initial findings indicate that academic detailing is a useful method of receiving unbiased information and a good review of the important aspects of diabetic patient care. Physicians also appreciated the interprofessional nature of the interactions with academic detailers. Suggested improvements to the study include: inviting other types of health professionals to academic detail and to increase the frequencies of sessions. Funding: Canadian Institues of Health Research

P-43	Developing a Canadian Physician Leadership Competency Framework *Alexandra Tcheremenska-Greenhill, Canadian Medical Association*

The competency approach to leadership development and assessment is becoming increasingly widespread and leadership competency frameworks now form the basis of the continuous professional development within most large organizations including the UK National Health Service (NHS)'s Leadership Center. It has been demonstrated that the success of that approach is fundamentally linked to the development of a framework that is inherently reflective of the group that will be using it and the best role models of leadership to emerge from that group, cross-fertilized with best-practices from other organizations.

There is no precedent of using a competency approach to medical leadership development in Canada. Through a structured process (literature review, expert consultations, focus groups and surveys), the Canadian Medical Association (CMA) identified and validated a competency framework for the key leadership competencies of Canadian physician leaders (leadership defined broadly as management, collaboration, advocacy and general leadership skills). Four main areas of competencies emerged – in addition to the usual competencies of "visionary" and "effective", Canadian physicians innovatively identified "inspirational" and "healthy" as equally important competencies that sustainable physician leaders share.

This framework can become the basis for life-long leadership skills development for medical students, residents and physicians in practice and was used in 2006 to redesign the CMA Physician Manager Institute curriculum.

The process of developing the competency framework as well as the final Canadian Physician Leadership Competency Framework and its application to an actual curriculum design are outlined.

P-44	An Innovative "Hire a Medical Student for the Summer" Program *Alexandra Tcheremenska-Greenhill, Canadian Medical Association*

Increasing medical student debt in Canada has been an issue that has been addressed through three main strategies: a drive to create more loans, return of service programs, scholarships and

bursaries, the creation of evidence of the impact on both student access to medical school and choice of specialty as well as the advocacy to governments to decrease or freeze tuition fees.

An additional strategy was designed by the Canadian Medical Association (CMA): creating paid non-clinical and non-research internship positions for medical students in the summers following their 1st and/or 2nd year allows students to access additional funding, and has the added benefits of 1) Exposing medical students to non-clinical activities of physicians & to the public policy process 2) Enhancing their leadership and management skills; 3) Benefiting the sponsoring organization from fresh perspectives as well as the project deliverable and 4) Increasing the collegiality between medical students and physicians in non-clinical roles.

A "Hire a medical student for the summer" kit was designed and successfully pilot tested. It includes the case for introducing such a program in one's institution, optimal timelines for the announcement and recruitment of students, adaptable application forms, interview process and questions as well as all necessary correspondence forms. We identified success factors for the implementation of a summer internship program and we designed a distributive non-clinical learning curriculum (partially to be delivered by the physician supervisor and partially as an independent study program directed by the medical student as an adult learner).

P-45	A Model of Collaboration in the Successful Development and Launch of a Distributed Medical Education Virtual Curriculum in Gender Health *Debbie Penava, University of Western Ontario; Anna Day, University of Toronto; Lee-Anne Facey-Crowther, McMaster University; Nahid Azad, University of Ottawa; Rupa Patel, Queen's University; Sarah Strasser, Northern Ontario School of Medicine; Shayna Watson, Queen's University*

Background: The Gender and Health Collaborative Curriculum Project was initiated in 2002 through the Council of the Ontario Faculties of Medicine with a launch of the website at MEC 2006 as an e-learning tool for medical students and health professionals. Objectives: The structure and function of the project team as a model for collaborative project development will be reviewed with a focus on a communication protocol and collaborative technologic tools. Results: The format of the project team is presented including the Director and the project executive as well as discussing recruitment of Ontario medical school Site Co-ordinators. Other available health human resources in the faculties that may affect "local" uptake of the resource are also discussed. Involvement of medical students throughout the endeavour is presented which was vital for module development and project success. Communication amongst the team members was done through biweekly to monthly teleconferences. As well an online website was created for discussion and the posting of information including minutes of meetings abstracts and upcoming presentation schedules module development etc. Twice yearly face-to-face meetings were vital to completion of our goals even with the available technology of our project. Funding for the project was through the Ontario Women's Council with a budget presented for review. Ongoing support for the project is being sourced. Conclusion: With the enthusiasm and dedication of the physicians and students involved on the project successful collaboration was aided by information technology. Regularly funded face to face meetings were essential to maintain successful collaboration.

P-46	Investigating Medical Students' Perceptions of the CaRMS Process *Harpaul Cheema, Jonathan Rhee, Jonathan Enright, Michael Rieder, Doreen Matsui, University of Western Ontario*

As students tackle the challenges of medical school an on-going source of stress is the concern about going through the process of the Canadian Resident Matching Service (CaRMS). With the recent amendments to the CaRMS match that pertain to the eligibility of International Medical Graduates (IMGs) there is a concern among graduates of Canadian medical schools that the level of competition for residency positions may increase. This study investigated medical students' perceptions of the CaRMS process in each of the 4 years of medical school. Students at the Schulich School of Medicine at The University of Western Ontario were surveyed about issues that specifically pertained to the CaRMS match. This study found that students were not opposed to considering leaving Canada for post-graduate training

should their desired residency position be seen to be unavailable in Canada. This has important implications for the Canadian Medical system as the lack of physicians around the country is an issue. Financial issues are becoming increasingly important for students to consider as they decide whether or not to apply to programs nationwide as part of their CaRMS application. This study found that fourth year students were significantly less concerned with travel expenses than their colleagues in the other3 years of medical school indicating that students realize the importance of applying to as many programs as possible to maximize their chance of obtaining their desired specialty. While this study describes the experience of one school we believe that the experience of our students is not unique and that the results from this study will help give us a better understanding of the stressors and issues currently felt by Canadian students as they prepare for the CaRMS match.

P-47	A Fresh Canvas: How Distributed Medical Education is Informing the Future of Faculty Development at McMaster University *Denise Marshall, Karl Stobbe, McMaster University*

The genesis of distributed medical education affords us an precedented opportunity to re-envision programs in faculty development in the health sciences. McMaster University Faculty of Health Sciences is utilizing its emerging model of distributed education (MacCARE) as the nidus where faculty development can be explored anew from the ground up.In partnership with the MacCARE program the Program in Faculty Development is systematically developing new initiatives that are driven by the needs of the new faculty members in new settings. Unencumbered by traditional or historical methodologies these initiatives are being developed introduced evaluated and audited. Faculty wide initiatives such as Interprofessional Education are being built into these new initiatives as foundational concepts. This experience in turn is then informing the traditional program for faculty development. The result is an overall renewal of the entire faculty development program. This poster details some of these emerging strategies at McMaster.

P-48	The Current State of Musculoskeletal Clinical Skills Teaching for Pre-clerkship Medical Students in Canada *Anna Oswald, University of Alberta; Mary Bell, Sunnybrook Women's College Heath Science Centre; Linda Snell, Jeffrey Wiseman, McGill University*

Background: Musculoskeletal (MSK) complaints make up 12-20% of primary health care visits however MSK physical examination (PE) skills are identified as weak areas in practicing physicians. Further there is a shortage of specialist faculty able to effectively teach this subject. Objectives: to document current practices of Canadian undergraduate medical programs regarding the nature amount and source of pre-clerkship MSK teaching provided so that curricula can be modified. Methods: A 2-page self-administered electronic questionnaire combining open- and close-ended questions was developed and piloted. It was distributed through an existing e-mail list-serve to all Canadian undergraduate associate-deans and to 16/17 undergraduate MSK course organizers. Results: 2/17 deans and 10/16 course organizers responded for a total response from 12/17 medical schools. These schools reported an average of 1 to 2 hours of large group MSK physical exam demonstrations and 3 to 5 hours of small group supervision of physical exam techniques. 64% reported that their small group teaching was done fully or in part by non-MSK specialists. Eight schools reported using the Patient Partners In Arthritis® (PPIA®) program in pre-clerkship teaching of MSK PE skills and the average time devoted to PPIA® teaching in those schools was 1 to 2 hours. Conclusions: Understanding the current status of MSK teaching for pre-clerkship medical students is necessary to allow appropriate targeting of existing and future MSK teaching initiatives. Considering the significant use of non-MSK specialists methods to facilitate this teaching need to be evaluated and may include increased use of PPIA® at the pre-clerkship level.

