

5<sup>th</sup> International Conference on Faculty Development in the Health Professions

5<sup>e</sup> Conférence internationale sur le perfectionnement du corps professoral dans les professions de la santé

Conference  
Research  
Abstracts

Creating Connections:  
Exploring Faculty Development  
through Different Lenses

Résumés de  
recherche de  
la conférence

Créer des liens en explorant différentes  
facettes du perfectionnement du corps  
professoral

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*Abstracts have been printed as they were submitted*

# 2019 International Conference on Faculty Development in the Health Professions

001

Career transitions and development

**Late career expectations: A survey of faculty members age 55+ at 14 U.S. medical schools**

K. Skarupski<sup>1</sup>, V. M. Dandar<sup>2</sup>

<sup>1</sup>Johns Hopkins University School of Medicine, Baltimore, MD, United States; <sup>2</sup>Association of American Medical Colleges, Washington, DC, United States

**Background:** The average age of full-time faculty at US medical schools was 49.5 in 2017, yet we know little about faculty older than this age. This study assesses the work-life expectations of 'late-career' faculty members, defined as 55, who may benefit from pre-retirement planning or who are seeking retirement resources. Gathering feedback from this faculty group has provided critical information for faculty affairs leaders to develop policies, programs, and resources to support late career transitions.

**Summary of Work/Results:** This study leverages data from a survey of 2,126 faculty members from 14 US medical schools. This voluntary survey was conducted by the AAMC and sent by faculty affairs leaders at each institution to faculty age 55. Participating institutions were identified through a convenience sample of members of the AAMC Group on Faculty Affairs and based on diverse institutional characteristics.

Across respondents, the average age was 62.3 years. Forty-five percent indicated they had begun thinking about full-time retirement, estimating retirement at age 68. Similarly, 44% indicated they weren't sure when they might retire and 11% had not begun thinking about retirement. The top 3 personal factors likely to affect retirement decisions were: health; post-retirement plans; and spouse/partner's plans and opinion. The top 3 professional factors were phased retirement or part-time options; changes in institutional leadership; and presence of a successor. After retirement, faculty indicated interest in ongoing education and research activities, and wanted health insurance (68%); email (47%); and part-time teaching opportunities (42%) from their institutions.

**Discussion/Conclusions/Take Home:** Medical schools have a rapidly-aging workforce and these data provide evidence that faculty members and institutions are unprepared for late career transitions. Engagement with late-career stage faculty members and institutional leaders is critical to plan for this changing faculty landscape. Faculty affairs leaders can champion these planning and programming efforts with partners from across the institution.

002

Career transitions and development

### **A structured physician mentorship program in an academic pediatric department: Insights on value and engagement**

A. Karwowska

University of Ottawa, Ottawa, ON

**Background:** Mentorship is increasingly viewed as essential for academic success and satisfaction among physicians, yet can be hard for individual faculty to establish. Following direction from its faculty, the Department of Pediatrics (DoP), University of Ottawa, supported the development of a formal mentorship program.

**Summary of Work:** A voluntary structured mentorship program was established and included the creation of the position of director of mentorship. The program assisted interested faculty in identifying mentoring needs, then facilitated a “match” with a mentor. Mentors and mentees received guidance through individual coaching, a mentorship seminar, and a handbook. After 12 months, the first cohort of participants was surveyed about various aspects of the facilitated mentor-mentee relationship using two electronic questionnaires.

**Summary of Results:** The questionnaires were completed by 12/15 (80%) mentors and 13/16 (81.3%) mentees. All faculty indicated satisfaction with the structured matching process. Most (10/13 mentees; 8/12 mentors) reported meeting regularly, and all mentees reported their mentors were readily accessible. Most faculty (12/13 mentees; 9/12 mentors) wanted to remain in their pairing. Most mentees (12/13) felt they had benefitted from the relationship. Academic activity, work-life balance and general support and encouragement were the most common mentoring themes. The greatest value of the relationship was reported around the giving and receiving of advice. All faculty felt that mentorship was important.

**Discussion:** Mentors and mentees reported high levels of satisfaction with the structured mentorship program including facilitated pairing. They reported high levels of engagement and found value in the relationships.

**Conclusions:** The structured physician mentorship program was viewed positively by faculty, facilitated high engagement, and helped create positive mentor-mentee relationships.

**Take Home Message:** Mentorship is viewed as important by academic faculty. A structured mentorship program can be effective and well received. Our program may serve as a model for other academic departments.

003

Career transitions and development

**Conceptualizing teacher expertise: A systematic review of medical and academic teaching frameworks**E. van Dijk<sup>1</sup>, J. van Tartwijk<sup>2</sup>, M. van der Schaaf<sup>1</sup>, M. Kluijtmans<sup>1</sup><sup>1</sup>University Medical Center Utrecht, Utrecht, Netherlands; <sup>2</sup>Utrecht University, Utrecht, Netherlands

**Background:** Different frameworks have been developed for academic teaching. These frameworks differ in their conceptual approaches to teaching, as well as the sources they are based on, e.g. expert consultation or literature. This study aims to provide a comprehensive analysis of these frameworks to better conceptualize teacher expertise and expertise development from a task-based perspective. This may inform faculty development programs as well as career decisions.

**Summary of Work:** We performed a systematic review of teaching development-, qualification-, and career frameworks to conceptualize teacher expertise. The majority of frameworks ( $n=44$ ) were from medical education ( $n=26$ ) but we also included those from higher education in general ( $n=18$ ). Frameworks were from four different continents.

**Summary of Results:** We identified seven task domains (i.e. groups of teaching tasks): teaching delivery, student assessment, educational design, reflection and self-development, leadership, educational research and coaching. Additionally, we found three dimensions in which frameworks conceptualized teachers' expertise development: as better performance on a task, as the ability to perform a greater range of tasks and as performing tasks with a larger sphere of impact.

**Discussion:** With this study we expand our understanding of teacher expertise in medical education. The results support the design of dedicated faculty training programs for expertise development in different teaching tasks and at different career stages. Additionally, the task domains and conceptualizations of teacher expertise identified in our study create common ground for the assessment and reward of teaching in medical education institutes.

**Conclusions:** Teacher expertise development is not one- but three dimensional: teachers may develop by getting better at a specific task, by performing multiple tasks, or by a greater sphere of impact.

**Take-home Message:** The multiple dimensions of teacher expertise development should be reflected both in faculty development programs and career policies.

004

Career transitions and development

### **Hiding in plain sight - The teaching potential of SAS doctors in the UK**

R. Thomson

Newcastle University, Newcastle upon Tyne, United Kingdom

**Background:** The UK National Health Service employs 20,000 Staff and Associate Specialist (SAS) doctors. These posts, analogous to Hospitalists in North America, have traditionally been 'service heavy', that is with job plans weighted towards direct patient care, and 'development light', that is with minimal allocation to teaching or educator development. There is a growing recognition that this needs to change.

**Summary:** This study explored, in depth, the untapped motivation and potential of SAS doctors as teachers, with a view to evolving new teaching roles supported by appropriate Faculty Development. A Narrative Inquiry approach was adopted to explore the participants' life histories and specifically their experience of learning and teaching. Ten semi-structured interviews of 60-90 minutes were conducted, transcribed, coded and subjected to inductive thematic analysis.

**Results:** Ten participants (7F,3M; age 34-65) were purposively sampled to capture the diversity of SAS doctors. Five participants graduated in the UK, and five abroad (2 Germany, 1 Spain, 1 India and 1 Sudan). Themes identified were: early parental encouragement to value autonomy over external recognition, pivotal crisis forcing re-evaluation of career goals, valuing practical clinical competence, low confidence to make tacit knowledge explicit for learners, pioneering role models and authentic organisational support.

**Discussion:** SAS doctors value practical wisdom, but much of this is tacitly held and not perhaps passed on to learners; with tailored Faculty Development and organisational support this situation could be transformed. Furthermore, SAS doctors, in sharing their career histories, revealed a potential to enrich and diversify the range of role models available to students and trainees.

**Conclusion:** SAS doctors in the UK are well placed to teach students practical doctoring. Faculty Development designed to enable teachers to recognise tacit clinical knowledge and make it explicit is likely to be most effective.

**Take-home Message:** SAS doctors have unrealized potential as educators

005

Cross-cultural faculty development

### Training faculty to care for patients with cultural humility - An immediate need towards the 2020 Olympics

R. Ashida<sup>1</sup>, S. Takeda<sup>1</sup>, S. Oikawa<sup>2</sup>

<sup>1</sup>Jikei University, Tokyo, Japan; <sup>2</sup>Kyoto University, Kyoto, Japan

**Background:** With globalization, many countries want their healthcare systems able to care for foreign patients. In particular, during the 2020 Olympics, healthcare workers in Tokyo must be prepared to treat foreign patients despite different languages and cultural concerns.

**Summary of Work:** We sent questionnaires to 457 hospitals to identify problems arising from languages and cultural differences. With questionnaire responses, we created scenarios and conducted simulation sessions for resident and faculty physicians with simulated patients (SPs).

**Results:** With responses received from 141 hospitals (31%), we created scenarios regarding language differences, the correctness of information for patients, and patients' beliefs and values that the physicians had not encountered. Simulation sessions with Polish and Chinese SPs showed that English was not a universal communication tool and that if a professional interpreter was not present, translation applications checked by reverse translation should be used. Sessions with a Muslim SP showed that patients' values and social practices are as important as treatment.

**Discussion and Conclusion:** All physicians had translation applications installed on their mobile phones, but few knew how to use the applications effectively. Practice through simulations will train physicians to use the applications while looking directly at patients rather than at mobile phones. Regarding patients' values and social practices, physicians should be trained to listen, consider the patients' concerns as important as treatment, and ask patients what they want.

**Take-home Message:** A variety of scenarios should be developed with international collaboration so that physicians can be trained to care for any foreign patient with cultural humility.

006

Cross-cultural faculty development

### **Growing medical educators in the Pacific - How do knowledge and skills learned transfer to Fijian clinicians teaching practice?**

S. K. Kado<sup>1</sup>, G. Brand<sup>2</sup>, I. Lindemann<sup>3</sup>

<sup>1</sup>University Of Western Australia, Suva, Fiji; <sup>2</sup>University Of Western Australia, Perth, WA, Australia; <sup>3</sup>Flinder's University, Adelaide, SA Australia

**Background:** Medical education workshops have been conducted in the Pacific since 2015 to improve clinical teaching and supervision. Systematic reviews, however, around faculty development recommend more qualitative research on 'How' workshops can change teaching practice. Fiji provided a unique low-resource setting for this research as faculty development is in its infancy.

**Summary of Work:** A qualitative case study was conducted to explore how Fijian clinicians translate knowledge and skills learnt in a medical education workshop to their teaching practice. Data were collected from nine clinicians through reflective journals, interviews, lesson plans and videos of teaching over four months followed by thematic data analysis.

**Summary of Results:** Six themes were identified that represented the clinicians' journey to changing their teaching practice: 1) Perception of the workshop; 2) Evolving teaching philosophy; 3) Changing practice; 4) Teachers' perception of responses from the students; 5) Inhibitors to change; and 6) Enablers of change.

**Discussion:** Based on the findings, a model of change was developed and reviewed against current educational change and medical education literature to provide a series of actionable recommendations for faculty development in low-resource settings like the Pacific.

**Conclusion:** To facilitate a change in teaching behaviours the background influences of the culture of the organisation, the individual experiences of the clinical teacher, the enablers and barriers to change should be considered to ensure faculty development is evolving and relevant. Furthermore, the clinical teachers require support through mentoring, feedback and collaboration to facilitate positive change.

**Take home Message:** Faculty development resulting in changed behaviour in Fiji is complex and requires consultation, support, reflection and feedback to meet the needs of the institution and individual.

007

Cross-cultural faculty development

**Faculty development initiatives to address the Black and Minority Ethnic (BME) attainment gap in undergraduate medicine: The UK experience**O. Sorinola, I. Davies, M. Machado, E. Reid, N. Morrison

University of Warwick, Coventry, United Kingdom

**Background:** Students from Black and Minority Ethnic (BME) groups across all higher education institutions in the UK on average attain lower degrees than their white counterparts. Similarly, UK medical students from BME groups have poorer academic performance compared to their white peers. GMC has placed high priority on addressing this attainment gap.

**Summary of Work:** Warwick Medical School is the largest graduate entry medical school in the UK. We collected data on admission, performance during the course / graduation over 8-year period (2010-2017). We used focus groups and interviews to gather data about BME students experiences during the course and thematically analysed the data. Based on our findings, we introduced FD initiatives to address the issues: set up an attainment gap group, faculty training/selection in admission, decolonise curriculum (BME cases in CBL/OSCEs/simulated patients), review pedagogic teaching/assessment practices, improve student support/experience training.

**Summary of Results:** Prior to the FD initiatives, data showed that white applicants are 25% more likely than BME to get a selection offer. BME students underperform with less merit and distinctions awarded and no black student graduated with honours over the eight-year period. BME students faced a range of issues that hindered their learning/performance including relationships (between faculty and students and among students); institution and learning (curricular, teaching/assessment practices); psychosocial/identity factors (feelings of isolation/reduced self-confidence).

FD initiatives introduced has reduced the performance gap, improved interactions between BME students/faculty, and BME students' voice/experiences have improved significantly.

**Discussion:** Despite recruiting students with proven achievement in their previous university degree(s), WMS BME students still have an attainment gap. FD initiatives introduced has reduced this gap and transformed the learning experience of BME students with better educational support from faculty.

**Conclusion:** Systematic FD initiatives can address the issues of differential attainment & improve BME student experiences.

**Take-home Message:** Attainment gap requires institutional solutions

008

Curriculum design/programming for faculty development

**Lessons learned: A multi methods systems approach to improving the culture and practice of feedback**

R. Dube<sup>1</sup>, S. Glover Takahashi<sup>2</sup>

<sup>1</sup>Centre Hospitalier Universitaire Sainte-Justine, Montreal, QC; <sup>2</sup>University of Toronto, Toronto, ON

**Background:** While feedback is central to effective health professions education, it is repeatedly viewed by both learners and faculty as unsatisfactory. Much has been written about the need for, and the mechanics of feedback. Recent work suggests feedback may need to be re-conceptualized to be less frequent but more effective, and welcomed by the receiver within the context of a constructive relationship and a culture of continuous learning and improvement.

To improve the culture of feedback, faculty developers and education leaders need enhanced approaches to feedback and coaching to support their success implementing competency based curriculum approaches.

**Summary of Work and Results:** This case study describes a multi-level, systems approach that applies an integrated relationship-centred approach to building individual, program and systems capacity for effective feedback. The intervention took place across multiple post-graduate programs at one institution over a period of 18 months.

We report on the guiding theoretical frameworks used in order to achieve a sustained improvement to the practice and culture of feedback, including faculty and residents co-learning. The resources and interventions that were developed are described. Early qualitative and quantitative program evaluation data indicates that resident and faculty co-learning was an important aspect in the success of the approach; the importance of the relationship between trainee and faculty key learning points for program participants.