P-49	Evaluating Continuity of Care *Karen Schultz, Dianne Delva, Richard Birtwhistle, Willa Henry, Queen's University*

Continuity of care is a quintessential part of Family Medicine that improves physician and patient satisfaction and patient outcomes. Teaching this to family medicine residents is valuable. Evaluation to assess the effectiveness of this teaching is essential. Hennen defines continuity of care as having 6 components: chronologic/ longitudinal informational geographic interdisciplinary family and interpersonal.

One way to facilitate evaluation is to think of geographic interdisciplinary family informational and longitudinal continuity of care as the quantitative necessary stepping-stones of continuity of care which ideally enables the qualitative interpersonal aspect of continuity of care to develop. Within the quantitative domains (particularly longitudinal and family continuity of care) a number of different equations have been described that capture these aspects. Evaluating the qualitative interpersonal domain of continuity of care has not been as well studied. Both the patients' and the providers' perspectives are important. Patient satisfaction surveys (at least two of which are validated and easy to administer) most closely capture the connection between the patient and their provider. A search of the literature has not revealed any tool to measure interpersonal continuity of care from the providers' perspective. This will be a critical component in evaluating any teaching of continuity of care. We are developing a tool that will do this by first identifying elements of interpersonal continuity of care and then formatting a questionnaire to capture these. This will be used to assess a new continuity of care clinic model being implemented in our program.

P-50	An Evaluation of Joint Adventures: Optimizing the Management of MSK Pain™: An Innovative Online CME Program *Lisa Fleet, Vernon Curran, Fran Kirby, Memorial University of Newfoundland; Francine Borduas, Michel Rouleau, Université Laval*

Purpose: The purpose of this study was to evaluate Joint Adventures: Optimizing the Management of MSK Pain™ a Mainpro-C accredited online continuing medical education (CME) program. It was offered via MDcme.ca in a case-based format with a trained facilitator for group discussion. It also used an innovative CME intervention called Script Concordance (SC) to further enhance the interactive nature of case studies. The SC method is different from other CME formats in that participants must develop and revise plans continually based on additional information. The purpose of this study was to evaluate participants' satisfaction with this Web-based CME experience; the effectiveness of the course on participants' confidence in this clinical practice area; and the effectiveness of the Script Concordance learning methodology. Methods: Registration Data; Discussion Board Statistics; Pre-Course Learning Needs Assessment; Post-Course Reflective Questionnaire; Course Evaluation Survey; Script Concordance Data; and Participant and Facilitator Interviews. Results: 10 course offerings. Participants were generally satisfied with the course and use of the Script Concordance method. This study was supported by an unrestricted educational grant from Pfizer Canada.

P-51	Disaster Management Session in the Undergraduate Clinical Transition Course *Kent Stobart, Louis Francescutti, Jeanette Buckingham, Curtiss Boyington, Sarah Forgie, University of Alberta*

MED532 is a two week transition course that prepares students for the start of the clinical curriculum. The course focuses on the necessary skills to work in clinical medicine with patients. There are a small number of large group didactic sessions that cover new medical expert knowledge content. Within this context we developed a two-hour student exercise in population health around disaster management. The students receive a short didactic review of clinical epidemiology public health problem solving and group dynamic issues. The twist is the students are then given the task to manage a developing disaster (unknown deadly infectious disease outbreak). The medical students are given 90 minutes to work through the scenario along with three mobile phone contacts they may use for assistance. A small group of medical students are chosen to be peer reviewers of the exercise. There are regular "news" updates and information is provided by mobile phone. Three "media scrums" are organized where the "media" ask questions of the medical students. The final 30 minutes are used for debriefing. The student peer reviewers report on the group dynamics as well as detailing the strengths and limitations of the group in problem solving the disaster scenario. Faculty either acts as the media or as expert consultants available by mobile phone. The exercise is well received by the medical students. It is the only situation we are aware of where problem solving of a "disaster' occurs in a large group setting. The medical students have requested further sessions.

P-52	Developing a Program for Resident Wellness at the Postgraduate Medical Education Office, University of Toronto *Susan Edwards, Sarita Verma, Rachel Zulla, University of Toronto*

Prevalence of stress-related mental health problems in residents is equal to or greater than the general population. Medical training has been identified as the most significant negative influence on resident mental health. At the same time residents possess inadequate stress management and general wellness skills and poor help-seeking behaviours. Unique barriers prevent residents from self-identifying and seeking assistance. Stress management programs in medical education have been shown to decrease subjective distress and increase wellness and coping skills. The University of Toronto operates the largest postgraduate medical training program in the country. The Director of Resident Wellness position was created in the Postgraduate Medical Education Office to develop a systemic approach to resident wellness that facilitates early detection and intervention of significant stress related problems and promote professionalism. Phase One of the program has been to highlight its presence to residents and program directors by speaking to resident wellness issues at educational events. Resources on stress management professional services mental health and financial management have been identified and posted on the postgraduate medical education website and circulated to program directors. Partnerships have been established with physician health professionals the University of Toronto and the Professional Association of Residents and Internes of Ontario. Research opportunities for determining prevalence and effective management strategies for stress related problems are being identified and ultimately programs/resources will be implemented to ensure that resident have readily accessible resources. The establishment of a Resident Wellness Strategy from its embryonic stages and the challenges faced are presented as a template for implementing similar programs at other medical schools.

P-53	Evaluating Literature Searching - Evaluator Agreement *Kathryn Hornby, Kristina McDavid, University of British Columbia; Rebecca Raworth, University of Victoria; Trina Fyfe, University of Northern British Columbia; Gurdeep Parhar, University of British Columbia*

The UBC MD undergraduate first year family practice course includes an evidence-based medicine component which involves an online tutorial and quiz a joint presentation by the course director and informatics theme coordinator as well as a literature search assignment. The literature search assignment requires that each student formulate their own question using a PICO style format. The students search MEDLINE using the OVID interface to find articles relevant to their question. The question the search strategy and article citations are submitted for evaluation. The literature search assignments are divided up between four medical librarians for evaluation. The 2005 literature search assignments were evaluated using a template which simply listed criteria to be considered during evaluation. To assess whether there was a reasonable level of agreement in the application of criteria twelve of the 2005 assignments were selected and evaluated by each librarian independently. The librarians then met to discuss the evaluations and come to a consensus as to how the criteria should be applied. Following the evaluation of the 2006 literature search assignments the librarians will again evaluate twelve of the assignments independently. Kappas will be calculated for each criterion used for evaluation on the twelve 2005 and twelve 2006 assignments to find out whether working towards consensus through discussion has improved the interrater agreement or whether a different approach needs to be considered.

P-54	Basic Essential Education Principles - BEEP - A Brief Faculty Development Course for Medical Teachers *Raed Hawa, University Health Network; Stacey Bernstein, Hospital for Sick Children; Bruce Ballon, Centre of Addiction and Mental Health; Rob Madan, Baycrest Centre for Geriatric Care*

We are proposing a novel teaching program that will impart practical and easily applicable teaching tips for every day use. This brief focused local faculty development program for improving the teaching skills knowledge and attitudes of new medical staff at two academic health science centres will be developed implemented and evaluated. The format will be six consecutive lunch and learn one hour sessions held locally in two academic health centres over a two to three month period. Participants will be expected to become familiar with basic teaching principles through interactive format that will include: mini-lectures innovative multi-media and case examples. The content of the six sessions will be elucidated from a formal detailed needs assessment. The participants would be required to commit to all the sessions in the series. The participants will be required to do readings as homework and to bring in challenging teaching

scenarios to be discussed in the context of the session's topic. Reflection of the learners' experiences will also be fostered through having the participants integrate and think about what they have learned and what they are committed to changing by documenting their experiences in a reflection journal. A short reflection paper will be required upon completion of the course. A handout booklet with updated articles reference lists and relevant content to covered topics will be provided. We will use qualitative and quantitative methods for evaluation of the program. The individual sessions will be assessed by participants using traditional evaluation forms. Through focus groups and analysis of reflection papers we will see if there was a change in the participants'teaching performance and attitudes and if knowledge gaps were narrowed.

P-55	Use of an IP Webcam for Remote OSCE Examination: The rOSCE *James Chan, Rong Sung, Michael Clarke, Sue Humphrey-Murto, University of Ottawa*

Recruitment of qualified examiners remains one of the most difficult challenges in creating OSCE examinations (Humphrey-Murto Wood & Touchie 2005). With the development of information technology examiners may be able to participate in OSCEs at a distance. The ability to recruit remote examiners would not only increase the pool of eligible examiners but also allow community based physicians to participate in large-scale evaluation exercises and be more connected to the academic world. We describe a pilot study using an IP based webcam to stream live video and audio to remote examiners during a real medical OSCE. Scoring of the remote OSCE (rOSCE) will be done via a secured online standardized checklist and global rating scale. Local examiners will concurrently examine the same students as the remote examiners and evaluate using the same checklist and global rating scale. Post encounter feedback is provided on an alternating basis by the local examiner and the remote examiner via streaming audio. A randomly assigned subgroup of undergraduate medical trainees in the same class will be evaluated. The rating properties of the remote examiners will be compared to local examiners. Student and examiner satisfaction with the remote OSCE will also be evaluated using a standardized survey form. The experiences and lessons learned as well as a brief cost and technical analysis will also be discussed. Reference: Humphrey-Murto S. Wood T.J. & Touchie C. (2005) Why do physicians volunteer to be OSCE examiners? Medical Teacher 27(2) pp. 172–174.

P-56	A Multi-dimensional Portfolio Assessment System in a Geriatric Medicine Selective Clerkship Rotation *Michelle Gibson, Melissa Andrew, Chris Frank, Queen's University*

Traditionally the mandatory clerkship ITER in internal medicine at Queen’s University has been completed based primarily on attending physician observations of students which may not accurately reflect students’ abilities. For a new 6-week internal medicine selective in geriatric medicine a unique multi-dimensional portfolio assessment system has been developed to enhance student learning and to improve assessment. Portfolio assessment research in medical and higher education literature was reviewed to determine what types of portfolio components would ensure that multiple assessment modalities are used to evaluate desired competencies. The structured portfolio contains validated evaluation forms (e.g. mini-CEX) evaluations by members of the health care team and by patients/families (i.e. 360o evaluation) samples of authentic student work with a self-assessment component specific assignments and at least one student-selected reflective submission. The student will review their portfolio with the undergraduate coordinator (MG) after 3 weeks to receive feedback and to identify needs for further learning opportunities. At the end of the rotation the undergraduate coordinator will review the portfolio with the student and provide feedback on their overall performance. In consultation with the attending physician(s) the undergraduate coordinator will use a rubric to determine the scores on the final ITER. As a preliminary evaluation strategy key stakeholders (students physicians team members) will be surveyed to assess the acceptability and utility of the portfolio system. The poster will review the development and implementation of a unique multi-dimensional portfolio to enhance learning and improve assessment in a clerkship rotation.

P-57	Promouvoir un climat de professionnalisme au préexternat à l'Université Laval *Joan Glenn, Moujahed Labidi, Saber Labidi, Maxime Chénard-Poirier, Michael Assayag, Lucie Rochefort, Université Laval*

Il existe à notre Faculté un souci de valoriser le professionnalisme chez les étudiants dès leur admission. Les activités qui abordent ce pilier de la formation médicale sont concentrées dans quelques cours au préexternat et lors de la phase clinique du programme de premier cycle. La direction de programme et les étudiants ont ensemble élaboré le présent projet dans une optique d'introduire le professionnalisme dans le quotidien de la vie étudiante au préexternat. Premièrement nous avons rédigé un Code de professionnalisme ayant une perspective de l'étudiant au premier cycle. Ensuite notre comité conjoint direction-étudiants a planifié des interventions qui présentent aux étudiants le Code d'une manière dynamique. Cette affiche décrit les activités faites pour les étudiants de première année : • Lecture du Code et rédaction d'une courte réflexion par chaque étudiant dès son arrivée en première année. • Séance au début de la première année consacrée à la présentation du Code et des réflexions des étudiants. L'animation de cette session est assurée par les étudiants séniors avec la participation de la direction de programme et quelques cliniciens-enseignants apportant chacun à leur niveau des modèles de rôle de professionnalisme pour les étudiants débutants. Un support multimédia (clips vidéo de mises en situation) permet de concrétiser les réflexions des étudiants. • Séance au deuxième trimestre consacrée au retour sur l'expérience en professionnalisme vécue par les étudiants au cours de leur première année. Ce projet est déployé dans un mode participatif réflexif concret et s'inscrit dans une continuité.

P-58	Weekly-administered, Optically-scored Student Surveys to Evaluate a Preclinical Medicine Course - A Novel Approach to Teaching Improvement *Ronald Damant, Dwight Harley, David Cook, University of Alberta*

Preclinical medicine courses at the University of Alberta are currently evaluated by means of a web-based student survey administered at the end of each 3 to 12 week block. The information gathered focuses almost exclusively on individual instructor performance. In an attempt to improve both the quality and scope of data generated a new questionnaire-based survey method was used to evaluate a first-year course in respiratory medicine. Students were asked to complete an optically-scored survey at the end of each week of the course. Using a 5-point Likert scale the students were asked to rate each instructor across four domains. Students were also asked to rate each of the individual course sessions (lectures small group sessions demonstrations labs etc.). The questionnaire included space for written comments. Finally feedback regarding the new evaluation protocol was collected. Initial development of the survey was labor-intensive. However several advantages were soon recognized: 1) student feedback was consistently very positive (less "evaluation fatigue"; less recall bias); 2) overall response rates were consistently > 50 – 60% (< 20% historically); 3) reliability of instructor-specific feedback increased over historical controls; 4) data pertaining to the perceived value of individual educational sessions provided a new and useful perspective; 5) digitalized response data was easily manipulated and analyzed. This novel approach to educational evaluation has the potential to improve the quality and scope of data generated which in turn could lend strength to teaching improvement efforts. Further development is warranted.

P-59	How Do Medical Schools Select Students for Distributed Campuses *David Snadden, Amy Johnson, Annie Docking, Trina Fyfe, University of British Columbia/University of Northern British Columbia*

Background The University of British Columbia Faculty of Medicine has recently developed a distributed medical education program in response to physician shortages. The Northern Medical Program is part of this and focuses on northern rural and aboriginal communities. One purpose of the Program is to attract and retain students who will stay and practice in the North. Purpose To ascertain the optimal way to choose students who will be successful in a rural distributed program and more likely to practice in underserved communities? Method A comprehensive review of current literature and web based information to determine published admissions practices of rural schools and personal contact with identified schools Results 17 Schools identified from literature and 7 of these responded to e-mail/telephone contact. From the literature rural origin experiences in rural or remote settings interest in rural lifestyle and an orientation towards primary care were identified as important factors in choosing rural oriented students. The seven responding schools described rural origin personal meetings and intuitive selection as valued markers during the selection process Conclusion Rural origin is important in identifying students suitable for education in rural campuses. However there is little consensus on what the most effective selection method is and impact of these selections. Therefore to enable schools to fulfill their

mandate of graduating physicians who will practice in underserved areas selection methods that accurately predict this outcome need to be developed. Future collaboration between schools could facilitate the development of evidence based predictive selection tools and the creation of a sufficient database for longitudinal physician retention outcome studies.