**Discussion, Conclusion and Take-home Messages:** Key lessons from this case study highlight the value of inventory of program needs for improved culture of feedback; the benefits of concurrent developmental activities that includes faculty and learners; the benefits of flexibility in educational delivery; the need for longitudinal mentorship of learners and faculty; and the positive potential impact of multi-level, systems approach that applies an integrated relationship-centred approach to building individual, program and systems capacity for effective feedback.

009

Curriculum design/programming for faculty development

### **Data driven faculty development strategic planning for implementing competency based curricular reforms**

S. Glover Takahashi, G. Sirianni

University of Toronto, Toronto, ON

**Background:** Expectations of faculty in the era of competency based (CB) curricular reform are evolving at a rapid pace in many health profession educational programs. The wide-ranging changes and the pace of those changes benefit from faculty development (FD) strategies that are flexible and adapt to concurrently meet the diverse needs of multiple groups including faculty, learners and educational leaders involved competency based curricular reforms. This research collected the input of experienced early education leaders who were early implementors to determine their experience and needs with regards to FD in CBME.

**Methods:** This multi methods research included: an online survey of 168 faculty development leaders; development of a FD planning tool; one to one consultations on FD plans with 23 key informants, and summary of needs and priorities across the FD informant meetings.

**Results:** The survey response rate was 44.6%. 80% of respondents had programs that had already launched to competency based curricular reform. The survey offered FD advice on best formats, best timing and key topics. The survey results informed the FD planning tool and the semi structured interviews. Key learning from the interviews was that the greatest need was for resources to support learners and teachers in the fast pace of curricular reform. Additionally, the interviews illustrated the needs faculty development on how to include new assessment tools and processes into their busy clinical practices. Other identified FD needs were for feedback and coaching skills and advanced FD development for Competence Committee Chairs and members.

**Conclusions:** This research illustrates how data driven faculty development can inform and support competency-based curricular reforms. Ongoing check ins and follow up may be helpful to monitor changes in FD gaps and needs over time.

010

Curriculum design/programming for faculty development

### Development of a competency framework for residents as teachers

J. Liang<sup>1</sup>, C. Chen<sup>2</sup>, C. Chen<sup>3</sup>, C. Huang<sup>1</sup>, W. Jean<sup>4</sup>

<sup>1</sup>Taipei Veterans General Hospital, Taipei, Taiwan; <sup>2</sup>National Yang-Ming University, Taipei, Taiwan; <sup>3</sup>Taipei Medical University Hospital, Taipei, Taiwan; <sup>4</sup>Far Eastern Memorial Hospital, Taipei, Taiwan

**Background:** Residents play an important role as teachers of interns and medical students. Teaching also helps these trainee-teachers in their learning. Beyond the well-known six core competencies for postgraduate training of ACGME, the teaching competencies should be included to the resident training programs and the milestones should be clearly defined as the references of curriculum design and evaluation.

**Summary of Work:** The working group consists of twenty members, including five experts from different major teaching hospitals across Taiwan, and 15 from one public medical center. The contents of teaching competencies were drafted by an experienced physician educator in Oct. 2018. The draft was sent to each group member and the feedbacks were collected. Two expert meetings were held for consensus monthly. The draft was revised after each meeting and the revision was sent to each member again. After three times of revision, the contents of teaching competencies of residents are finalized in late January, 2019

**Summary of Results:** Two core competencies, instruction and assessment, with three sub-competencies and 37 milestones are adopted in the final edition of competencies of residents as teachers. The sub-competencies are "dissemination of knowledge" and "skills teaching" for instruction and "direct observation and feedback" for assessment.

**Discussion:** Several concerns were proposed during the development process. First, the add-on teaching competencies may increase the burden of clinical teachers to evaluate. Besides, the milestones should be easily evaluable behaviors or skills rather than personal characteristics. As the result, the final edition is relative concise for the clinical feasibility.

**Conclusions:** Instruction and assessment are the two core competencies for residents as teachers. Three sub-competencies with 37 milestones are developed.

**Take-home Message:** A framework of competencies for residents as teachers is developed. It could be applied in combination with other existed competencies for a more holistic of postgraduate training plan.

011

Curriculum design/programming for faculty development

**Innovative, comprehensive faculty development for large group teaching in a medical school affiliated with a large healthcare system**

E. FM. Schlegel, D. Olvet, A. Fornari

Hofstra/Northwell, Hempstead, NY, United States

**Background:** Up to 30% of large group sessions at the Zucker School of Medicine are led by clinical faculty employed by our affiliated healthcare system (Northwell Health) spread out over far geographical distances. Large group leaders are expected to deliver the material using active learning techniques. However, there are significant challenges to providing faculty development to a geographically dispersed group. We describe a systematic approach to ensure teaching excellence among clinical faculty teaching in large group sessions.

**Summary of Work:** We implemented a 6-fold faculty development approach, (1) Foundational Skill Building, (2) Personal Coaching, (3) QA/QI Incorporating Feedback and Evaluation Data, (4) Continuous Introduction of Teaching Innovations, (5) a System-based Community of Practice, and (6) Educational Onboarding for newly-appointed faculty. Individualized consultations determine the needs, build a collaborative working relationship, and focus on improvements through a feedback cycle. Newsletters, templates and other resources are disseminated through the Learning Management System and distribution channels to maintain continuous communication.

**Summary of Results:** After partnering with individual faculty, student evaluations have been favorable commending enjoyable in-class activities and effective use of technology. Data will be presented from semi-structured interviews evaluating the program structure, as well as from student evaluations. Close collaboration with the course directors is needed to determine logistics of faculty development based on session performance and to acquire teaching skills.

**Discussion and Conclusions:** Targeted skill building, one-on-one targeted consultation and feedback, flexible availability of the faculty development specialist, enhanced communication strategies and innovative thinking are key to accommodating the different needs of faculty teaching in large group sessions.

**Take-home Message:** Successful faculty development for educators working within a large healthcare system can be accomplished through flexibility and innovative communication strategies within a curricular framework. Our 6-fold faculty development program prepares health care professionals for effective teaching in large group sessions.

012

Curriculum design/programming for faculty development

### **From lit to lightbulbs: A comprehensive approach to needs assessments**

E. K. Soleas, N. Dalgarno, R. van Wylick, I. Harle

Queen's University, Kingston, ON

**Background:** Continuing Professional Development (CPD), Faculty Development (FD), Education Scholarship (ES) and Global Health (GH) offices need to produce programs in compliance with the national standards. The foundation of every program should be a comprehensive and representative needs assessment. What constitutes a comprehensive needs assessment? Does this help a planning committee function optimally and achieve better outcomes? In this presentation, we offer answers and a paradigm for consideration.

**Summary of the Work:** As a collaborative union of several offices (CPD/FD/GH/ES) we brought together a diverse array of thinkers and professionals with the common goal of growing into a comprehensive research centre that simultaneously develops immersive professional education. Recognizing that our strength is having different talents housed in individual teams we instituted a process where every program or product to be developed begins with a thorough literature review spearheaded by ES. This review synthesizes themes and isolates educational opportunities for development.

**Summary of Results:** These opportunities are converted to avenues for scholarship activities using representative stakeholder data sources including focus groups, interviews, and surveys. The sum of the findings from these independent sources would be combined with relevant past program evaluations and needs assessments followed by presentation to planning committees in CPD/FD/GH/ES to inform program/product designs.

**Discussion and Conclusions:** We have been using this structure for the better part of a year and our program evaluation scores, diversity of attendees, participant satisfaction, and office synergy have noticeably improved. Our process provides a rigorous, representative foundation for our CPD/FD/GH events, while also generating opportunities for scholarship.

**Take-home Messages:** While expending vast resources on scholarship might seem counter-intuitive for an education office, the two are cross-pollinating for offices that prioritize doing education well. This model will be step-by-step illustrated and opportunities highlighted for ease of attendee replication.

013

Faculty development for research and scholarship

### Fostering socially accountable rural health research through longitudinal faculty development

C. H. Bethune<sup>1</sup>, S. Asghari<sup>1</sup>, T. Heeley<sup>1</sup>, W. Graham<sup>2</sup>

<sup>1</sup>Memorial University of Newfoundland, St. John's, NL; <sup>2</sup>Memorial University of Newfoundland, Port aux Basques, NL

**Background:** Rural clinical faculty (RCF) often encounter questions that matter to their patients, but lack the skills to investigate these questions through research. Memorial University (MUN; Newfoundland & Labrador, Canada) launched 6for6 to address this issue.

**Summary of Work:** 6for6 is a longitudinal faculty development program focused on improving the research skills of RCF at MUN. True to its title, 6for6 sponsors six RCF annually to attend six educational development sessions. It uses a tailored curriculum to empower RCF as leaders in the pursuit of socially accountable, rurally-focused health research.

**Summary of Results:** Using a needs assessment of RCF we designed a blended curriculum to address gaps in their research skills. The curriculum consists of six two-day small group learning sessions using face-to-face workshops, individual mentorship from academics, library support and online content (e.g. readings, videos, activities, assignments). Each participant develops their own research project through the lens of their unique rural context, enabling them to hone and apply their research skills. Peer review enriches each project through regular pragmatic feedback and learning opportunities.

**Discussion:** 6for6 is continuously evaluated and improved using face-to-face discussion and feedback, pre-post surveys, and end-of-program focus groups. Thirty RCF have pursued community-relevant research projects, resulting in 10 publications, and \$3 in grants for every \$1 MUN invests in 6for6.

**Conclusions:** 6for6 is empowering its participants to conduct socially accountable rural health research. This success is attributable to a trusting relationship between the core team, participants and panel of experts, with participant engagement at all stages to iteratively improve the program based on their feedback.

**Take-home Messages:** Faculty development programming for RCF in research fosters unique, relevant, impactful projects. The curriculum should be supported by passionate faculty and staff, tailored to participant needs, incorporate peer engagement through review and feedback, and be responsive to changes.

014

Faculty development for research and scholarship

### **High performance from high expectations: Growing the McMaster clinician educator area of focused competency program**

T. M. Chan, D. Brandt-Vegas

McMaster University, Hamilton, ON

**Background:** Medical education is increasingly becoming professionalized. The requirements for entry to scholarship and leadership within academic health sciences centres is increasing. Within Canada, there are few practical, competency-based certifications for those seeking a more practical route for becoming a clinician educator.

**Summary of Work:** The Royal College of Physicians and Surgeons of Canada's Clinician Educator Area of Focused Competency (AFC) diploma program was set up in 2014 at McMaster University.

**Summary of Results:** The inaugural class was a group of 5 trainees. Subsequently trainee classes have ranged between 8 and 13 individuals. A total of 37 trainees have registered in the program to date. Four trainees completed the program, two withdrew from the program, and 28 currently remain in progress at different stages. Most trainees (n=25) in the program are faculty members at McMaster University, eight of which belong to a regional campus. Other trainees (n=12) are senior residents who are concurrently completing the AFC during their residency training. Trainee-led innovations include a senior emergency medicine simulation curricula, interdisciplinary in situ patient-safety audits, a faculty development certificate program, and an podcast-based online curriculum.

**Discussion:** McMaster's Clinician Educator AFC is a proof-of-concept for a new competency-based faculty development program that aims to strengthen the teaching and learning environment, while also fostering a community of practice of educators. The program encourages local medical education innovation and solutions.

**Conclusions:** McMaster's Clinician Educator AFC has successfully attracted a growing group of faculty members and senior residents that collaborate on local education innovation, while developing a foundation in concepts related to medical education. This experience is applicable for other similar academic institutions wishing to develop their local medical education community.

**Take-home Message:** A practical faculty development program can create both a community of practice, but also tangible improvements to education across multiple sites

015

Faculty development for research and scholarship

### Education theory made REALLY practical: Turning a faculty development activity into scholarship via the ALiEM faculty incubator

S. Krzyzaniak<sup>1</sup>, M. Gottlieb<sup>2</sup>, J. Sherbino<sup>3</sup>, D. Papanagnou<sup>4</sup>, M. Boysen-Osborn<sup>5</sup>, L. Yarris<sup>6</sup>, T. M. Chan<sup>3</sup>,

<sup>1</sup>University of Illinois, Peoria, IL, United States; <sup>2</sup>Rush University Medical Center, Chicago, IL, United States; <sup>3</sup>McMaster University, Hamilton, ON; <sup>4</sup>Thomas Jefferson University, Philadelphia, PA, United States; <sup>5</sup>University of California Davis, Davis, CA, United States; <sup>6</sup>Oregon Health Sciences University, Portland, OR United States

**Background:** Often clinician educators have difficulty with incorporating acts of education scholarship into their daily lives. Few faculty development opportunities actually scaffold acts of creation by participants.

**Summary of Work:** The ALiEM Faculty incubator was created as a year-long, continuous, concurrent faculty development. Teams of three geographically-separate incubatees are grouped and challenged to use a common template to explain a specific conceptual framework/theory and relate it to their educational practice via a vignette. These chapters are then edited by Faculty Incubator mentors and then openly distributed as blog posts via the International Clinician Educator blog (<https://icenetblog.royalcollege.ca/>) for peer review. Chapters are further edited and then assembled into a peer-reviewed, self-published, free open access medical education e-book which is distributed via ResearchGate and iTunes.

**Summary of Results:** Since 2016, incubatees have authored two e-books, comprising 20 total chapters. The first book, published in August 2017, has had 4,563 reads via ResearchGate and 483 downloads via iTunes. The second book, published in November 2018, has had 1,473 reads via ResearchGate and 230 downloads via iTunes. Based on customer reports, several health professions education programs have added these books as resources to their curricula.

**Discussion:** Based upon these results, our incubatees are clearly filling a community need to connect theory to practical outcomes. Moreover, they have now had an early success that has helped them to gain experience with a multi-centre collaboration, providing them with skills they can use in the future. Importantly, they have also contributed a meaningful and useful work that educates others.

**Conclusions:** With scaffolding and support, early career clinician educators are capable of generating important scholarly contributions, while learning important collaboration skills.

**Take-home Message:** Consider challenging junior faculty with opportunities to create while being developed.

016

This abstract has been withdrawn

017

Faculty development for research and scholarship

### **The essence of education scholarship: A realist evaluation of a longitudinal faculty development program**

R. Penciner, R. Bordman, V. Christofilos, B. Onyura, R. Stoller, R. Freeman

University of Toronto, Toronto, ON

**Background:** Competence in education scholarship (ES) is desirable and valued amongst faculty based in community hospitals. However, there is limited research on initiatives to develop ES competence amongst these physicians. With further integration of learners into community hospitals, there is an imperative to support faculty in these settings.