P-60	Getting It Right: Conducting a Faculty Development Needs Assessment Survey in a Large Medical School *Eileen Egan-Lee, Bart Harvey, Ivan Silver, University of Toronto*

How do you assess the needs of faculty in large medical schools? Surveys are a popular choice but low response rates are a frequent problem. Using Dillman's Tailored Design Method (2000) a survey was developed and mailed to a 10% simple random sample of faculty in the Faculty of Medicine University of Toronto (n=484). A response rate of 74.6% was achieved; we think our experience would be instructive to other medical schools planning to conduct their own needs assessment. The purpose of the study was to identify program topics formats times and the preferred method of response to a paper-based survey. Respondents appear to clearly prefer attending faculty development activities that are: (1) brief (2) in person and (3) on topics generally relevant to their day-to-day work and responsibilities. Results confirmed that program offerings currently provided by the Centre for Faculty Development are in line with faculty needs and preferences. Opportunities for additional program development and delivery times were also highlighted. Respondents clearly preferred using the paper based survey (93.6% 338/361) over its on-line counterpart (6.4% 23/361).

P-61	Using Web-based Modules to Integrate Evidence-based Medicine and Clinical Skills Education: A Pilot Project *Heather Lindsay, Heather Murray, William Pickett, Sue Moffatt, Queen's University*

Objective: To design a web-based interactive learning module that introduces basic concepts in clinical epidemiology and evidence-based medicine early in the clinical skills education of undergraduate medical students. Background: Up until this year students at Queen's were taught concepts in clinical epidemiology during didactic sessions late in their first year and applied them in their second year during a single small-group session. Methods: For this pilot project faculty within the departments of Clinical Skills and Clinical Epidemiology at Queen's School of Medicine collaborated with a medical student to create 3 pilot on-line learning modules using the Thinking Cap Studio software. They are intended to be completed by students during their first semester prior to pre-existing practical sessions of Clinical Skills where the concepts are particularly relevant. The topics covered by the modules are: (1) accuracy precision and inter/intra-rater reliability; (2) sensitivity specificity and predictive values; (3) prevalence and its effect on test statistics. An optional on-line survey was appended to each module to evaluate user satisfaction. Results: This project is ongoing and we hope to expand it in the future. Data to date shows that 35 people have completed the survey for the first module and 8 people each for the other 2 modules. Users were asked to rate the module on a scale of 1 to 5 higher numbers indicating higher satisfaction. Eighty percent of users rated the first module a 4 or 5 when asked if the module was engaging and 85.7% of users rated it a 4 or 5 when asked if they found it clinically relevant. Results for the other two modules are comparable thus far. Discussion: We will continue to collect data and use the feedback to improve the modules. We are also considering various methods of evaluating the effectiveness of these modules in teaching these concepts. Further information: Heather Lindsay 4hl13@qlink.queensu.ca

P-62	The Resident Experience in a Large Urban Teaching Setting *Nicole Tenn-Lyn, Sarita Verma, Rachel Zulla, University of Toronto*

The University of Toronto's academic plan Stepping Up aims to give every student the "opportunity for an outstanding and unique experience." Existing surveys of postgraduate medical trainees are generally market and satisfaction-oriented. Using mixed methods the 2005-2006 Online Resident Exit Survey explored self-reported experiences during residency training at the University of Toronto with respect to satisfaction with their program director and faculty preparation for certification and practice quality of life patient care and work environment. The response rate was 28% (93 out of 332). The mean age was 32 years and 48.4% were male. Participants completed their training from the following programs: Family Medicine (28%) Medicine (20%) Pediatrics (12%) Surgery (10%) Psychiatry (10%) and other programs (19%) Exiting residents rated their program director as excellent in terms of effectiveness as a program

leader availability to residents and resident advocate. All respondents rated program faculty as very good across all dimensions (resident advocacy supervisor treatment of residents teaching effectiveness and mentoring). Mix and diversity of cases was rated as excellent while clarity of education objectives protected educational time and graduated responsibility were rated as very good. Overall quality of life throughout residency was very good (40%) specifically resident morale. A commonly identified area for improvement is in the availability of career counseling. Furthermore 47% received their evaluations over two weeks after completing a rotation. Since most respondents found evaluations to be constructive and useful(85%) timeliness of feedback should be monitored to ensure that appropriate measures are implemented to optimize the trainee's learning experience.

P-63	A Roadmap to Research for Postgraduate Medical Education - A Comprehensive Curriculum *Leslie Flynn, Phil Hahn, Stephen Vanner, Queen's University*

According to the CanMEDS 2005 Physician Competency Framework the role of Scholar requires residents to acquire research skills. Upon completion of a specialty training program residents are expected to have the ability to pose a research question develop a proposal plan a methodological approach carry out a project and disseminate the results. The Royal College of Physicians and Surgeons has placed an emphasis on the provision of the appropriate environment for residents to accomplish these tasks as seen in the revisions made in the June 2006 General Standards of Accreditation. These identify the requirement to have a faculty member who will facilitate and supervise the residents in research and scholarly work. The challenge lies in providing the education and linking residents with appropriate faculty. We report on the development of a program for PGY1 Residents from all disciplines to ensure that they have a comprehensive curriculum in research. The Introduction to Research is provided in an annual early autumn Core Academic Day. A faculty wide Research Fair is then held to enable residents to connect with those engaged in research in the Faculty of Health Sciences. Potential mentors from Basic Sciences Clinical Sciences Health Education Statistics and Epidemiology and Interprofessional Education are present to establish a working relationship with residents. An electronic "roadmap to research" has been prepared to guide residents. Residents are expected to present at their departmental research day. Information regarding funding and research awards is provided to residents to motivate and reward them in their work.

P-64	Giving Feedback in PBL: Novel Large Group Role Plays *Carol-Ann Courneya, Niamh Kelly, University of British Columbia*

UBC has run a hybrid problem based learning (PBL) curriculum since 1994. For the last two years after students have completed their first PBL block we run a large group session the objective of which is to encourage students to brainstorm and role play giving feedback in scenarios involving common group dynamic issues. The group dynamic issues are: a quiet student; a dominant student; and a student who pre-reads the PBL cases. The students are clustered into groups around the lecture hall and for each scenario they brainstorm how to give feedback to the 'student' under discussion . Students from different groups then take turns in front of the large group giving feedback to "Carol-Ann" the student in the scenario. Carol-Ann's role as the recipient of the feedback is to truly respond as if the situation were real. Students have mixed success with their feedback depending on the approach they take. This exercise has several purposes: it allows students to voice their thoughts about potentially problematic group dynamic issues in a hypothetical (and hence safe) setting; it exposes students to the consequences of a variety of feedback approaches (some good and some not so good); and ultimately portrays a satisfactory closure to the dilemma. At the discussion for our poster we will: 1) describe the role-plays in more detail 2) play short vignettes from the large group setting and 3) describe some lessons learned from two years of presenting this session.