**Summary of Work:** We developed a 12-month longitudinal faculty development program in ES for faculty based in community hospitals. Core program activities included (1) in-person workshops on ES principles and (2) customized supports that included coaching and advising with clinician-educators and consultations with education scientists. We conducted an evaluative study to examine how program participation influenced these participants' engagement and productivity in relation to ES. Data were collected using curricular documents, participant surveys and observed presentations and were analyzed using thematic analysis.

**Summary of Results:** Fifteen participants affiliated with 9 hospitals (13 physicians, 3 other health professionals) completed the program. We identified 3 themes that influenced program outcomes including; (1) motivation – both extrinsic and intrinsic; (2) personalized and collaborative support - enhancing participant confidence and project advancement; (3) curricular design features – supporting and generating a “productive struggle” as essential for learning and developing a community of practice.

**Discussion:** The program was designed to support faculty based in community hospitals in (1) development of basic competencies in ES; (2) advancement of scholarly projects and (3) development of communities of practice. With careful attention to curricular design and motivated participants, we were able to realize these objectives.

**Conclusions:** Effective faculty development in ES for faculty based in community hospitals requires deliberate curricular design, development of fundamental skills and a high level of support.

**Take-home Message:** Longitudinal faculty development programs can be effective with attention to; (1) curricular design (2) opportunities for ongoing social interaction and (3) customized supports such as coaching

018

Faculty development for research and scholarship

### Using a professional development course on introduction to qualitative research to promote post-course research initiatives

M. Rashid, C. Hodgson

University of Alberta, Edmonton, AB

**Background:** The Teaching Scholars Program (TSP) was introduced to the Faculty of Medicine and Dentistry (FoMD), University of Alberta as a longitudinal professional development (PD) opportunity in 2011 and is now offered through the IDEAS Office. The Program consists of 7 separate longitudinal courses. The TSP006 course: introduction to Qualitative Health Professions Educational (HPE) Qualitative Research is one of 3 courses needed for a FoMD non-credit certificate in TSP HPE Research. The TSP006 course was taught in the spring and fall of 2018 due to its demand by faculty and resident. Many faculty and residents are unfamiliar with qualitative research and how to design and conduct a qualitative study. The goals of TSP006 are to help develop qualitative HPE research skills within the FoMD and to increase collaboration and productivity of the participants beyond the period of the course.

**Summary of Work:** Teaching clinicians how to conduct qualitative research is challenging given the lack of formal training in this area. It is even harder to increase research productivity after completion of one PD research course. Often after a PD course, faculty members go back to their busy lives and find it difficult to implement a research study on their own. Our goal was not to only teach a PD course, but to use that experience as an opportunity to stimulate continued research collaboration beyond the course. Our indicators of success are: (1) course evaluations, which indicated high course satisfaction and (2) class members' collaborative work on a post-course qualitative research project funded by the FoMD.

**Conclusion:** Scholars were able to identify and reflect upon a wide range of qualitative research approaches, and methodologies. Through such professional development course that we will be able, create a community of scholars.

019

Faculty development for research and scholarship

### **What we learned from two educational research series: Lessons learned for interprofessional faculty development**

E. K. Soleas, N. Dalgarno, C. Laverty, R. Egan, R. van Wylick

Queen's University, Kingston, ON

**Background:** Interest in Scholarship in Teaching and Learning (SoTL) is driven in part by the need to provide systematic academic development for faculty anchored in evidence-based practice and quality assurance frameworks. This proposal reports on a mixed method evaluation of two iterations of an 8-session interprofessional Educational Research Series to determine if it met the needs of faculty, health professional students, preceptors, graduate students, and staff participants.

**Summary of Work:** Framed by both adult learning theory and constructivism, data was collected from session exit surveys (n=91), attendee interviews (n=9), and facilitator focus groups (n=3).

**Summary of Results:** The quantitative data from the exit surveys found that participants better understood (71.5%) and became more confident (61.5%) in educational research. However, they did not feel they received sufficient feedback on their projects (41.8%). Three overarching themes emerged from the qualitative data: personal growth, supports for learning, and challenges to learning. Participants perceived they had a better understanding of and support for educational research. They felt their learning was supported through facilitator expertise, interactive sessions, an interprofessional focus, and increased access to resources. The challenges included depth versus breadth, time, and educational language and theory. This paper will inform other institutions wishing to build SoTL within their institutions.

**Discussion and Conclusions:** The Series was well received by participants and provided a foundational introduction to educational research. It demonstrated the benefit of integrating varied perspectives when learning about educational research and that capacity building exercises for researchers in higher education can cater to a number of interests simultaneously.

**Take-home Messages:** An interprofessional approach broke down siloes, and reduced the number of overlapping programs offered which indicates that more cost-effective Faculty Development can still be a improvement over traditional FD.

020

Faculty development for teaching, learning and assessment

### **Biomedical curriculum alignment contents and competencies focused on the desired former students profile**

I. Aleluia, S. Brasil, L. Rocha, L. Vilas Boas, G. Argolo Ferraro, S. Ferrer

Escola Bahiana de Medicina e Saude Publica, Salvador, Brazil

**Background:** A critical thinking about pedagogical *praxis* is part of both faculty and institutional engagement on the health professional formation, being then linked to a live curriculum: a one which evolves accordingly to pedagogical needs. This workshop has analyzed the competencies developed in a biomedicine course, focusing on the graduate's previous profile.

**Summary of Work:** On 4 initial meetings, faculty members brought up their own concepts concerning competences (cognitive, procedural, attitudinal) present in their disciplines using conceptual maps. Thus, they could identify same or similar contents in different disciplines; discussing and identifying then about differences and similarities in what refers to complexity level, approach or context. So, they brought up methodologies of teaching-learning process and assessment, making then links between contents, competencies and the previous graduate's profile. In a second phase, faculty members aligned the discipline's differences by semester and, after discussion, they did the same with the semesters.

**Summary of Results:** 21 teachers, together with the course dean and one educationalist, took part of a discussion having pointed out the need of investment on attitudinal and humanistic contents, side by side with cognitive subjects, in order to build essential competencies characteristics aiming to strengthen the biomedical identity.

**Discussion:** The conceptual map is an important tool on medical education. In our workshop, the use of making connections with the objective of clarifying the problem, helped teachers to better understand this tool in searching to define and solve problems.

**Conclusions:** An important point was the benefices of a collective planning and articulation among and simultaneous evolvment of competencies, contents and methodologies of teaching, learning and assessment processes adequate to a biomedical course.

**Take-home Message:** Reflection about our *praxis*, is essential for a good faculty development, as well as for a dynamic curriculum development, in order to promote the desired professional qualification.

021

Faculty development for teaching, learning and assessment

### Perceptions of junior faculty in general internal medicine regarding mentoring medical students and residents in scholarly projects

P. Jha, S. Bhandari

Medical College of Wisconsin, Milwaukee, WI, United States

**Background:** Our study's purpose was to survey junior faculty in the Division of General Internal Medicine (GIM) at a tertiary academic center to explore their perceptions regarding benefits of mentoring, barriers to mentoring and possible interventions to counteract such barriers.

**Methods:** A Qualtrics survey was emailed to all assistant professors in GIM at the Medical College of Wisconsin (MCW) to assess perceived benefits, barriers and interventions. Responses were coded using a five-point Likert scale. We dichotomized responses into positive, indicating 'strongly agree' or 'agree', and negative, pertaining to the remaining responses. Comparison between categorical groups was performed using a Chi-square test. All analyses were performed using SAS 9.4 (Cary, NC).

**Results:** Of 50 surveyed, we had 34 completed responses (30 academic hospitalists and 4 primary care physicians) corresponding to the response rate of 68%. Nearly half (47%) had been at MCW for 1-3 years and 18% for >6 years. Only 38% mentored resident and student projects in the first year; after that only 50% were involved in mentoring in subsequent years. The perceived benefits of mentoring included enhancing curriculum vitae (100%), building educator portfolio (94%), critical thinking (88%), increased medical knowledge (85%), enhancing scientific writing and publication (82%), taking leadership positions in medical education (82%), networking and collaboration (79%) and meeting teaching requirements (76%). Various barriers to mentoring are summarized in Figure 2. Perceived interventions included protected time for supporting mentorship and scholarship (97%), incentives like financial or recognition (85%), institutional support (82%), coordinating with experts (79%), training and workshops (77%), structured peer mentorship program (71%) and greater leadership support (68%).

**Discussion:** Our findings highlight the need for structured mentorship and support from leadership to promote mentorship and faculty development.

022

Faculty development for teaching, learning and assessment

### Teaching patient safety: The synergy of academic and clinical partnerships to change the culture

M. Daly<sup>1</sup>, M. Boillat<sup>1</sup>, F. luconi<sup>1</sup>, M. buck<sup>1</sup>, N. korah<sup>1</sup>, S. mak<sup>1</sup>, V. coulombe<sup>2</sup>, R. proulx<sup>2</sup>, E. khalil<sup>1</sup>, S. Vaillancourt<sup>1</sup>, R. Antonacci<sup>1</sup>

<sup>1</sup>McGill University, Montréal, QC; <sup>2</sup>Integrated Health and Social Services University Network for West-Central Montreal, Montréal, QC

**Background:** There is a need to develop a culture of patient safety within the healthcare setting. Increasingly, patient safety principles are included in formal curricula and taught to learners at both the undergraduate and postgraduate levels. Most recently, patient safety has been integrated into the CanMEDS 2015 framework. Yet much of clinical teaching and learning is *work-based*, and changing the culture of patient safety involves changing the attitudes and behaviors of clinical teachers who serve as powerful role models for students and residents. It is imperative that we provide educational sessions for clinical teachers in order to sensitize them to the importance of role modelling and of the hidden curriculum in advancing patient safety.

**Methods:** In response to this need, the Offices of Continuing Professional Development, Faculty Development, and Interprofessional Education at McGill University, in collaboration with the McGill teaching hospitals, came together to design a series of educational initiatives for clinical teachers that support the teaching and practice of patient safety in the workplace. Workshops were based on the Canadian Patient Safety Institute's Safety Competency Framework. The six domains were covered in the first two workshops while the final workshop focussed on quality improvement. Workshop activities included videos, case studies and multiple small group discussions.

**Results:** Participants reported an increase in their knowledge of patient safety theory as well as an improvement in their perception of how to intergrate patient safety theory into their teaching and clinical practices. The interprofessional nature of the planning committee also reinforced the importance of a diverse team when discussing patient safety issues.

**Conclusions:** Take home messages included the synergy of the partnership between academic and clinical partners in advacning a patient safety culture in addition to role modelling technicques that can be integrated into existing teaching sessions to highlight patient safety theory.

023

Faculty development for teaching, learning and assessment

### Fostering faculty teaching of clinical reasoning

K. Forbes, J. Foulds

University of Alberta, Edmonton, AB

**Background:** There has been much attention in the medical education literature on teaching and assessment of clinical reasoning (CR). Making sense of varied definitions of CR and translating this knowledge to practical teaching strategies was the focus of our faculty development (FD).

**Summary of Work:** A three-part FD workshop series was created to provide Faculty of Medicine and Dentistry (FOMD) members an opportunity to learn about CR theoretical constructs, explore a repertoire of clinical teaching tools for use in their own setting, and learn and share experiences with colleagues. Each 1.5-hour accredited workshop was offered quarterly. Workshops in the series were titled: (1) The Fundamentals of Clinical Reasoning; (2) What's in a Question? Effective Questioning Techniques to Foster Clinical Reasoning; (3) Expanding Your Toolkit for Teaching and Assessing Clinical Reasoning. Each workshop covered background theory and concepts and provided participants with a variety of interactive activities to practice using educational tools. Guided exercises used clinical cases demonstrating application to the clinical learning environment

**Summary of Results:** Four sets of the three workshops were completed over a one-year period. Each session included nine to 20 faculty representing a range of disciplines within FOMD. Combined mean evaluation scores for workshops 1, 2 and 3 respectively were 4.80 (n=71), 4.75 (n=59) and 4.84 (n=56).

**Discussion:** Significant and ongoing interest in this workshop series continues with overwhelmingly positive feedback from participants. Participants highlight group discussions, idea sharing, and the resources provided as most appreciated.

**Conclusions:** Faculty rate this interactive workshop series highly. Having participants complete the three workshops as a group was particularly valuable in building relationships and networking.

**Take-home Message:** Faculty members' collective experiences in teaching and assessing CR, when shared in a positive environment, can serve to enrich the learning of others.

024

Faculty development for teaching, learning and assessment

### "What works and what doesn't" in appraisal meetings?

A. Soerensen<sup>1</sup>, P. Adreassen<sup>2</sup>, M. Kleis Moeller<sup>3</sup>, B. Malling<sup>1</sup>

<sup>1</sup>Randers Regional Hospital, Randers, Denmark; <sup>2</sup>Aarhus University, Aarhus, Denmark; <sup>3</sup>Aarhus University Hospital, Aarhus, Denmark

**Background:** In Denmark, an educational advisor is assigned to every trainee in each rotation of postgraduate medical education (PGME). The advisor must conduct at least three appraisal meetings with the trainee. This study investigates "what made it work" for trainees who evaluated the appraisal meetings most beneficial (successes) respectively least beneficial (non-successes).

**Summary of Work:** Inspired by Brinkerhoff's Success Case Method a survey was conducted among all 129 trainees employed in their first 6-month rotation of PGME in Central Denmark Region. A cluster-analysis of 79 included trainees gave rise to 8 successes, 7 non-successes and 62 average participants. Semi-structured interviews were completed with 6 successes and 5 non-successes and analyzed with a content analysis approach.

**Summary of Results:** What made appraisal meetings work for successes as opposed to non-successes were more time spent on meetings experiencing advisor as a contact person being introduced to purpose and process of the meetings using the personal learning plan for clarification of learning objectives and follow-up getting feedback on clinical skills, global performance and career plans. Appraisal meetings and learning plans can foster reflections on educational goals, progress and career. Also it can enhance self-confidence and a feeling of security and belonging. Success depends on advisor's motivation and skills.

**Discussion and Conclusion:** We found a strong relation between trainees' benefits from appraisal meetings and advisors' motivation and skills. The latter support the need for training of educational advisors. However training provides no guarantee for motivation. We therefor raise the controversial question: Should all doctors serve as educational advisors – or should we enroll only motivated candidates and ensure sufficient, continuous faculty development of those?

**Take-home Message:** Appraisal meetings and personal learning plans can foster reflections on education and career as well as self-confidence and security, but only if the advisor is motivation and skilled.

025

Faculty development for teaching, learning and assessment

### **Teachers are just students: Evaluation of and adaptations to a teacher qualification track based on self-directed learning**

J. Kooloos, J. Draaisma, R. Engbers

Radboud University Medical Center, Nijmegen, Netherlands

**Background:** At the Radboud University Medical Center in Nijmegen, both student curriculum and teacher qualification (TQ) track are founded on principles of self-directed learning (reported at the 4<sup>th</sup>-ICFDHP). With students indicating their struggle with self-directed learning, can teachers practice what they preach? We reflect on teachers' level of self-directedness during the TQ-track, and on their perceived learning outcomes, using informal feedback and an e-questionnaire.