P-65	Reliability, Face Validity and Content Validity of the Mini-clinical Evaluation Exercise (Mini-CEX) in the Assessment of Practicing Family Doctors *Gordon Page, George Pachev, Stephen Barron, University of British Columbia; Douglas Blackman, College of Physicians and Surgeons of British Columbia*

The mini-Clinical Evaluation Exercise (mini-CEX) can incorporate performance-based

multiple-competency assessment into the real-life settings of medical practice. Its use however requires preliminary exploration of its measurement properties. This study focuses on the reliability of the mini-CEX in the assessment of 12 family practitioners who volunteered to participate in the study conducted by 6 physicians trained in the use of the mini-CEX forms and on its face and content validity. Observations took place in the physicians' offices over one day and included an average of 10 patients for each physician. In addition both the evaluating and evaluated physicians completed a survey which enquired about the relevance and usefulness of the instrument. The patient-encounters of two family practitioners were observed by two assessors each. Internal consistency coefficient based on all observations was high (Cronbach alpha = 0.92). Generalizability studies on the 10 observed interactions of each family physician with patients followed by decision-studies allowed for exploring the dynamics of the generalizability coefficients as a function of the number of observed encounters. The G-coefficient for the 10 encounters was high (0.93). The value of the G-coefficients exceeded 0.90 with as few as 8 observed encounters. Face validity and content validity were evaluated on the basis of the survey. The majority of the respondents found mini-CEX to be relevant to assessing clinical competence and that the variety of encounters allowed for adequate assessment of abilities. In addition the content validity was estimated by analysis of the encounters according to patient-age problem-type and complexity.

P-66	Correlating Global Ratings with Summative Checklist Scores on an OSCE *Dwight Harley, David Cook, Margaret Sagle, University of Alberta*

The OSCE is a commonly used performance-based assessment tool that provides an objective measure of clinical competence. Its popularity results from the perceived objectivity of the check-lists that characterise this style of assessment. OSCE check-lists are often supplemented with global rating scales through which expert examiners provide a holistic rating of candidates' clinical competence. The literature suggests that holistic global ratings are as reliable as checklists but may be confounded because the same examiner generally scores the check-list and completes the holistic scale. Global ratings have an advantage in that they provide an opportunity to collect other data on clinical behaviour that is not available from the check-lists. An OSCE was administered to the 125 medical students of the Class of 2006 at the University of Alberta. Students were assigned to one of two eight-station tracks. The tracks were congruent in terms of the learning outcomes and competencies that were assessed. Passing scores based on checklist scores were determined for each station using the Yes/No method. In addition to completing the check-lists examiners provided a global rating of clinical competence on a six point scale – needs to improve a lot needs to improve borderline unsatisfactory borderline satisfactory good and excellent. Students receiving any of the first three assessments are considered to have failed. This study reports the relationship between global ratings and summative OSCE check-list scores by conducting a correlational analysis. Failure rates and failure classifications based on the check-list scores and the global ratings have been compared.

P-67	Validation of a Large Scale Clinical Examination *Susan Glover Takahashi, University of Toronto; Arthur Rothman, International Medical Graduates Ontario*

ABSTRACT The objective of the study was to validate a multi-level rating system in a large scale high stakes objective structured clinical examination (OSCE)used to evaluate the clinical competencies of international medical graduates (IMGs). Specifically the purpose of this study to provide evidence that the results generated by this examination appropriately differentiate and classify the candidate participants using a common rating form. In the study reported here the ability of the OSCE results to differentiate validly between two levels of competence clerkship and PGY1 using a common rating form was examined. Samples of University of Toronto year 3 clerks and PGY1 Family Medicine residents were included in the October 2005 test administration and these results compared along with the results of the IMG candidates. The results suggest that the clinical examination scores were capable of differentiating between year-3 clerks first year Family Medicine residents and the IMG candidates. In addition the results suggest that the group of IMGs are less competent than PGY1 Family residents and more competent than the clerks. Finally the results demonstrate that the scores generated be the post-encounter oral questions were the most effective in differentiating the two training levels and among the three groups of test takers. These results provide evidence of validity of the clinical examination and the rating scale used to determine level of competence of the IMGs at the clerkship and PGY1 levels. This study also demonstrated that it is

possible to differentiate using a common examination instrument

P-68	The Predictive Validity of an Assessment of Clinical Competence *Gisèle Bourgeois-Law, Robert Renaud, University of Manitoba*

CAPE a 4-part assessment of clinical competence has been used to assess practicing doctors in difficulty since 1989. In more recent years it has also been used as a screening tool to assist regulatory authorities in their decision as to whether or not to grant licensure to international medical graduates who meet other criteria such as the Evaluating Exam. CAPE has been alternatively accused of being too difficult or too easy. In this regard the perceived appropriateness of CAPE has been mixed in that while some view this assessment as being too difficult others perceive the opposite. Thus one question that would help to resolve this issue would be to determine the degree to which the candidates' performance on CAPE predicts their subsequent performance in practice. The objective of this study was to correlate performance on the four different components of CAPE (multiple-choice short-answer therapeutics structured oral interview and comprehensive clinical encounter) with sponsor ratings obtained six months after successful entry into practice. Regression analyses found that the four components of CAPE collectively accounted for 22% of the variance in sponsor ratings with the Structured Oral component as the strongest predictor.

P-69	Validity of Mini-clinical Evaluation Exercise (Mini-CEX) as a Tool for Assessment of International Medical Graduates *Gordon Page, George Pachev, University of British Columbia; Claudio Violato, Rod Crutcher, University of Calgary; Stephen Barron, University of British Columbia*

The mini-Clinical Evaluation Exercise (mini-CEX) holds the promise to incorporate performance-based multiple-competency assessment into the real-life settings of medical practice. Its use as an assessment tool however requires the detailed exploration of its measurement properties in different contexts of practice. This study focuses on issues of validity of the mini-CEX as applied in the assessment of 24 international physician's 12 week supervised practice across the four Western provinces of Canada members of the Western Alliance for Assessment of International Physicians (WAAIP). Face validity was evaluated on the basis of surveys completed by 12 international graduates and 18 supervising physicians. The majority of the respondents considered mini-CEX to be a valid method for evaluating clinical competence and a useful addition to the assessment battery of performance measures. Content validity was evaluated on the basis of analysis of the accumulated observations across broad parameters: systems patient age-group and gender settings of care problem complexity etc. In general the review of the observed categories within the parameters over which problems were sampled appears to support the content validity of the assessments. Criterion/construct validity was evaluated based on the correlations of the average mini-CEX global assessment with results on OSCE (not significant) multiple-choice knowledge examination (not significant) in-training evaluation reports (ITER) – r=0.84 p

P-70	Reliability of Mini-clinical Evaluation Exercise (Mini-CEX) as a Measurement Tool in the Assessment of International Medical Graduates *George Pachev, Gordon Page, University of British Columbia; Claudio Violato, Rod Crutcher, University of Calgary; Stephen Barron, University of British Columbia*

The mini-Clinical Evaluation Exercise (mini-CEX) holds the promise to incorporate performance-based multiple-competency assessment into the real-life settings of medical practice. Its use as an assessment tool however requires the detailed exploration of its measurement properties in different contexts of practice. This study focuses on the reliability of the mini-CEX as applied in the assessment of 25 international physician's 12 week supervised practice across the four Western provinces of Canada members of the Western Alliance for Assessment of International Physicians (WAAIP). Internal consistency coefficient based on all (523) observations was high (Cronbach alpha = 0.97). Generalizability studies on a sample of maximum 24 observed interactions of each international physician with patients followed by decision-studies allowed for exploring the dynamics of the generalizability coefficients as a function of the number of patient-encounter observations and the number of encounter-types (e.g. new patient vs. follow-up patient ambulatory vs. in-house etc.) included in the assessment. While the G-coefficient for the sampled observations was high (0.95) and appropriate for high-stakes assessments results indicated that the value of the G-coefficients exceeds 0.90 with as few as 12 observed encounters.

Increasing the number of observed encounter-types from 2 to 8 while keeping the overall number of observed encounters constant increased the value of the G-coefficients from 0.90 to 0.95.