**Summary of Work:** During the TQ-track, communities of eight teachers each (CoTs) meet six times during one year to discuss the development of their teaching competencies, while building individual portfolios. So far, fifteen CoTs were installed, and nine have completed all meetings. The TQ-track is founded on self-direction: the meetings have no specific format or agenda.

**Summary of Results:** Feedback from the participating teachers tells us that they struggle most with self-assessment on competencies and constructing reflective portfolios. Therefore, we decided to tune down the level self-direction, dedicating two of the six CoT-meetings to discuss teachers' progress concerning competencies and portfolios. Teachers experience this as very supportive. Perceived learning outcomes on teaching competencies are also reported.

**Discussion:** During their TQ-track, CoTs are able to autonomously engage in learning activities, improving their educational skills. However, they indicate that they need more structural support to actually finish the track. Finding the right balance between the level of autonomy and the level of support is vital to maximize teachers' learning outcomes.

**Conclusion:** Communities of teachers in the TQ-track in Nijmegen appear to be capable in self-management only to a certain extent. Support is added to the TQ-track, but we are in constant search of ways maximize teachers' self-management.

**Take-home Message:** When placed in a community of learners, teachers express the need for support and directions concerning achievement of goals and format of the end-result, just as students would do.

026

Faculty development for teaching, learning and assessment

### The role models of medical education mentors

M. Kvernenes<sup>1</sup>, E. Schei<sup>1</sup>, L. Hokstad<sup>2</sup>

<sup>1</sup>University of Bergen, Bergen, Norway; <sup>2</sup>Norwegian University of Science and Technology, Trondheim, Norway

**Background:** Role models are acknowledged as crucial to medical students in their professional development. Mentors have an important function as role models for students and residents, yet we know little about the inspirations, reflections and experiences that give shape to mentors' approaches to mentoring. In this paper, we ask: Who are the mentors' role models?

**Summary of Work:** We interviewed 23 mentors from three medical programs in Canada and Norway. The transcripts were analyzed using a narrative approach, allowing us to identify threshold concepts in the mentors' descriptions of developing as professional physicians and as mentors.

**Summary of Results:** The data provides rich descriptions of the mentors' role models in two contexts: as professional physicians and as mentors. Preliminary findings indicate that the learning trajectories for the two roles are intertwined, suggesting that mentors give shape to their roles as mentors largely by reinterpreting and reflecting on significant thresholds in their professional development as medical doctors.

**Discussion:** Our findings illustrate how previous learning experiences can give new meaning when put in a new context. This challenges traditional linear stage models of learning, which in turn has implications for faculty development designed to support physicians as mentors. Our findings suggest that facilitating reflection on their own professional identity formation and educational trajectory as physicians can be a beneficial faculty development approach for mentors.

**Conclusion:** Mentors rely heavily on their own learning experiences and previous role models when they approach mentoring. By understanding what motivates, inspires and give shape to mentors' perception of their mentoring role, faculty developers are better equipped to provide pedagogical support.

**Take-home Messages:** Faculty development initiatives designed to support mentors should be based on guided reflection principles and self-awareness of the significance of role models.

027

Faculty development for teaching, learning and assessment

### Peer observation and feedback for teaching as an emerging faculty development strategy in health professions education

H. Lochnan<sup>1</sup>, S. Kitto<sup>1</sup>, K. Leslie<sup>2</sup>, P. Rowland<sup>3</sup>, P. Hendry<sup>1</sup>

<sup>1</sup>University of Ottawa, Ottawa, ON; <sup>2</sup>Centre for Faculty Development, Toronto, ON; <sup>3</sup>Univeristy of Toronto, Toronto, ON

**Background:** In recent years, the literature on faculty development (FD) has significantly grown. Despite advances, there has been a limited number of works that synthesize and categorize the growing volume of publications on FD that focus specifically on peer-to-peer observation and feedback for teaching across all health professions. The need to comprehend the current state of peer-to-peer feedback to promote successful teaching in the health professions education context is considerable. This scoping review is a timely addition to literature to support this endeavor.

**Summary of Work:** The primary objective of this scoping review was to identify and examine the extent, range, and quantity of available evidence of peer-to-peer feedback in clinical teaching across the health professions education literature. Using Arksey and O'Malley six-step framework and following three inclusion criteria 20 articles published between 2004 and 2018 (a 15-year period) were included in the dataset for analysis.

**Summary of Results:** Over 45% of all included studies were originated from the USA, followed by Canada (35%), with other articles hailing from Australia, Europe and UK (20%). The articles came from the medical literature (60%), nursing (20%) and allied health journals (20%). Common barriers to implementation of peer feedback included insufficient training/preparation, subjective nature of feedback, and time commitment.

**Discussion:** More than 65% of the studies were published after 2014 demonstrating a burgeoning interest in using peer-to-peer observation and feedback for teaching in health care professional development.

**Conclusions:** This review is the first to generalize evaluations of peer-to-peer feedback in clinical teaching in order to help FD planners choose the most appropriate and efficient teaching strategies.

**Take-home Message:** It is hoped that such a review of existing scholarship across health professions will help to synthesize our knowledge of the field and guide future FD programs and their evaluation in medical education.

028

Faculty development for teaching, learning and assessment

### **Developing competencies for academic advisors and competence committee members: A grassroots community approach for faculty development**

E. K. Soleas, R. van Wylick, D. Dagnone, I. Harle, D. Stockley

Queen's University, Kingston, ON

**Background:** Implementing competency-based medical education (CBME) at the institutional level poses many challenges. One of these is having to rapidly and effectively enable faculty to be facilitators and champions of a new curriculum which utilizes feedback, coaching, and models of programmatic assessment.

**Summary of Work:** This project began with a systematic review of the available literature (n=37) followed by a community consultation survey which was distributed one year before the transition to CBME (n=83), and one year after the transition to CBME (n=144). After the first survey, a modified Delphi process of international experts involved in CBME was carried out to validate the competencies and create online modules (n=5) for faculty development.

**Summary of Results:** Our newly established competencies were accepted with an overwhelmingly positive response from all stakeholders. The Academic Advisors' competencies were focused on mentoring and coaching skills, rather than assessment skills; whereas, Competence Committee members were focused on the integration of multiple sources of assessment, and abiding by the new policies governing CBME such as when to promote a resident to the next stage of residency.

**Discussion:** The variety of perspectives provided a rich and comprehensive lens on what is required by faculty to be well-informed Academic Advisors or Competence Committee members. These competencies were informed by literature, molded by expert consensus, but still uniquely aligned to the SoM.

**Take-home Message:** We found value in taking an active community-based approach to developing faculty leader competencies sooner rather than later when transitioning to CBME. The specialization of Competence Committees members and Academic Advisors requires the investment of specialized professional development and the sustained engagement of a collaborative community with shared concerns.

029

Faculty development for teaching, learning and assessment

### **Role and impact of changing practice profiles in teaching and learning**

E. Wooster, D. Wooster

University of Toronto, Toronto, ON

**Background:** Canadian demographics are undergoing a profound shift resulting in a continually adapting healthcare environment for clinical practice. Within this environment, clinicians are experiencing a shifting scope of practice. These shifts impact teaching and may result in gaps in learning for trainees. Successful faculty development programs can help to address these gaps and may require integration of diverse methodologies.

**Summary of Work:** A survey was distributed to develop a snapshot of the current scope of practice of practicing vascular surgeons and to explore possible impacts on trainees.

**Summary of Results:** Eighty percent of surgeon respondents described a different scope of practice from their initial training. Reasons for this change included resource constraints, changing patient demographics, changing colleague demographics and patient preferences. Trainees described a decrease in availability of certain procedures and a changing training sphere during residency. Trainees often compensated for these gaps by pursuing fellowships at other institutions.

**Discussion:** Changing scope of practice for practicing surgeons impacts the current training sphere. This results in gaps in training that need to be addressed through faculty development initiatives. In some instances, providing trainees with exposure to procedures and patients may be a simple matter of realignment. In others, engagement of a different mix of faculty may help to expand the trainee experience.

**Conclusion:** Awareness of the current scope of practice of physicians and its impact on training programs is an important consideration in our changing health professional education continuum. Developing the necessary mix of clinical expertise to provide appropriate training opportunities is a vital consideration for faculty developers.

**Take-home Message:** Having current knowledge about the scope of practice of staff surgeons is an important in nurturing a successful training program. Faculty developers need to have accurate information regarding staff clinical skills and prepare programs to address any possible gaps.

030

Faculty development for teaching, learning and assessment

### How faculty development influences emerging trends in Canadian CPD: A scoping review

E. Wooster<sup>1</sup>, M. Paton<sup>1</sup>, M. Teferra<sup>2</sup>, A. Quaiattini<sup>2</sup>, F. Luconi<sup>2</sup>

<sup>1</sup>University of Toronto, Toronto, ON; <sup>2</sup>McGill University, Montréal, QC

**Background:** There have been widespread calls for health system reform and Faculty Development and Continuing Professional Development (CPD) have been identified as potential agents of change. This scoping review explores the landscape of and influential forces shaping CPD trends and its relationship with Faculty Development, examining the degree to which Faculty Development influences those trends.

**Summary of Work:** This scoping review follows Arksey & O'Malley's 6-stage framework. We included scholarly investigations, targeting practicing physicians in Canada, in the areas of CPD, CE and CME published in English and French between 2008-2019. Studies were coded independently and reviewed in pairs to ensure accuracy and inter-reliability.

**Summary of Results:** From the original 3761 references, a sample of 43 articles that met our inclusion criteria were selected to test and refine our study selection and coding procedures. 70% of the papers targeted physicians only and 14% targeted physicians working in interprofessional teams. Faculty development was explicitly referenced in 10% percent of articles. Forty percent of articles focused on continuing education techniques and approaches and 23% discussed clinical content areas. Simulation (39%) and workshops (31%) were the most commonly used instructional methods. Only 12% of articles explicitly cited a theoretical framework.

**Conclusion:** This scoping review explores the forces that influence the changing landscape of CME/CPD in Canada and may inform the alignment between CPD, and Faculty Development.

**Take home Message:** This scoping review aims to contribute to the evolution of the CPD field targeting multiple stakeholders and examining the influences of Faculty Development. The current trends revolve around: a) keeping physicians up-to-date in their roles as clinical practitioners, teachers and scholars, b) informing CPD developers, c) offering a clear understanding of the Canadian CPD and Faculty Development context in relation to licensing, regulatory bodies and policymakers, and d) identifying gaps for future research.

031

Faculty development for teaching, learning and assessment

### **TiMEtoTeach innovative outreach and support for universal faculty**

C. A. Dennis, N. Davies

University of Leeds, Leeds, United Kingdom

**Background:** In the Leeds medical degree, 75% of teaching occurs on placement, delivered by clinical and non-clinical professionals, many of whom without formal educational training. The dispersed and diverse nature of faculty pose challenges to consistency. TimetoTeach provides accessible and convenient faculty development in spite of time constraints and lack of resources within the healthcare environment. It promotes effective learning environments, interprofessional teaching and sustains partnership outside of the university.

**Summary of Work:** TiMEtoTeach is educational outreach, supporting transition into teaching and enabling skills development. Universal faculty (staff, students and members of the Patient and Carer Community) visit placement sites with 'pop-up' Continuing Professional Development sessions and free, pre-arranged bespoke training ensures promotion of quality teaching, assessment and feedback. This creates sustainable growth of an engaged interprofessional, universal medical education community.

**Summary of Results:** Our visits directly answer the requests of universal faculty to know more about delivery of medical education. We ensure sharing of good practice, and teaching in context with the rest of the curricula, thereby increasing capacity and enhancing capability of faculty.

**Discussion:** With focussed visits to practice areas we can ensure consistent teaching securing excellent student learning experiences. Competence and confidence of faculty is enhanced through reward and recognition.

**Conclusion:** Outreach in placement areas has raised awareness of medical education, encouraged enthusiastic teachers and provided a consistent message from the medical school. Support for interprofessional teaching has become accessible and focussed. Through building relationships, we can help support development of future medical educators.

**Take-home Message:** Faculty Development opportunities can be flexible yet directed. Outreaching in the workplaces promotes working in partnership and encourages all to develop their educational skills within a community of practice. This is a model which can be transferred to other disciplines and enhance collaborations between university and partnering professional workplaces.

032

Faculty development for teaching, learning and assessment

### How speaking up for learning can enable interdisciplinary teacher team processes for integrated education

S. Meeuwissen, W. Gijsselaers, I. Wolfhagen, M. oude Egbrink

Maastricht University, Maastricht, Netherlands

**Background:** Interdisciplinary teacher teams are responsible for the delivery of interdisciplinary activities in integrated education. Teachers' team learning processes have appeared to be essential for the successful development of interdisciplinary education. However, these team learning processes are not self-evident. Three general input levels of team learning concepts -individual, team and organizational- were used to (i) explore important factors that influence interdisciplinary team learning processes and (ii) understand whether teachers perceive these factors to enable or hinder team learning.

**Summary of Work:** A qualitative study was conducted. 17 members of different interdisciplinary teacher teams in the Maastricht University undergraduate health profession programs were interviewed. Sensitising concepts of team learning informed our interview guide and template analysis. Data were collected in an iterative process, until template development was seen as sufficient.

**Summary of Results:** Perceived core factors on the level of the individual, the team, and the organization were: 1) individual characteristics, skills and motivation, 2) teams' vision, decision-making and reflection, and 3) organizational communication, support and learning. Team learning was facilitated by creative, education-minded and student-centered individuals, who worked with shared task understanding and shared decision-making, within team cultures allowing reflection, questioning and speaking-up. Continuous organizational communication and support, and attention for a sustainable workforce needs encouragement to overcome possible problems.

**Discussion and Conclusion:** Although the barriers traditionally built between disciplines are high, they certainly are not insurmountable. Team leaders could play a central role in stimulating shared decision-making and creating learning cultures in which people routinely reflect on team processes, dare to speak-up and question each other.

**Take-home Messages:** Team members should be encouraged to embrace student-centered education; Team leaders should focus on shared decision-making and create a learning culture in which reflection, speaking up, and questioning another are key; Organizations should invest in continuous communication and support for learning.

033

Faculty development for teaching, learning and assessment

### Unwanted variation in quality of clinical supervision of medical students in Norwegian general practice

T. Mildestvedt, E. Schei

University of Bergen, Bergen, Norway

**Background:** In order to assess supervision quality in general practice outplacement, we surveyed 149 final-year medical students' experiences in 2018, in two classes, before and after an increase of outplacement from 4 to 6 weeks. The supervisors were general practitioners having received written instruction written instruction materials combined with intermittent, non-compulsory faculty development courses.

**Summary of Work:** Using a digital questionnaire, we collected quantitative and qualitative student data on the frequency and quality of supervision and feedback, and on the perceived learning value of different supervision experiences, such as observing a role model, and being observed during a consultation.