P-71	Interprofessional Educators Teaching Interprofessionals: A New Format for Teaching Residents the CanMEDS Roles *Leslie Flynn, Linda Beckett, Bethmarie Michalska, Sangeeta Gupta, Eleanor Rosenzweig, Teresa Broers, Queen's University; The QUIPPED Team*

There is a national movement to transform health care delivery to a collaborative team based model. Changing the way health professionals are educated is a key component of this health system renewal. We report on our initiative to teach the role of Communicator and Collaborator to a large group of learners (n=155) from medicine occupational therapy physical therapy nursing and pharmacy. The interprofessional session was incorporated into the annual PGY-1 Resident Core Academic Days at Queen's University designed to introduce first year residents to the CanMEDS competencies and the Principles of Family Medicine. Faculty members from the Schools of Medicine and Rehabilitation Therapy collaborated with the Queen's University Interprofessional Patient-Centred Education Direction team to prepare the workshop. In addition to large group learning participants were assigned to a small group to ensure a practical interprofessional learning experience. The goal of the session was to assist learners to acquire the knowledge skills and attitudes to become collaborative practitioners who are able to work together effectively. Content included a focus on effective communication conflict resolution and the benefits and challenges of an interprofessional team. A modified Interdisciplinary Education Perception Scale and the Readiness for Interprofessional Learning Scale measured learner attitudes towards Interprofessional Education. Preliminary findings show that pre-workshop themes reveal a fear of both being disrespected and of conflict. Post-workshop themes reveal an appreciation of effective communication in teamwork and an awareness of its impact on patient-care. We conclude that an interprofessional approach is highly effective to teach communication and collaboration.

P-72	Creating an Interprofessional Academic Division: Embedding IPE into the Development of the Division of Palliative Care, McMaster University *Denise Marshall, Alan Taniguchi, McMaster University*

Academic faculties departments and divisions are faced with the task of embracing interprofessionalism and incorporating this ethos meaningfully into the fabric of their academic mission and programs. This can be a daunting and overwhelming mandate. This poster describes the process of embedding Interprofessionalism into the genesis of a new academic Division of Palliative Care. Both the conceptual framework for this process as well as the actualization of it will be described. Lessons learned from this experience can help guide other departments and Divisions in their IPE mandates.

P-73	Formation à la collaboration interprofessionnelle et à l'interdisciplinarité d'étudiants en médecine et en médecine vétérinaire *Maryse Guay, Université de Sherbrooke; Denise Bélanger, Université de Montréal; François Milord, Université de Sherbrooke; Alex Thompson, Université de Montréal; Louise Lambert, Agence de la santé et des services sociaux de Montérégie*

Contexte: Afin de favoriser l'interdisciplinarité depuis janvier 2005 une activité de formation conjointe médecine/médecine vétérinaire a été expérimentée. Objectif: Initier les étudiants en médecine (ÉMD) et les étudiants en médecine vétérinaire (ÉMV) à l'interdisciplinarité et à la collaboration interprofessionnelle. Méthode: S'inspirant de la méthode de tutorat trois ÉMD de l'Université de Sherbrooke en stage de santé communautaire et trois ÉMV de l'Université de Montréal en stage de santé publique accompagnés de professeurs de chaque discipline ont participé à l'activité de formation de trois heures. Les ÉMV et EMD sont invités à discuter d'un cas de zoonose nécessitant des interventions de santé publique. À travers les étapes successives allant du diagnostic chez l'humain et chez l'animal jusqu'à la prise en charge finale les étudiants sont amenés à échanger sur leurs pratiques faisant ressortir les occasions de collaboration. À partir de l'analyse des questionnaires d'évaluation remplis par les étudiants après l'activité le déroulement de l'activité a été ajusté les éléments facilitants et les difficultés rencontrées ont été identifiés. Résultats: L'activité s'est tenue 18 fois auprès d'environ 60 ÉMD et 60 ÉMV. Les étudiants sont satisfaits et souhaiteraient que l’activité soit offerte à davantage d’étudiants. Les échanges ont fait ressortir les similitudes entre les deux professions et les avantages de la collaboration. Des débats intéressants

notamment sur les aspects éthiques ont été soulevés. Conclusions: Il est faisable d'initier les ÉMD et ÉMV à la collaboration en utilisant une méthode accessible à tous. Cette méthode pourrait facilement être transposée à d'autres professions.

P-74	Interprofessional Palliative Care Problem-based Learning *Nora McKee, Donna Goodridge, Fred Remillard, Marcel D'Eon, University of Saskatchewan*

This poster describes an innovation involving three educational themes: learning in an interprofessional group using PBL as a tool and increasing undergraduate education in palliative care. With the support of funding from IECPCP (Interprofessional Education for Collaborative Patient Centered Practice) a palliative care PBL was developed and piloted with a group of medicine nursing and pharmacy students. Evaluation of the pilot included a Likert-type evaluation survey a short answer pre and post-test to assess knowledge gained and audio taped individual semi-structured interviews. All 3 student groups (medicine nursing and pharmacy) rated the interprofessional and group dynamics as very valuable. The areas the students learned most about were in assessing symptoms discussion of choices at end of life and the roles of members of the palliative care team. Three interprofessional themes were evident in the qualitative analysis: seeing the other professions perspective sensing one’s own professional role and focusing on patient centered care. It was evident from the interviews that sharing of narrative is important in learning about palliative care. The project was felt to be successful and is unique in using PBL as an interprofessional experience. This initiative has grown to be part of the undergraduate curriculum of five colleges at the University of Saskatchewan.

P-75	Palliative Care Interprofessional Learning: The Dalhousie Experience *Kim Blake, Greta Rasmussen, Grace Johnston, Judy Smith, Dalhousie University*

For the past decade The Faculties of Medicine Dentistry and Health Professions at Dalhousie University have prepared students to work in interprofessional health teams through a collaborative program under the auspices of the Tri-faculty Inter-Professional Academic Advisory Committee (Tri-IPAAC). Medical students participate in interprofessional learning (IPL) sessions with other health profession learners from over 20 independent programs. Each year over 2500 students—up to 825 students in one day—meet and work together in small interprofessional teams to discuss contemporary health and health care issues. In its September 12 2006 issue The Medical Post noted that MD graduates at Dalhousie are “among the first generation of Canadian physicians for whom the idea of working in an inter-professional team was as central to his studies as learning how to accurately assess a patient’s presentations.” This poster presentation will outline our senior-level Palliative Care IPL module which has the following learning objectives. Upon successful completion students will: •Be able to describe the role of their own profession and that of other health professionals’ role in palliative care •Be able to apply an understanding of the health professionals’ role to a palliative care case •Be able to apply an understanding of health professionals’ roles to future practice •Be able to identify additional skills and knowledge needed to contribute as a team member in palliative care Outcomes will be described in terms of competencies for interprofessional learning CanMeds 2005 and EFPPEC.

P-76	Inter-professional Problem-based Learning: Tutor Issues *Marcel D'Eon, Peggy Proctor, Nora McKee, University of Saskatchewan*

The benefits of PBL for inter-professional education are not well documented. Although the use of cases in particular and PBL in general are supported (D’Eon 2005) there is much we do not know about the use of PBL for IPE. In particular there appears to be little written or known about the experiences of and training for facilitators of inter-professional PBL. We have been using standard and so far relatively successful PBL facilitator training. But we have not modified it in any significant way to account for the complexities of IPE. To determine the unique challenges of and identify possible approaches to inter-professional PBL facilitation we asked open ended questions of our tutors conducted focus groups and then developed a tool to survey all inter-professional PBL tutors. This poster reports on the results of this research conducted over one full academic year (three PBL cases and over 50 tutors from five different health science programs).

P-77	Collaboratively Constructed Diagrams to Assess Clinical Reasoning *Marc Brisbourne, Ron Damant, Dwight Harley, Terry Palmer, David Begg, University of Alberta*

Junior medical students require instructional support to develop expert clinical reasoning skills; however activities explicitly facilitating the development of such skills are often overlooked in most medical school curricula. As a tool to facilitate the development of clinical reasoning in problem-based learning tutorials we are developing and testing a prototype of a web-based application that allows groups of students to collaboratively construct a diagram of a patient case. Diagrams demonstrate potential as a group problem-solving tool since they serve as a visual representation of a problem that helps group members outline and assess specific items of information decide what additional information is required examine the problem holistically and identify possible solutions. Constructed diagrams can then serve as a focal point for sharing and discussing the group's reasoning process where tutors and other group members can provide feedback. Prior to the development of the site a pilot study involving 15 second-year medical students and four instructors working in five groups examined the feasibility of the concept by constructing diagrams using a paper diagram construction toolkit. User participation in the initial stages was encouraging and provided recommendations for improvement for future stages of development. We are now testing the usability of the web application prototype that incorporates suggestions from pilot testing and exploring how PBL tutors can assess the quality of the group's clinical reasoning process.

P-78	Effective and Instructive: Using Resident Peer Evaluators for an Internal Medicine OSCE *Mark Goldszmidt, University of Western Ontario*

Background and Purpose Many programs use OSCEs to evaluate resident clinical and communication skills. However identifying sufficient numbers of faculty to participate as expert examiners can be quite challenging. The purpose of this study was to assess the impact of using PGY2 peer examiners for a PGY1 and PGY3 internal medicine OSCE. Methods: In 2005 and 2006 PGY 2 residents at the Schulich School of Medicine & Dentistry participated in a half-day examiner workshop. In groups of five they received specific content training on one of five multi-part stations. They also received training on feedback techniques. Outcomes assessed included resident perceptions and station validity. Results: Over a two year period 46 PGY1 and 27 PGY3 residents were examined. Although many expressed having had concerns prior to participating overall the exam was highly rated as a valuable learning experience for both examinees and examiners. Common themes from open ended questions included: recognition of the importance of examsmanship skills appreciation for the immediate post station feedback and acknowledgment as to the importance of having an approach to clinical scenarios. Within a given station there were no significant differences between mean scores by examiner. Station scores were well distributed across the range of possible scores with more senior residents performing on average better than junior residents. There was however significant inter-station variability even for high performing and more senior residents. Conclusions: Using peer examiners can be an effective method for assessing and providing residents with feedback on their clinical skills and examsmanship technique. Future plans include assessing inter-rater reliability using faculty co-raters.

P-79	Développement des habilités réflectives chez les externes : Projet pilote de portfolio réflectif *Serge Langevin, Sylvie Bourque, Nathalie Gagnon, Université de Sherbrooke*

Le portfolio et le mentorat occuperont une place prépondérante dans la réforme de l'externat de la faculté de médecine de l'Université de Sherbrooke. L'une des fonctions du portfolio est de promouvoir le développement des habilités réflexives des externes. Nous souhaitons inculquer tôt cette propension à la réflexion sur les actions professionnelles. Elle concourt à un apprentissage plus efficace tout en aidant l'externe à mieux transiger avec les expériences difficiles. Cette démarche d'introspection et d'autorégulation consciente et délibérée n'est toutefois ni spontanée ni naturelle. Pour relever ce défi sur le terrain clinique le portfolio doit répondre à plusieurs conditions. En plus du soutien d'un mentor cette réflexion doit s'inscrire dans un cadre bien défini. Nous proposons un outil simple et commode pour guider l'externe dans cette démarche. Notre modèle conceptuel comporte quatre étapes : l'appréciation rigoureuse de l'évènement son analyse critique la stratégie de résolution et l'identification des retombées

sur la pratique professionnelle. Pour une rétroaction de qualité un guide de correction a été élaboré concomitamment pour les mentors. Un projet pilote de 16 semaines impliquant 28 externes et 7 mentors est actuellement en cours depuis octobre 2006. Les objectifs sont d'évaluer la pertinence la validité et la commodité de nos outils pédagogiques la faisabilité d'une telle modalité pédagogique dans le milieu de la formation clinique et l'évolution dans la qualité des réflexions produites par les étudiants durant cette période. Des méthodes qualitatives incluant les groupes de discussion le jugement d'expert et l'analyse documentaire seront utilisées pour vérifier l'atteinte des objectifs.

P-80	Musculoskeletal Examination Teaching by Patients versus Physicians: How Are They Different? *Anna Oswald, University of Alberta; Jeffrey Wiseman, McGill University; Mary Bell, Sunnybrook Women's Health Science Centre; Linda Snell, McGill University*

Background: Musculoskeletal (MSK) complaints comprise 12-20% of primary healthcare visits however MSK physical examination (PE) skills are identified as weak areas in practicing physicians. Further there is a shortage of specialists able to effectively teach this subject. Previous controlled evaluations in undergraduate medical programs of patient educators trained through the Patient Partners In Arthritis® (PPIA®) program have led to mixed results. Objectives: to document how teaching by PPIA® in a pre-clerkship MSK PE skills session differs from that of physician tutors so that curricula can be modified to allow PPIA® teaching to be incorporated more effectively. Methods: A qualitative researcher observed video recorded and took notes during pre-clerkship MSK PE small group given by either a PPIA® or physician tutor. The notes and videos were reviewed for emerging themes which were evaluated by case by case and cross case analysis. Results: Six groups were evaluated (2 PPIA® and 4 physician tutors). The two PPIA® educators were more consistent regarding teaching content and style than the four physicians. There appeared to be a continuum in teaching structure from PPIA® to novice physician tutors to experienced physician tutors. The PPIA® consistently covered all major joints whereas the physicians did not; yet physicians were more likely to request verbalization of actions relate findings to history and experience student questions. Conclusions: Understanding the nature of pre-clerkship MSK teaching by PPIA® versus physician tutors is necessary to allow appropriate targeting of the existing PPIA® program and to guide the development of future MSK teaching initiatives.

P-81	Local Leadership: A Key Component in Starting a New Medical Campus in 14 Months *Pierre Gagne, Université de Montréal*

Local leadership: a key component in starting a new medical campus in 14 months. Pierre Gagne[1,2,3] Jean Bragagnolo[2] Patrick Houle[3] Sylvie Bouvet[2] Raynald Gareau 4 Raymond Lalande[1] Jean L. Rouleau[1] Yves Lamirande[2] Christiane Bonfanti[2] What started as a local hospital initiative to promote medical education locally ended up in the launch of a new medical campus in only 14 months. This campus of the Universite de Montreal in the Mauricie involved four different institutional partners. Even though the academic expertise was present in Montreal the local leadership present was crucial through all phases of the project. We tried to identify: 1) who were the local key players 2) what were their respective roles and values 3) and what can be learn from this collaborative experience. Positive and negative end points will be summarized. Key words: leadership distributed medical education partnerships

P-82	Web Based Self-learning Modules for a Distributed Medical Education Model *Jean Roy, University of Ottawa*

Web-based interactive self-learning modules have been used in our medical school for a few years to complement or replace traditional learning activities during the more and more distributed clerkship. Presented in an interactive format the modules consist of clinical presentations intermingled with questions theory information capsules and reviews. The modules rely on the experiential method proven to both increase retention and boost motivation. The student provides an organized answer before being presented with one. The format is flexible and can even help attain attitude objectives. Our aim was to build an easy to develop and maintain tool that would favor content over multimedia hype even if the format allows for integration of rich multimedia learning objects. Contrary to common belief developing modules is not overly time consuming. It is unfortunate that the format popular in the 80's is rarely seen. It is a great tool requiring minimal resources to run. We will present the steps involved in developing such modules the database that was developed to run the modules store the answers from the students pre and post test answers as well

as evaluations (of learning and of the activities). Finally we will present results (student satisfaction) review current literature on the subject and present different approaches for future research: modules used in a stand alone fashion in combination with workshops or in preparation for small group sessions.