**Summary of Results:** While some students conducted more than 200 independent consultations, others reported less than 30. The number of student consultations observed fully by supervisor varied from 132 to zero. Increasing the outplacement from 4 to 6 weeks correlated with significantly increased numbers of independent consultations and observations by supervisors. Students' written feedback, while largely positive, suggest a lack of direct supervision and feedback on clinical performance. Students' experiences with 49 different clinical tasks showed undesired variation. As an example, some students did not get any experience with performing a gynaecological examination.

**Discussion:** There is a dearth of data about supervision practices and learning outcomes for Norwegian medical students during clinical rotations. The current study documents a need for more knowledge and better faculty development programs.

**Conclusions:** Most students profited strongly from general practice outplacement, but the quality of supervision varied, and was often suboptimal. The observed variations suggest that the current system of faculty development for family physicians in supervising roles, needs improvement.

**Take home Message:** General practice is a valuable clinical learning arena for senior medical students, but poorly trained supervisors in general practice understand and practice their supervisor role differently.

034

Faculty development for teaching, learning and assessment

### Taking stock of what is known about Faculty Development (FD) for CBME: A Scoping Review

G. Sirianni<sup>1</sup>, S. Glover Takahashi<sup>1</sup>, J. Myers<sup>2</sup>

University of Toronto, Toronto, ON; <sup>2</sup>Sinai Health System, Toronto, ON

**Background:** Medical training programs are undergoing transformational change with the advent of competency-based medical education (CBME). However, many faculty members feel ill prepared to carry out the teaching and assessment tasks required. Faculty development (FD) is often proposed as a key factor in CBME's successful implementation. The primary objective of this project was to conduct a scoping review of the literature to inventory what is currently written about FD in the CBME context.

**Summary of Work:** Four databases were searched using relevant keywords. Titles and abstracts generated by the literature review were manually reviewed for relevance. Articles flagged for full review: 1) Relevant to FD for undergraduate or postgraduate medical education 2) Descriptive articles on program experience with FD in CBME 3) Studies looking at best practices in FD in CBME 4) Consensus statements and frameworks 4) Exclusion: Validation studies focused solely on assessment tools; studies which did not specifically mention CBME. Themes identified and agreed upon by two reviewers.

**Summary of Results:** Total of 709 citations and abstracts manually reviewed for relevance with 19 flagged for full review. Main results: 1) All studies published after 2009 2) 8/19 articles relevant to Postgraduate Medical Education 3) Most studies from Canada, USA and Europe 4) 4/19 articles with an experimental design with most articles being opinion papers or consensus guidelines. Many studies suggest what should happen in CBME FD, but not the best practices or practical approaches to achieving this.

**Discussion:** This scoping review illustrates that FD for CBME is a relatively new area for study with a paucity written on FD in CBME and few high quality studies. Themes from the current studies include content areas of focus for FD (e.g. workplace-based assessments) and common barriers encountered.

035

Faculty development for teaching, learning and assessment

### **Collecting wisdom on what works and why using a survey of faculty development leads for CBME**

G. Sirianni, S. Glover Takahashi

University of Toronto, Toronto, ON

**Background:** As postgraduate programs transition to an outcomes-based approach to curriculum, assessment and evaluation, there is evidence that faculty feel unprepared for the tasks necessary in a CBME context. Medical teachers working within these new educational models must contend with content and process differences including knowledge of CBME, teaching skills within a CBME system, along with new assessment tools. This project aimed to harness the collective expertise and opinion of education leaders to determine their experience and needs with regards to FD in CBME.

**Summary of Work:** In 2018, an online survey was distributed to program directors, faculty development leads and education leaders within those programs that had transitioned or would soon be transitioning to CBME educational models. After the initial survey invitation, four additional survey completion reminders were sent. Surveys were sent to 168 faculty members.

**Summary of Results:** Overall survey response rate was 44.6%. Family Medicine faculty made-up 46.7% of respondents, followed by Medicine at 18.3%. 56.7% of respondents were Program Directors and 26.7% were FD leads. 80% of respondents had programs that had already launched to CBME. The top FD topics survey respondents would like to learn more about include: 1) Implementing CBME 2) Assessment tools 3) Feedback and Coaching 4) Competence Committees. The majority of programs felt that the ideal timing for CBME implementation was 6-12 months prior to implementation. The main perceived barrier to FD was lack of time amongst faculty.

**Discussions/Conclusion:** This survey is locally the first of its kind to evaluate the FD needs and experiences of many postgraduate programs supporting teachers and learners in their new CBME context. The results will inform the needs for additional resources and enable focused FD on barriers and needs. Longitudinal follow up may be helpful to monitor changes in FD gaps and needs over time.

036

Faculty development for teaching, learning and assessment

### Teachers' perspectives on professional development: A focus group study at three Dutch universities

M. van de Wiel<sup>1</sup>, E. de Ponti<sup>2</sup>, K. Schlusmans<sup>3</sup>

<sup>1</sup>Maastricht University, Maastricht, Netherlands; <sup>2</sup>Tilburg University, Tilburg, Netherlands; <sup>3</sup>Open University Netherlands, Heerlen, Netherlands

**Background:** Professional development programs are common in higher education and have shown positive impact on teachers and students if they are well-implemented and relate to educational practice. In 2008, the Dutch research universities agreed upon the characteristics and content of a University Teaching Qualification (UTQ) to promote the quality of university teaching. The aim was to facilitate teachers to develop competences needed to perform core teaching tasks and apply them in practice. Therefore, reflection on professional performance is central in guiding the developmental trajectory and in portfolio assessment. In 2017, universities organized peer reviews to reflect on the quality of the programs and pinpoint issues for improvement.

**Summary of Work:** The present focus group study examined teachers' experiences with the UTQ and continuing professional development (CPD) to include them in the peer review of three universities. In total 54 teachers participated in 9 focus groups representing all faculties. Content analysis was supported by Nvivo.

**Summary of Results:** The results showed that participants valued both UTQ and CPD, if they could apply the knowledge, feedback and ideas gained to improve their teaching practice. They also valued reflection on performance as promoted by discussions with colleagues and the UTQ portfolio. Most participants were motivated to provide high-quality teaching, but felt hindered by high workload and balancing research and education.

**Discussion:** Despite implementation differences, the general themes were recognized at all universities. Participants openly shared their experiences. As more motivated teachers might have participated, further systematic evaluation studies are needed.

**Conclusions:** To enhance teaching quality, the programs should optimize transfer to the workplace by focusing on meaningful learning on and for the job and link to the intrinsic motivation and wishes of teachers. This study provided clear guidelines to do this.

**Take-home Message:** Embed faculty development within teaching practice.

037

Faculty development for teaching, learning and assessment

### **Clinical coaching in Competency-based Medical Education: Perspectives from faculty and learners**

R. Dube<sup>1</sup>, D. Bhatia<sup>2</sup>, D. Richardson<sup>2</sup>

<sup>1</sup>Centre Hospitalier Universitaire Sainte-Justine, Montreal, QC; <sup>2</sup>University of Toronto, Toronto, ON

**Background:** Competency Based Medical Education (CBME) is an approach to training physicians that is fundamentally oriented to graduate outcome abilities and organized around competencies. It deemphasizes time-based training and promises greater accountability, flexibility, and learner-centredness. To deliver on these promises, CBME must develop teachers who offer tailored training that promotes each learner's individual professional development. To facilitate this, a new model of teaching and learning in medical education is being implemented: clinical coaching. This clinically based teaching methodology requires an understanding of roles, goals and expectations, observation of a learner executing a task, and a coaching conversation. Coaching interactions between learners and teachers are complex interpersonal exchanges influenced by multiple sociocultural factors, most of which have received little attention in the scholarly literature. In Canada, as part of the RCPSC Competency by Design project, some postgraduate programs have implemented a CBME design. Residents and teachers are teaching and learning with a CBME approach. However, an understanding of the experiences of faculty and learners with coaching in a CBME context, which would be valuable information to guide faculty development for programs implementing CBME, has not yet been achieved.

**Summary of Work:** This paper will report the results of an exploration of the experiences of learners and faculty engaged in CBME programs. Individual interviews and thematic analysis are being used to collect their viewpoints and reflections.

**Summary of Results:** Recruitment of faculty and learners has taken place, interviewing is underway and results will be available for presentation.

**Discussion, Summary and Take-home Messages:** Faculty and resident experiences of the overall learning environment, the perceived purpose of workplace-based assessment, and, particularly, coaching process(es) and their impact on learning attitudes and trainee-supervisor relationships will provide an essential perspective of the implementation that has already occurred, as well as for future programs undertaking CBME implementation.

038

Faculty development for teaching, learning and assessment

### Examining the space between the intended, and the enacted curriculum during reform: Implications for faculty development

J. Lazor<sup>1</sup>, C. Barned<sup>2</sup>, S. Sechiv Jugnundan<sup>1</sup>, V. Boyd<sup>1</sup>, B. Onyura<sup>1</sup>

<sup>1</sup>University of Toronto, Toronto, ON; <sup>2</sup>McGill University, Montreal, QC

**Background:** Curriculum innovation and reform is often motivated by the desire to introduce evidence-informed educational practices. However, implementing and sustaining curricula change is a formidable challenge. As agents of curriculum delivery, medical teachers are central to the successful enactment of reform; thus, the teacher-curriculum connection warrants further study.

**Summary of Work:** This research explores how curriculum reform is enacted, from the perspectives of faculty and students. Within the context of a new case-based learning (CBL) medical school curriculum, we examine faculty and student enactment, adaptation, and resistance to key curricular principles with specific implications for Faculty Development. We conducted 19 CBL tutor semi-structured interviews and 3 student focus groups (N=19). After iterative review of select transcripts, interview data were analyzed using directed summative content and matrix analyses, and cross-case comparison.

**Summary Results:** CBL tutors were generally attuned to the principles underlying the curriculum, but variably enacted them within their teaching practice. Whereas some teachers' modifications advanced curricular goals, others undermined them. Factors influencing adaptations included pedagogical beliefs, affective concerns, quality of curricular materials, and students' learning practices. Students enacted and subverted curricular processes in response to personal beliefs, work demands, and individual tutors' teaching practices.

**Discussions and Conclusions:** This framework offers in-depth understanding of the factors that influence individual faculty teaching practices and student learning practices. It also examines how the interrelationship between the two impacts the learning environment. This information is critical to the identification of key content and strategies that need to be considered for effective Faculty Development and student preparation during the implementation of curricular reform.

**Take-home Message:** Curricular reform can surface paradoxical conditions within the learning environment that influence faculty members' participatory relationship with the formal curriculum. Sustainable reform requires expanded FD strategies and greater attention to the teacher-curriculum relationship.

039

Faculty development for teaching, learning and assessment

### **Mentors' beliefs about their roles in health care education: A qualitative study on mentors' personal interpretative framework**

L. Loosveld

Maastricht University, Maastricht, Netherlands

**Background:** Many higher education institutes support their mentors with faculty development aimed at mentoring skills. Different mentors interpret and enact their mentoring in different ways, and little is known about these individual role perceptions. To a certain extent, these perceptions are influenced by the beliefs about how teachers perceive and perform their job, and give meaning to it. This notion strongly suggests that teaching mentors cannot go without identifying and tapping into those beliefs. So if we want to support mentors, we need to know these individual mentoring beliefs.

**Summary of Work:** We aimed to reconstruct mentors' beliefs through the lens of the personal interpretative framework (Kelchtermans, 2009): professional self-understanding (what) and subjective educational theory (how) of teaching. Interviews with 18 mentors were analyzed in a systematic two-step process, first taking the individual mentor as our unit of analysis (within-case analysis), before looking across the sample to build a general explanatory pattern (cross-case analysis).

**Summary of Results:** Four mentoring positions were identified: (1) The "facilitator" (service-providing and responsive); (2) The "coach" (development-supporting and responsive); (3) The "monitor" (signaling and collaborative); (4) The "exemplar" (service-providing or development-supporting, and directive).

**Discussion:** The four mentoring positions should not be read as a prescription of what mentoring practice ideally looks like. Rather, the goal of this research was to provide an interpretative description of the diverse ways in which mentors think about their goals and practices as mentor.

**Conclusion:** Four mentoring positions could be identified. These give insight in individual mentoring perceptions, and can serve as the basis for personalized faculty development.

**Take-home Message:** Awareness of positions can help mentors understand why they act the way they do in certain situations, and how this affects the learning and development of mentees. It can also help mentors identify personal learning needs and therefore signal opportunities for faculty development.

040

Faculty development for teaching, learning and assessment

### Mixed methods analysis of the needs of sessional teachers at a health sciences school

A. Snook, A. Schram

University of Iceland, Reykjavik, Iceland

**Background:** Many teachers who instruct healthcare students are considered sessional (adjunct/contingent) faculty. As sessional teachers often have limited exposure to pedagogy, this study was designed to explain their pedagogical needs.

**Summary of Work:** We utilized a sequential, explanatory mixed methods approach where we initially surveyed 160 sessional faculty (25% response rate) at a health sciences school. We assessed desire for more pedagogy before starting to teach, attitudes towards improving, attendance at teaching enhancing activities, and current teaching needs. Subsequently, we utilized three focus groups (n = 15) to explain what support these teachers desired.

**Summary of Results:** Most sessional faculty wanted more teaching on pedagogy before starting to teach (71%) and felt that it was their responsibility to improve as a teacher (67%) but 44% were not attending teaching enhancing activities. Their highest rated teaching needs were for motivating students, designing effective assessments, developing a reflective approach to teaching, and providing constructive feedback to learners at regular intervals. Focus group analysis identified the theme of learning to provide guidance and constructive criticism for clinical teachers. In contrast, the themes of known learning objectives, a “go-to” person, reflective end-of-course meetings, convenient and ‘brilliant’ pedagogy, and effective assessments were identified for classroom teachers. Both groups voiced a willingness to learn and a commitment to students and their profession.

**Discussion:** Institutions and departments need to provide orientations and pedagogical training that is specific for types of sessional faculty prior to starting classroom or clinical teaching. Subsequently, they need to offer ongoing training that is convenient and pertinent to their needs to develop sessional faculty as educators and improve teaching.

**Conclusions:** The use of mixed methods resulted in suggestions for sessional faculty development.

**Take-home Message:** Needs are seen for different types of sessional faculty and should be considered in faculty development.

041

Faculty development for teaching, learning and assessment

### The effect of connectedness and appreciation on medical educator identity in sessional faculty at a health sciences school

A. Snook, A. Schram

University of Iceland, Reykjavik, Iceland

**Background:** Sessional (adjunct, clinical) faculty may struggle with their medical educator identity. We investigated how a sense of connectedness and appreciation predict identity as a medical educator and openness to improve.