P-83	Two Models of Examiners in a Structured Oral Examination *Claire Touchie, Susan Humphrey-Murto, University of Ottawa; Martha Ainslie, University of Calgary; Kathryn Myers, University of Western Ontario; Timothy Wood, Medical Council of Canada*

Background Clinical examinations such as objective structured clinical examinations (OSCE) and structured oral examinations (SOE) are said to require a diversity of tasks (cases) and multiple raters to provide acceptably reliable scores. This is not always possible and for some examinations it is more feasible to have fewer raters assessing more cases. This study evaluates the reliability of two examiner models in a SOE; those based in a station for the duration of the examination (station-specific examiners) and those who follow a candidate throughout the examination (candidate-specific examiners). Methods An 8-station SOE was administered to third and fourth year internal medicine residents. Two station-specific (SS) and two candidate-specific (CS) evaluated the residents' performance at each station. To investigate the differences between types of examiners mean ratings and correlations were compared and a generalizability analysis for both types of raters was conducted. Results Ninety-four examiners and 44 candidates participated at three examination centers. There were no significant differences in mean scores (SS mean: 74% CS mean: 72%). Ratings on each station assigned by rater type were low to highly correlated (range r=0..38 to r=0.89). The examination reliability was 0.71 for the SS examiners and 0.77 for the CS examiners. The inter-rater reliability of the two examiner types was 0.76 and 0.75 respectively. Conclusion This study suggests that the model of candidate-specific examiners was as reliable as the model of station-specific examiners in the setting of a structured oral examination. Possible reasons for this surprising result will be explored.

P-84	A Generalist in the Specialist Jungle: Are First-year Medical Student Perceptions of Family Medicine Influenced by a Brief Exposure to a Family Physician Lecturer in the Pre-clinical Years? *Miriam Boillat, Colin Chalk, McGill University*

Among potential factors which may bias medical students against family medicine as a career choice is the overwhelming predominance of specialist physicians and research scientists in pre-clinical teaching. We wondered if brief exposure to a family physician during the basic science curriculum at McGill would produce any discernable change in student perceptions of family medicine. During our first-year neuro-anatomy Unit the usual lecture on sleep physiology by a scientist was paired with a family physician's presentation on a practical approach to sleep problems. Students completed a questionnaire on their perceptions of family medicine and a contrasting specialty (neurology) at the beginning of the Unit and again at the end of the Unit about two weeks after exposure to the family physician. Preliminary results show that following this intervention a greater proportion of students perceived family medicine as a difficult branch of medicine believed that family physicians focus on treating the person with the disease felt family physicians were skilled in the care of insomnia and were considering family medicine as a career choice. These findings suggest that modest curricular changes placed at strategic moments may have an impact on student perceptions of family medicine and ultimately may influence career choice.

P-85	Residents in Distress: Prevalence of Burnout & Impostorism *Jenny Legassie, Mark Goldszmidt, Elaine Zibrowski, University of Western Ontario*

Background Residency can be a time of emotional stress with up to 76% of residents in some programs experiencing feelings of burnout. For some this may be compounded by doubts about their capabilities to fulfill their roles (impostorism). To date no study has looked at both the prevalence and relationship between burnout and impostorism in a residency program. Objectives To explore the prevalence of and relationship between burnout and impostorism among internal medicine residents. Methods In the fall of 2006 all internal medicine residents at the Schulich School of Medicine & Dentistry (PGY 1–3; N=78) were invited to participate in an anonymous postal survey consisting of a short demographic questionnaire the Clance Impostor Scale and the Maslach Burnout Inventory Human Services Survey. Results Forty-seven residents responded to the survey (60.3%). Sixty-nine percent reported experiencing some form of

emotional distress [burnout only (26%); impostorism only (13%); burnout and impostorism (30%)]. Although a significant negative correlation was detected between PGY level and scores on the CIS (rho =.31 n = 45 p =.03) no differences were detected for burnout by PGY level nor were there any differences detected by gender. No correlation was detected between burnout and impostorism. Conclusions Although the prevalence of impostorism and burnout can be quite high during residency the two phenomena appear to represent distinct aspects of well being. Future studies are needed to confirm these findings at other centers. Strategies for addressing these aspects of resident distress are also needed.

P-86	Acquiring Procedural Competency *Judson Barkhurst, Marc Brisbourne, David Begg, University of Alberta; Chris de Gara, Cross Cancer Institute*

Effective instruction of surgical procedural skills is difficult under the most optimal circumstances. Ethical considerations and a lack of ‘practice’ patients limit a students’ ability to develop skills for rare but potentially life-saving procedures such as cricothyrotomy. Simulations show potential for providing students safe and ethical opportunities to obtain competency however training must allow for sustained deliberate practice in a realistic context where students can make mistakes and obtain feedback to improve performance. To address these shortcomings we are evaluating a method of teaching rare potentially life-saving procedures that combines a didactic presentation computer-based cognitive simulation and physical simulation using a task trainer. With a PowerPoint presentation third-year clinical students (n=20) are provided a review and indications for the procedure. They are given the opportunity to develop their knowledge comprehension and skill with the procedure using a self-directed simulation created in Macromedia Flash that provides an immersive experience and immediate feedback. Once they have successfully demonstrated their understanding and ability to perform the procedure through a series of quizzes and challenges within the computer-based simulation students graduate to a task trainer where an instructor assesses their competency using a validated surgical skills checklist (Moorthy et al Stud Health Technol Inform 2003). We anticipate this combined instructional approach using low-fidelity simulation provides a safe ethical and sustainable form of consistent and effective instruction that addresses the flaws inherent in traditional procedural learning approaches.

P-87	Career Preferences Following a High School Outreach Program *Thomas Lacroix, University of Western Ontario*

The Society of Rural Physicians of Canada has suggested that Universities should offer outreach programming to rural high schools to increase rural applicants to medical schools. However there is a relative paucity of data to support their effectiveness. Schulich School of Medicine & Dentistry established the MedQUEST Health Careers Exploration Program in 2005 as a way of increasing the number of qualified rural applicants. After an initial pilot program of 30 Grade 10-11 students the program expanded to 160 participants in 2006. Now the largest high school outreach camp in North America the program drew from 60 high schools in 10 counties in Southwestern Ontario exposing them to over 20 professions during the week-long camp. Students were given pre- and post- camp questionnaires. Results demonstrated a significantly increased interest in most disciplines on a 7-point Likert scale using paired student t-tests. This was most pronounced in family medicine (pre-camp 4.57 SD 1.60; post-camp 5.33 SD 1.54 p

P-88	Comparative Faculty Development Needs of Ontario Rural Family Physicians and Royal College Specialists *Danielle Blouin, Elaine Van Melle, Gene Dagnone, Lewis Tomalty, Queen's University*

BACKGROUND: All 6 Ontario medical schools have substantially increased their enrollment over the past 3 years. Academic centers can no longer solely assume the clinical training requirements for this larger number of learners. Rural preceptors both family physicians (FP) and Royal College specialists (RCS) have been recruited to assist. The importance of designing faculty development (FD) activities that specifically address the concerns of community-based faculty is increasingly recognized. Prior published papers focus their efforts on a single medical discipline such as Internal Medicine or Family Medicine. OBJECTIVES: This study aims at comparing the FD needs of rural FP and RCS. METHODS: A survey was mailed to the 1170 Ontario community preceptors having taught for at least 1 month in the previous year. The survey examined preceptors’ interest for several listed FD topics formats sites and timing in relation to their type of practice (FP vs. RCS). RESULTS: Response rate was 55%; 40% were FP 58% RCS (2% unknown). The

following FD topics made the ‘top-ten’ of both the FP and the RCS: ‘Time-efficient precepting’ ‘Providing effective feedback’ ‘Assessing learners’ performance’ ‘Characteristics of effective teachers’ ‘Review of learners’ objectives’ ‘The learner in academic difficulty’ ‘Evidence-based medicine’ and ‘Med-tech resources for teaching and clinical practice’. Levels of interest for each topic however vary significantly between FP and RCS for the first 6 of these topics. Both groups prefer seminars presented locally and combined with Continuous Medical Education activities. FP would rather choose weekday events; RCS favor evening and weekend activities. CONCLUSION: FD needs of community FP differ from those of RCS with regards to preferred topics sites formats and timing of activities. To be successful FD programs must take into account their target audience’s specific preferences.