**Summary of Work:** We utilized a sequential, explanatory mixed methods approach where we surveyed 146 sessional faculty at a health sciences school using scales to measure identity as a medical educator, perceived connectedness to university department, openness to improve, and how much appreciation motivated them. We performed structural equations modeling to determine predictions. Subsequently, we utilized three focus groups (n = 15) to explain details.

**Summary of Results:** Connectedness to their department predicted identity as a medical educator, which acted as mediator to predict an openness to improve through reflection. Appreciation also trended towards predicting identity as a medical educator. Focus group analysis identified the following themes: “connectedness is adequate”, desiring more connectedness (classroom teachers), desiring ways to communicate, desiring direction and coherence, “no appreciation required”, frustrations with student feedback, desiring departmental understanding of clinical demands, and desiring departmental feedback on teaching.

**Discussion:** Our model suggests that medical educator identity in sessional faculty explains the relationship between connectedness, appreciation and openness to improve. However, the focus group discussions shed light on why these relationships were tempered by identifying systemic obstacles and a mixture of opinions on the need for connectedness and appreciation.

**Conclusions:** Administrations and departments need to focus on removing obstacles to communication and collaboration for teachers who desire better relationships between department and profession. They should highlight the professional benefits of teaching and look for ways to provide feedback (student and departmental) to maximize identity as a medical educator for sessional teachers. Implementing these changes may improve openness to improve through reflection.

**Take-home Message:** Connectedness and appreciation should be considered when designing faculty development for sessional faculty.

042

Faculty development for teaching, learning and assessment

### **Changing teaching: A personal experience with intentional design to encourage motivation and student engagement**

A. Snook

University of Iceland, Reykjavik, Iceland

**Background:** In the past, I had taught theoretical principles of physical therapy modalities by traditional lecture as it was familiar and easy for me. A motivational model suggest that teachers can design motivational principles into instructional to enhance engagement and learning. The components of the motivational model are student perceptions of empowerment, usefulness, success, interest, and caring in the classroom. I wanted to see if I could change the way I taught and intentionally design a course that would engage and motivate students.

**Summary of Work:** Through teacher reflection-for-action, faculty development workshops on team-based learning, and application of a motivational model, I intentionally designed the course to incorporate strategies that would maximize student motivation. Strategies included assessing prior subject knowledge, using a flipped design, having low-risk quizzes to show them that they were learning and could be successful, giving students choices in the course, showing proof that clinicians use modalities, having them create of a 'job aid' for future use, and communicating to the students that I cared and respected their goals.

**Summary of Results:** Specific areas on student evaluations that are consistently rated higher than average include overall teacher/course evaluation, use of diverse methods, stimulation of critical thinking, and encouraging students to be independent thinkers. There also continues to be positive feedback when students are in clinical placement and using the 'job aid' when working with modalities.

**Discussion:** The course has now run for three years and student evaluations indicate that the course is successful in motivating and engaging the students.

**Conclusions:** I was able to change my teaching for the better by using reflective practice and motivational principles.

**Take-away Message:** Teachers can intentionally design student motivation and engagement into their courses and change the way they teach.

043

Faculty well being

**A longitudinal interprofessional faculty development program: Adds meaning to work and builds resilience**A. Fornari<sup>1</sup>, C. George<sup>2</sup><sup>1</sup>Hofstra/Northwell, Hempstead, NY United States; <sup>2</sup>Northwell Health, New Hyde Park, NY United States

**Background:** Humanism in clinical practice is needed now more than ever to address depersonalization and burnout, which are rampant among clinicians. More than one-third of physicians have lost touch with humanism and empathy, both of which are at the core of clinical practice.

**Summary of Work:** The Mentoring and Professionalism in Training (MAP-IT) program seeks to incorporate humanism as a core value in the development of health professionals. This is accomplished through skills training of participants in a longitudinal curriculum delivered as small group interactive sessions, which use critical reflection and skill building to apply humanism in their interactions with trainees and colleagues. This program is a resilience strategy for clinicians and serve as a restorative intervention focused on “meaning in work”.

**Summary of Results:** Data collection in the 2017-18 cohort of MAP-IT assessed pre/post burnout and resilience using two validated instruments: the Maslach Burnout Inventory (MBI) and the Connor-Davidson Resilience Scale (CD-RISC). Based on the results there was an increase in resiliency over time among the group’s leaders and participants, with the participants having a statistically significant ( $p < 0.05$ ) increase. The highlight from the burnout results is the participants experienced a significant increase ( $p < 0.01$ ) in the “personal accomplishment” component of the MBI over the course of the program.

**Discussion and Conclusions:** There is a need for interprofessional clinicians to focus on their humanistic relationships with peers and colleagues away from the patient care setting. The MAP-IT program enables vigor, engagement and re-connecting clinicians with their meaningful work. This naturally leads to resilience and counteracts the clinician burnout.

**Take-home Message:** Clinicians build resilience/personal accomplishment in longitudinal interprofessional development. A curriculum focused on acquisition of knowledge and skills, supported by critical reflection, generates humanistic mentors, as evidenced by their words, actions, and deeds.

044

Faculty well being

**Perception of academic hospitalist about burnout and it's impact on medical education**P. Jha, S. Bhandari

Medical College of Wisconsin, Milwaukee, WI, United States

**Background:** Academic hospitalist play a crucial role in providing quality patient care, medical education and research. We did this project to study the perception of academic hospitalist at MCW about burnout and ways to improve hospitalist well being and performance including patient care and teaching.

**Methods:** A Qualtrics survey was emailed to a total of 52 academic hospitalists(including perioperative hospitalists) at the Medical College of Wisconsin. The survey questionnaire aimed to asses the perception of hospitalists about burnout and its impact on medical education. Responses were obtained on a 5-point Likert scale. Data was analyzed as respective frequencies and percentages. The comparison of the responses between duration of service as hospitalist and gender was done. All analyses were performed using SAS 9.4.

**Results:** Forty-two hospitalists (80%) completed the survey. 62% hospitalists reported feeling burnout. 95% reported lack of enthusiasm and energy to work as a sign of burnout and 93% felt mental exhaustion.93% of the faculty reported high patient load/census as a cause for burnout and 83% reported unrealistic work load/feeling over worked as the cause for burnout. 69% faculty reported not feeling valued as hospitalist by the residents and other sub-speciality peers as contributing factors. The burnout rate increased proportionately with duration of work as a hospitalist.

Majority of the hospitalists suggested improving the work structure and incorporating respect, care and compassion among the hospitalist as a group culture crucial to combat burnout.81% hospitalist felt that high demands of non teaching clinical works interfered with their time and interest to teach medical students. This finding strongly suggests that burnout is negatively influencing academic hospitalist role as a teacher.

**Conclusions:** Our survey-based study on academic hospitalists showed the majority of academic hospitalists are experiencing burnout and there is a need for intervention at institutional level to combat this silent epidemic.

045

Faculty well being

**From burnout prevention to a culture of wellness through faculty development**J. R. Shapiro, M. Privitera

University of Rochester, Rochester, NY, United States

**Background:** Research demonstrates a high incidence of clinician stress, burnout, and depression. Approaches to improving wellness must include Individual and institutional approaches.

**Summary of Work:** Twenty-nine one-hour long wellness seminars for faculty and clinicians were designed and implemented over a three-year period. Initial need analysis was performed using current literature on factors involved in burnout of physicians. Additional seminars were planned based on individual need analysis from attendees. Self-reported changes in knowledge, skills and behavior/attitudes were analyzed. Using content analysis, written input from participants were analyzed inductively and then clustered into emergent themes.

**Summary of Results:** There were 612 participants during the first year of implementation. Seminars were highly rated for content and presentation. Plans to transfer knowledge and wellness tools to existing roles were reported by attendees. Several themes emerged as recommendations to the organizational leadership to help reduce burnout through individual and institutional interventions. These themes also led to the design and implementation of additional professional development offerings in wellness such as a new series on the use of the electronic health record, a series on mindfulness, and a program on human factors-based leadership for faculty and clinician wellness.

**Discussion:** The wellness seminars have served as an important venue to learn what is important to clinicians to help them in their resilience and for sustaining practice. They helped give safe places for discussion of the need to change the path of the increasing incidence of high-level burnout.

**Conclusions:** The practice environment has been noted to have an important impact by hospital leadership, has opened the door to continued progress of our wellness efforts, and has emerged as an important way of affecting the institutional culture.

**Take home Message:** Wellness programs might not only benefit the individual clinician but also be vital to the delivery of high quality healthcare.

046

Interprofessional faculty development

### A safe space for inter-professional faculty development

E. Amari<sup>1</sup>, J. Clark<sup>1</sup>, K. Wisener<sup>1</sup>, B. Hardie<sup>1</sup>, S. Murphy<sup>1</sup>, R. Roots<sup>1</sup>, D. Drynan<sup>1</sup>, J. Klick<sup>2</sup>, R. Hatala<sup>1</sup>, K. Veerapen<sup>1</sup>

<sup>1</sup>University of British Columbia, Vancouver, BC; <sup>2</sup>University of Northern British Columbia, Prince George, BC

**Background:** Faculty Development (FD) utilizing inter-professional small groups is uncommon. At the University of British Columbia, we implemented a longitudinal FD program where faculty from various health professions taught and learned from each other in facilitated small groups. We sought to understand how the inter-professional setting impacts teaching and learning in faculty development.

**Summary of Work:** Two cohorts of five participants each, met for six, 90-minute sessions over one year. All sessions were moderated by a FD lead who also modeled the first session on 'feedback'. Subsequently, each participant developed and delivered a session on a key educational topic using interactive methods. Participants provided structured feedback; dialogue and reflection was encouraged. Interviews were conducted with three participants and two cohort leaders. Preliminary content analysis was conducted by two of the authors by coding the transcripts and identifying themes.

**Summary of Results:** Participants felt safe to share their experiences when focusing on educational topics and shared their perspectives more freely among other professionals versus with their own professional groups. They began to appreciate commonalities and variations in how health professions applied educational principles. While lesson planning, they considered their lack of knowledge about others' perspectives, resulting in a fresh approach to the topics. Over time, the feedback and discussions became more robust, and participants incorporated the observed strategies.

**Discussion:** Inter-professional FD in small groups may have fostered learning and engagement in an environment which was perceived as safe through a focus on educational topics and the longitudinal structure.

**Conclusions:** FD with active participation of inter-professional faculty in a secure environment within small groups may promote a deeper understanding of the way other people teach and enhances the feedback process.

**Take-home Message:** Creating non-threatening environments for inter-professional faculty to learn and teach together may have a positive impact on learning teaching skills.

047

Interprofessional faculty development

### Using a curriculum change perspective to identify faculty development support for interprofessional learning

M. Anakin<sup>1</sup>, E. Kennedy<sup>1</sup>, D. Wright<sup>1</sup>, M. Butler<sup>2</sup>

<sup>1</sup>University of Otago, Dunedin, New Zealand; <sup>2</sup>Otago Polytechnic, Dunedin, New Zealand

**Background:** Integrating interprofessional learning opportunities into established programmes can be challenging even when teachers and departments are actively encouraged to do so. To date, no one has used a curriculum change perspective to consider the faculty development required to understand and support interprofessional learning initiatives

**Summary of Work:** A six-factor model of curriculum change was used to conduct a conceptual analysis of interprofessional learning initiatives provided by the Division of Health Sciences at the University of Otago.

**Summary of Results:** The factors identified were: ownership of the interprofessional teaching activities, access to sufficient resources for interprofessional learning, the strength of one's identity as an interprofessional teacher, opportunities for leadership in interprofessional learning policy and practice, an understanding how students may engage with interprofessional learning, and an appreciation of how quality assurance processes may afford or constrain interprofessional learning opportunities. These six factors were found to operate at four levels of social organisation: lecturer, departmental, institutional, and inter-institutional.

**Discussion:** Because each factor may operate at one or more level of social organisation, it may be experienced by individuals as forces that enable and inhibit interprofessional learning. Examples from practice will be used to illustrate the conflicts that these forces can create for lecturers, departments, institutions, and inter-institution collaborations. To address these conflicts, discussion will include suggestions about the design of future interprofessional learning activities, policy changes, evaluation strategies, and research possibilities.

**Conclusion:** Faculty developers will find the conceptual framework and examples from practice useful to stimulate thinking. Faculty developers will also be encouraged to consider how interprofessional learning challenges in their programmes at their institutions can identified with this conceptual framework in order to provide appropriate support.

**Take-home Message:** Consider using a curriculum change perspective to identify the faculty development support required to nurture interprofessional learning at your institution.

048

Interprofessional faculty development

### **Integrating and supporting the role of health professional educators in family medicine**

D. Kopansky-Giles<sup>1</sup>, J. Peranson<sup>2</sup>, I. Waters<sup>3</sup>

<sup>1</sup>Canadian Memorial Chiropractic College, Toronto, ON; <sup>2</sup>University of Toronto, Toronto, ON; <sup>3</sup>Toronto Western Family Health Team, Toronto, ON

**Background:** The transformation of primary care teaching units into interprofessional (IP) teams has created new opportunities for Health Professional Educators (HPEs) to take on roles as educators in Family Medicine (FM) training programs. There is a growing imperative to identify the structural and process supports that enable a quality cross-professional experience for both learners and teachers.

**Summary of Work:** In 2015, the Department of Family and Community Medicine (DFCM) at the University of Toronto (UT) created a new Faculty Development program to identify needs and implement supports to optimize the integration of HPEs across departmental teaching units. Initial survey of HPEs revealed multiple challenges to their engagement as teachers, including lack of: formalized training to be teachers; protected time or feedback on teaching; faculty status recognition; and funding to support teaching roles. Over the past 3 years, multiple strategies have been undertaken to address these issues.

**Summary of Results:** 3-year program outcomes have included: (1) Increased familiarity of the HPE teaching role across the DFCM; (2) Regular HPE representation on existing DFCM committees; (3) New faculty appointment guidelines resulting in increased HPE appointments; (4) Establishment of a community of practice (COP) with over 100 HPEs; (5) Dissemination of HPE-relevant website content, newsletters, presentations, brochures; (6) HPE-led education scholarship.

**Discussion:** Key project enablers for this innovative program included: support of leadership and alignment with the strategic plan and existing DFCM program structures; paired MD and HPE champions; administrative support; ongoing internal and external dissemination; and opportunities to pilot new initiatives.

**Conclusions:** The DFCM HPE program has resulted in improved recognition of and engagement of HPEs across DFCM teaching sites. This innovative model could inform other training programs looking to enhance the integration of HPEs into medical education.

**Take-home Message:** HPEs are a valued teaching resource in FM training and robust, iterative strategies are needed which may result in more effective integration of these teachers into medical education programs.

049

Interprofessional faculty development

### **When teachers meet in interdisciplinary teams: Hangouts, distribution centers and melting pots**

S. Meeuwissen, W. Gijsselaers, I. Wolfhagen, M. oude Egbrink

Maastricht University, Maastricht, Netherlands

**Background:** Integrated health professions education forces teachers from different scientific and clinical disciplines to collaborate. However, teachers' teaching experiences often rely on offering disciplinary course units.

Management sciences literature shows that team performance increases with team learning processes - sharing, co-construction, constructive conflict. We explored team learning processes and outcomes among interdisciplinary teacher teams in the development of integrated health professions education.

**Summary of Work:** An exploratory, sequential mixed-methods design was used. First, 17 vignette-guided, semi-structured interviews were conducted. Participants were teachers originating from diverse disciplines, working in different courses of the integrated, undergraduate health profession programs at Maastricht University. Data were analysed using template analysis. Sequentially, evaluation data of the different courses were used to provide a descriptive analysis of students' perspectives on educational quality (items: course organization, quality, learning effect, alignment).

**Summary of Results:** Three team approaches were identified: 1) In fragmented teams or 'hangouts', teachers individually worked on tasks that they were interested in, leaving their disciplinary mark. 2) Framework-guided teams or 'distribution centers' aimed to work within the given frameworks and organizational expectations, striving for disciplinary balance. 3) Integrated teacher teams, 'melting pots', worked interdisciplinary on all topics and put students at the center. Integrated teams reflected high-level team learning processes and were most satisfied with their (team)work. Students evaluated courses of integrated teams highest on all investigated quality items.

**Discussion and Conclusions:** Successful interdisciplinary teacher teams are represented by integrated teams. Teachers should be more aware about the limitations of traditional, discipline-centered work and get experienced with exchanging knowledge in interdisciplinary teams. Continuous faculty development programs could offer solutions for its dissemination.

**Take-home Message:** (1) Interdisciplinary teacher teamwork is complex and not self-evident; (2) Sharing tasks does not automatically result in interdisciplinary, integrated teamwork; (3) Integrated teamwork leads to more team satisfaction and better quality of education.

050

Interprofessional faculty development

### Teaching teams to teach: Program evaluation results from an interprofessional faculty development program in academic family medicine

J. Peranson<sup>1</sup>, D. Kopansky-Giles<sup>2</sup>, A. Ghavam-Rassoul<sup>1</sup>, M. Slater<sup>3</sup>

<sup>1</sup>St. Michael's Hospital, Toronto, ON; <sup>2</sup>Canadian Memorial Chiropractic College, Toronto, ON; <sup>3</sup>Queen's University, Kingston, ON

**Background:** At the University of Toronto (UT), new teachers have access to a faculty development program (BASICS) designed to prepare clinician teachers for academic medicine. Historically, its target audience has been family physicians. When St. Michael's Hospital (SMH) expanded to include 25 physicians and health professional educators (HPEs) for a new clinical teaching site, a modified version of the UT BASICS program was run to enable this interprofessional group to learn together.

**Summary of Work:** The modified BASICS program was developed and evaluated by an interprofessional planning committee. A mixed-methods evaluation was conducted to determine: (1) If BASICS could be modified for an IP audience; (2) If learning about teaching together would facilitate the acquisition of participants' competencies for collaborative teaching and interprofessional practice. This included: (1) pre- and post-program questionnaires on knowledge (MCQs), self-perceived collaborative competency (HPCCPS) and program reflections; (2) module-specific evaluations, (3) qualitative feedback from module teachers.

**Summary of Results:** The modified BASICS program was delivered monthly over six months. 13 physicians and 27 HPEs participated. 100% indicated satisfaction with the program. Pre-post HPCCPS indicated improvement in self-perceived collaborative competency ( $p < 0.0001$ ). 89.7% reported that learning needs were met, and 50% felt more prepared for IP teaching. Facilitators reported that teaching together enhanced their own collaborative competency.

**Discussion:** While most primary care providers in Canada are trained in IP settings, there are still few models to support the development of IP teams of who are prepared for effective, collaborative and cross-professional teaching.

**Conclusions:** This project demonstrates the feasibility of implementing BASICS for an IP team audience, with positive impacts on confidence in teaching, collaborative ability and adoption of an enhanced IP lens amongst participants and teachers.

**Take-home Message:** The outcomes of this project have informed the movement towards a more IP approach to faculty development at the UT DFCM.

051

Interprofessional faculty development

### **What motivates faculty development? An interprofessional glimpse into the minds of healthcare professional educators**

E. K. Soleas, I. Harle, M. De Sousa, R. van Wylick

Queen's University, Kingston, ON

**Background:** Faculty Development (FD) events are key components of upskilling and maintaining the teaching capacity of faculty in Health Science programs. A typical needs assessment ascertains the relative strengths and gaps in faculty knowledge. We flipped this notion to determine how well FD providers know what motivates their clientele to attend FD events.

**Summary of Work:** An online survey combining open-ended and Likert-items asking about motivations to attend FD Events was performed and gleaned 204 responses across our nursing, rehabilitation therapy, health science, and medicine faculty.

**Summary of Results:** Response rates averaged around 15%, and proportions of responses were representative of the sizes of each health professions' faculty roster. There were no significant differences between types of Health Professions Educators and their relative emphasis on a given motivator. The strongest reported motivator for attending a given FD event was "interest in the content", while the weakest reported motivator was "Continuing Education credits" and their equivalents. Topics that were seen as strongly contributing to competence as a health professional and teacher occupied the middle of the range of importance as drivers.

**Discussion and Conclusions:** Nothing beats topics of interest as drivers of attendance at FD events, however, clear arguments for how the FD event will improve healthcare provision or teaching ability are close seconds for drumming up attendance. Credits and equivalent extrinsic incentives such as nice venues, or time-condensed events were reported by Faculty to very weakly motivate them, if at all, and should be treated as lowest priority means to increase attendance at FD events.

**Take-home Message:** Although accreditation is a key component of ensuring quality, evidence-based education, choosing interesting topics and those of easily articulated importance to providing high quality healthcare and teaching should be the highest priority rather than new topics or events at nice places.

052

Leadership development

**CORAL Collection: Resources to equip and develop entry level leaders in medical education**M. F. D'Eon

University of Saskatchewan, Saskatoon, SK

**Background:** People begin entry level leadership roles in medical education without much or any preparation. Discussions about medical education policy are not well informed by theory and decisions are not always made using available evidence. Busy clinicians cannot take time away from residency training or clinical practice to learn about medical education. Entry level leaders need to be better prepared.

**Summary of Work:** The CORAL Collection was created in 2017 to help prepare entry level leaders in medical education with short, powerful “just-in-time” (rather than “just-in-case”) resources. The CORAL Collection is growing; Cells can be added at any time. Each Cell, which can usually be completed in 10-15 minutes, includes information and self-assessments, activation of prior learning, a brief quiz to deepen learning, and a concept map of other related CORAL Cells. There are now 11 Cells covering topics in the learning sciences, assessment, program evaluation, and leadership and change management.

**Summary of Results:** The Cells have been used to flip workshops, enhance graduate classes, and prepare committee members. There are plans to create additional Cells in response to emerging faculty development needs.

**Discussion:** The Cells are built using effective learning strategies aimed at an entry level leader. They are not for everyone. The Cells are versatile: they can be integrated into almost any faculty development program. They can be used independently in any order. They do not have to be used as an entire collection or part of an intensive program.

**Conclusions:** It is possible to create a conceptually simple but effective resource to help prepare entry level leaders in medical education.

**Take-home Message:** the CORAL Collection is a versatile and growing collection of resources to help prepare entry level leaders in medical education for their roles.

053

Leadership development

**What is actually needed? Using narrative comments from multi-source feedback to inform faculty development among educational leaders in clinical departments**G. Eriksen<sup>1</sup>, G. Bjørg<sup>2</sup>, B. Malling<sup>1</sup><sup>1</sup>Aarhus University, Aarhus, Denmark; <sup>2</sup>People Partners, Aarhus, Denmark

**Background:** Faculty Development (FD) should be based on needs assessment among stakeholders. Multi-source feedback (MSF) of educational leaders (EL) involves stakeholders who are relevant in this needs assessment. Therefore, aggregated data from MSF processes might be a fast and cost-effective way to gather information on which areas to integrate in FD. This study explores the content of narrative comments from MSF processes among ELs in clinical departments.

**Summary of Work:** Narrative comments from MSF processes from 87 ELs were analyzed using a content analysis approach. Respondents in the MSF process were Heads of Departments (HODs) (91), specialists (430) and trainees (468). The MSF comprised both scores and free steered narrative comments; this EL should “continue to...”; “get started with.”; “should stop doing...” and “other comments”.

**Summary of Results:** In all 1375 comments were analyzed. Most narrative comments considered leadership and were essentially suggestions about improving personal leadership skills. The stakeholders’ views were concurrent in demanding an EL who listens, involves others, delegates, follows up on initiatives and takes supervision of peers seriously. ELs who are confidence-building, constructive, persistent and above all engaged are called for. Furthermore, HODs and specialists demanded an EL who clearly communicates goals and strategies for the development of medical education in the department.

**Discussion:** Many Faculty Development initiatives involve courses. However, narratives from MSF processes point at a need to increase focus on development of personal leadership skills in FD strategies for ELs in clinical departments. The introduction of external coaching in a combination with involvement of HODs as a surplus to traditional courses might be rewarding.

**Take-home Message:** The need for personal leadership development of educational leaders in clinical departments is not met through traditional course activity. Involvement of Heads of Departments and probably initiatives like repeated MSF procedures, coaching or mentoring needs to be considered.

054

Leadership development

**Leading through complexity a case study**L. E. Graves

Western Michigan University, Kalamazoo, MI, United States

**Background:** Medical education leaders face challenges in multiple settings and at various levels of complexity. Medical education is situated at the intersection of two complex systems-education and healthcare. Human System Dynamics (HSD) is an approach to complex systems focusing on applying principles of complexity science and chaos theory to cope with volatile, uncertain, complex, and ambiguous (VUCA) situations. Through defining sticky issues and wicked problems, HSD approaches focus on *praxis* – the intersection of theory and practice of leadership.

**Summary of Work:** Using a case study approach, we will share the curriculum of an institutional training program using HSD approaches over the course of 12 months.

**Summary of Results:** HSD processes including inquiry and adaptive action were used to address medical education challenges at multiple levels of the learning continuum. Examples specific to undergraduate medical education, faculty governance and faculty development are described.

**Discussion and Conclusions:** Education and healthcare are both complex systems. Medical education straddles these two complex systems with new paradigms such as HSD are required to address the challenges in medical education and specifically in faculty affairs. This case study provides an introduction to a new approach and practical tools aligned with the challenges of medical education.

**Take-home Message:** This case study will describe how the use of complexity science and chaos can inform the challenges in medical education.

055

Leadership development

**What works in academic leadership development? The evaluative case of a contemporary program**S. Lieff<sup>1</sup>, C. Barned<sup>2</sup>, B. Onyura<sup>3</sup><sup>1</sup>University of Toronto, Toronto, ON; <sup>2</sup>McGill University, Montreal, QC; <sup>3</sup>Centre for Faculty Development, Toronto, ON

**Background:** The academic health care environment is characterized by rapid change and complexity. Academic leaders must have the capacity to influence their institutions' and respond to emergent needs in ways that strengthen their organizations. In response, academic leadership development programs have proliferated. However, rigour in their design and evaluation is still in its infancy.

**Summary of Work:** We conducted an evaluative study of the New and Evolving Academic Leaders (NEAL) program: a longitudinal leadership development program at the University of Toronto. Informed by authentic, self, shared and complexity paradigms of leadership, the program's primary pedagogical orientations emphasize experiential learning and reflective practice. We employed a contribution analysis approach and drew on multiple sources of qualitative data, in order to identify potential impact pathways through which the program contributed to desired outcomes. Data sources included reflection course assignments, semi-structured interviews with 18 program alumni 1-3 years after program completion, and interviews with program coaches.

**Summary of Results:** Our results support views of effective leadership development as a process of personal and organizational discovery. Situated and experiential leadership development provided platforms for ongoing feedback, exposure to alternative leadership models, relationship building, and individual and collaborative reflection, thereby contributing to enhanced capabilities and shifts in 'leader role' perspectives toward more interdependence, collaboration, reflectiveness, and authenticity. Individual differences variably impacted participant interaction with various program elements.

**Discussion:** Through situated and experiential development, academic leaders can draw from their practice to incorporate more contemporary notions of leadership in contrast to traditional approaches.

**Conclusions:** Leadership development can effectively influence the cognitive frameworks and leadership practices of academic leaders. However, programs developers may need to attend to individual and contextual differences that can influence program success.

**Take-home Message:**

Leadership development programs can transform the mindset and practice of academic leaders to incorporate contemporary leadership models.

056

Leadership development

**Developing education leaders through an innovative endowed chair program**R. Ramachandran, P. Chin-Hong, A. Peterson, H. Loeser, P. O'Sullivan

University of California San Francisco, San Francisco, CA, United States

**Background:** In 2001, our institution established an endowed chair in education program through its Academy of Medical Educators to support teaching excellence, career development, and professional identity formation. Most holders receive discretionary funding co-funded by the School of Medicine and an academic department to pursue value-added education work. Terms are limited to five years; holders are limited to two terms. Additional chairs are based solely within the Academy, focused on teaching, learning, and administrative leadership.

**Summary of Work:** We conducted a constructivist grounded theory study, interviewing chair holders who completed at least one term to understand and model program impact. We double-coded all transcripts and reconciled codes. During code analysis, we identified themes through iterative consensus-building.

**Summary of Results:** Twenty-three (96%) eligible faculty members from 14 departments participated. Resulting themes included opportunity, resources, expectations and recognition. Chair positions provided opportunities to advocate for education within departments or beyond UCSF and to build scholarship, community, and self-confidence. Chair resources allowed holders to develop professionally and/or support learners/colleagues. Expectations for funds use often were not immediately obvious; with experience, holders recognized how to leverage funds. Ultimately, chair positions indicated quality of educational work and amplified visibility and status within UCSF and externally.

**Discussion:** A model of program impact emerged. Resources combined with institutional and departmental expectations allowed chair holders to take advantage of opportunities, resulting in visibility and gravitas as educators. Term limits provided focus. Holders increased the recognition of education in their departments, and often nationally in their clinical specialty.

**Conclusions:** 1) An endowed chair in education program impacts the individual, the institution and beyond. 2) Awareness of an endowed chair program's impact on chair holders is critical for refining such a program.

**Take-home Message:** A term-limited educational endowed chair program has impact on individual chair holders and beyond.

057

Leadership development

**Exploring leadership development through the lens of innovation and design thinking**S. Saner, G. Rabalais

University of Louisville, Louisville, KY, United States

**Background:** In the rapidly changing world of academic medicine, leadership skills must include problem-solving skills and embracing change. Design thinking can help develop these mindsets and can contribute to leadership success. Few faculty members receive training in design thinking or leadership skills.

**Summary of Work:** The Leadership and Innovation in Academic Medicine (LIAM) course was created to help early to mid-career faculty answer the following question. How can we best apply leadership and innovation principles to influence a group or organization to achieve a common goal? A developmental approach to leadership training was created that is now completing its second year at the School of Medicine

**Summary of Results:** We used the backward design framework first developed by Jay McTighe and Grant Wiggins (Understanding By Design, 2005). Our curriculum development resulted in an eleven-month hybrid course with a design thinking and innovation thread. Applications to participate far outnumber available slots for this program that is delivered at no charge to the participants. Satisfaction scores remain exceptional and feedback from HSC and University leadership is overwhelmingly supportive of continuing and expanding the program.

**Discussion:** Most leadership development programs do not focus on the use of design thinking to solve problems in an innovative way. This method of leadership training also emphasizes the foundational skills required lead yourself, lead with others, and lead the organization. Our approach has attracted university-wide attention prompting discussions to expand this program across the university.

**Conclusion:** We believe leadership development should include focused instruction in design thinking and innovation for problem-solving.

**Take Home Message:** Emerging faculty leaders should be introduced to design thinking and innovation as a problem-solving approach.

058

Program evaluation beyond measurements of satisfaction

### Faculty development program evaluation: A need to embrace complexity

M. Audétat<sup>1</sup>, N. Fernandez<sup>2</sup>

<sup>1</sup>University of Geneva, Geneva, Switzerland; <sup>2</sup>Université de Montréal, Montreal, QC

**Background:** The aim of this review was to provide an overview of the existing models of educational program evaluation in order to suggest a conceptual framework for the specific case of evaluating Faculty Development (FD) programs. An iterative process was achieved by a contrast and discussion of the evaluation frameworks that have been offered in the education field as well as the medical education.

**Summary of Work:** Following Fry et al's overview of the theories that underpin program evaluation models, suggesting three approaches: linear, systematic and complex. Although FD activities tend to focus predominantly on teaching and instructional effectiveness, the systems level perspective points to a critical need to expand FD curricula in order to reinforce teachers' capacity to become organizational change agents.

**Summary of Results:** Medical education evolves, so too does FD. Its impacts must be recognized and evaluated at multiple levels; -on organizations, -on professional identity development, -on workplace norms and culture, -on clinical teaching roles.

**Discussion:** Focusing FD Program evaluation on the reciprocal impacts of the three processes - identity, norms and interactions, offers comprehensive and dynamic insights into the evolution of teaching practices. These overlapping areas are strengthening of roles, creating new practice models and becoming agents for change. We suggest that FD Program evaluation focus on how professional roles evolve, on how new practice models emerge and on how agents for change challenge accepted norms and practices.

**Conclusion:** As new norms and practices evolve, FD Program designers will need to leverage reliable information about the impacts of their work to enhance FD programs.

**Take home Message:** FD interventions impact not only on the knowledge, attitudes and skills of clinical teachers, but also on their dual professional identity development, on their interactions with other professionals, students and patients and, finally, on the institutions in which they work collectively.

059

Program evaluation beyond measurements of satisfaction

### Challenges with practical evaluation of a faculty driven faculty development program

E. Wooltorton, D. B. Archibald

University of Ottawa, Ottawa, ON

**Background:** A faculty development (FD) program re-design was needed to better engage our family medicine department's 400 faculty members. A needs assessment was conducted, and a logic model and evaluation framework were created. We sought to evaluate Kirkpatrick's level outcomes including participant engagement (reaction), changes in knowledge and confidence (learning), application of materials (behaviour) and longer-term change in physician burnout, scholarship, and retention (results).

**Summary of Work:** In 2017 faculty were recruited to deliver original workshops anchored in seasonal "half-days". These centralized events involved multiple sequential and concurrent workshops based on experiential, situated, and socio-constructivist principles.

**Summary of Results:** The number of workshops increased yearly from 10 (2016) to 28 (2017) and 30 (2018). Mean attendance at each event increased from 17.4 faculty (2016) to 19.2 (2017) and 33.8 (2018). Absolute number of faculty participants increased from 98 (2016) to 116 (2017) to 143 (2018). However there was no increase in the rate of return participants: in 2016 51% of participants attended >1 event, vs 34.4% (2017) and 36% (2018). Participants rated their knowledge and confidence as increased (>85% "agree" or "strongly agree") after each workshop.

**Discussion:** Our new FD approach engaged more participants, however our evaluation framework proved impractical for assessing higher level outcomes. The framework originally outlined a plan to assess participants via surveys and focus groups. However faculty rejected this: we failed to consider the voluntary nature of faculty participation in FD and the perception of "evaluation fatigue".

**Conclusions:** Future judgment of the program's worth and merit requires more selective, creative and indirect long-term approaches (eg counting changes in field note usage, distance travelled to event) in place of traditional methods.

**Take-home Message:** A new "faculty driven" program engaged more participants, but faculty prefer us to assess program outcomes indirectly

060

Program evaluation beyond measurements of satisfaction

### **Educational practices/interventions as a success indicator for faculty development program**

Z. Zayapragassarazan, K. Dharanipragada, S. Kumar

Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER), Pondicherry, India

**Background:** The six-day national course on educational science for teachers of health professionals is held in a workshop format twice a year. It includes sessions on objectives, teaching-learning, assessment and curriculum. Kirkpatrick's 'reaction' and 'learning' – level evaluation is done during the courses.

**Summary of Work:** Kirkpatrick's 'Behavior' and 'Result' – level evaluation of last 10 Courses was done by inviting the participants of the Courses to share their educational practices/educational interventions that worked for them in promoting knowledge, attitude and skills among their learners. A format requesting information on title of the practice, the context that required the initiation of the educational practice, objectives of the educational practice, obstacles faced if any and strategies adopted to overcome them, impact of the educational practice, resources required and references/suggested readings was sent by email to the participants of last 10 Courses. The responses received were collated under different categories including teaching learning, assessment, curriculum development and skill development. The departmental affiliations of participants were also noted.

**Summary of Results:** 30 of 250 participants responded to the invitation and of these 14 belong to preclinical, 6 to para clinical, 6 to medical and 4 to surgical departments. Categories of educational practices/interventions included teaching and learning (n=20; 66%) assessment (n=5; 17%) and curriculum development (n=5; 17%).

**Discussion:** Much remains unknown about the behavioral modification and other experiences of the participants of faculty development programs. Evaluating faculty development programs at 'Behavior' and 'Result'-levels (Kirkpatrick's) helped us in knowing the effectiveness of our faculty development program.

**Conclusion:** The faculty development program motivated the participants to use their knowledge and skills for using educational practices/interventions for bringing desirable change.

**Take home Message:** Documentation of effective educational practices/interventions helps in knowing the effectiveness of faculty development program.

061

Teacher recognition and advancement

**What a workshop about teacher identity can tell us**

I. Aleluia, L. Vilas Boas, S. Brasil, S. Zaidhaft

Escola Bahiana de Medicina e Saude Publica, Salvador, Brazil

**Background:** Being a health professional and a teacher brings two different knowledge fields, with strong professional identities, to work together. Being a teacher includes what I know and what I do in a social and personal context; a complex process, that evolves over time and with personal engagement.

**Summary of Work:** We invited a group of teachers from the medicine course, to participate in a four hour's workshop about Teacher Identity. They had to think about their motivations to become a teacher, their difficulties to work as a teacher and the strategies used to overcome them. They worked alone in the first moment, and later they shared their results with their colleagues.

**Summary of Results:** 21 teachers had participated (14 doctors e 05 from other health professions and 02 educators). The principal motivations were: 1. Identification (previous experience with good teachers; see themselves through the students' eyes) and 2. Renovation (make difference, live through theirs students). On difficulties, they complained about how difficult it is to balance personal and professional lives, generational differences and remuneration. The strategies: 1. Better use of time, 2. Renewal, 3. Sense of humor, 4. Learn more about technology, 5. Share the problems to find solutions. Teachers liked the workshop and found the initiative very positive.

**Discussion and Conclusions:** The workshop promoted a space to think about what it means to be a teacher, and a health professional at the same time. The group could think about their motivations to become a teacher, to develop their identities, and identify areas of difficulties in teaching. They asked for more workshops.

**Take-home Messages:** It is essential for the institutions to have a faculty development program that promotes teachers' reflections about their role and their identity. It strengthens faculty engagement in professional and personal development of the teachers.

062

Career transitions and development

**"Teaching up": Residents as co-presenters at a continuing professional development skills and simulation conference**E. Wooltorton, F. Motamedi, S. Hetz, R. Sextus, R. Ly, P. Hendry

University of Ottawa, Ottawa, ON

**Background:** The "Skills Day for Family Physicians" is a one-day annual continuing professional development (CPD) conference teaches a mix of psychomotor, procedural and communication skills. Participants choose stations based on need and interest. Teaching strategies include case-based small-group discussions and simulation (models, standardized patients). Most speakers are family physicians. In order to mentor a new generation of presenters, speakers are urged to recruit family medicine resident co-presenters. We hypothesized that participants attending workshops taught by resident co-presenters may be less confident than those taught by faculty alone.

**Summary of Work:** The program's high level accreditation (3 credits / hour) allowed us to assess participant confidence (5 point Likert scale, self-rated "confidence to perform the skill today") at baseline, immediately-post intervention and 3 months post-intervention. We calculated station-specific mean participant confidence immediately-post event, and we calculated change in confidence for individual participants (from baseline to 3 months post-conference).

**Summary of Results:** Of 16 stations, five involved resident co-presenters (many of who led the station design). The conference registered 41 participants. Immediately post-conference there was no participant difference in confidence: mean confidence for resident stations was 4.23 (95% CI 3.98-4.47) and faculty-alone stations was 4.39 (95% CI 3.9-4.87). After 3 months the percentage of participants with at least a 1 point increase in confidence from baseline on the Likert scale was calculated: there was no difference between resident stations (mean 56.89%) and faculty-alone stations (57.86%)

**Discussion:** Involving residents as co-presenters does not adversely affect participant confidence. Residents physicians already teach medical students in clinical settings, but this reinforces their potential as educators for licenced physicians.

**Conclusions:** Having recently acquired many skills themselves, resident physician may be ideally as medical educators.

**Take-home Message:** Resident physicians are effective teachers and a potential resource as CPD co-presenters

063

Cross-cultural faculty development

### A China-Canada faculty development collaboration

M. E. Lang<sup>1</sup>, X. Chen<sup>2</sup>, D. Kunimoto<sup>1</sup>, R. Khan<sup>1</sup>

University of Alberta, Edmonton, AB; <sup>2</sup>Jilin University, Changchun, China

**Background:** International faculty development programs offer unique opportunities for collaboration between universities. The Faculty of Medicine & Dentistry (FoMD) at the University of Alberta and Jilin University, Changchun, China co-developed a faculty development curriculum for undergraduate medical education.

**Summary of Work:** A four-day faculty development curriculum was designed jointly by senior administration from both universities and peer reviewed by specialists in Chinese culture, and in medical education. Topics were delivered via lecture and workshops and encouraged collaborative learning, reflection and practice.

**Summary of Results:** An initial pilot program of this curriculum had 29 faculty members participate from Jilin University. The average ratings for “overall experience” and “curriculum content” were both 4.6/5.0 (n= 28) with the topics on “education scholarship”, “assessment” and “making lectures fun” given the highest ratings. Jilin participants also shared a variety of areas in which the FoMD could learn from them including problem-based learning and classroom teaching. The most common request for program improvements was to increase the duration of the program. Facilitators also evaluated the program highly.

**Discussion:** Faculty members from both universities were excited to be part of this pilot initiative and to start building a community of educators between our two institutions. Feedback from the participants and facilitators will be used to strengthen the program further.

**Conclusions:** This pilot program identified common themes in faculty development between our two universities and highlighted key areas where we could learn from each other. Future faculty exchanges are planned between our two universities.

**Take-home Message:** Co-designing an international faculty development program offered a unique opportunity into understanding similarities and differences in medical education between China and Canada.

064

Curriculum design/programming for faculty development

### Just in Time Teaching (JITT) tips

A. Fornari<sup>1</sup>, J. Corral<sup>2</sup>

<sup>1</sup>Hofstra/Northwell, Hempstead, NY, United States; <sup>2</sup>University of Colorado, Denver, CO, United States

**Background:** Faculty development programs increasingly need to adapt to reach the busy clinicians who teach medical students. Just-in-time faculty development provides a mechanism to send evidence-based teaching tips immediately before teaching. In our pilot a clinician educator champion and a post graduate champion were assigned to the project to work with the centralized office overseeing faculty and trainee development. Eight Just in Time Tip (JITT) infographics with evidence-based content were developed by the system-wide faculty development office, complemented by 2 clinically relevant JITTs specific to each of seven mandatory clinical rotations. An email software platform automatically re-sizes content for computers and mobile devices, and allows JITT to be pre-scheduled to send at 8am the morning a clinician teaches. Programs also had the option to select JITT via WhatsApp, a web-based communication application.

**Summary of Results:** The targeted clinicians received one JITT at 8am each week for eight weeks at both the start of the academic year, and repeated six months later for reinforcement. Programmatic evaluation, to be reported, is multi-faceted from multiple end users: faculty, trainees and students.

**Discussion:** JITT provides an innovative way to reinforce positive teaching behaviors among busy clinicians. Department champions' enthusiasm increases when they create clinical-specific Tip emails.

**Conclusions:** Each clinical discipline has its own culture and teaching focus that must be considered to ascertain buy-in of end users of JITT. Electronic faculty development is a complement to other efforts offered in busy clinical environments where teaching needs to be prioritized.

**Take-home Message:** JITT success requires educational scholarship credit and for clinical department champions to partner with the faculty development office. A project manager is needed to track all components leading to successful distribution of the Teaching Tips across a wide clinical audience. An infographic designer enhances visual appeal and uptake of evidence-based tips

065

Curriculum design/programming for faculty development

### **A Competency-based approach to faculty development programming**

J. M. Bailey

Virginia Commonwealth University, Richmond, VA, United States

**Background:** Faculty development at the Virginia Commonwealth University School of Medicine (VCU SOM) has previously focused on enhancing teaching and learning in the medical and clinical education settings. While this work is important, this narrow focus does not address all facets a faculty member's role. To broaden their programming, the VCU SOM faculty development team adopted a competency-based approach to the development and planning of faculty development activities.

**Summary of Work:** The Senior Associate Dean for Faculty Affairs completed a research project focused on successful medical faculty who promote through the tenure process and advance in their careers. She identified the following categories for success: teaching, service, scholarship, advancing, and leadership. Each of these categories contains action-focused competencies that align with career progression addressing early, mid, and late career stages. The faculty development team adopted the identified competencies to their curriculum development and planning processes.

**Summary of Results:** The results of this adoption have been clearer goals for learners, a mapped structure for faculty development activities, and a broader range of topics offered that align with career stages.

**Discussion:** Faculty development activities are now categorized into five (5) categories: Teach, Lead, Serve, Discover, and Advance with each category color coded for easy recognition in event marketing materials. A new logo reflecting these competency categories is now included on all Office of Faculty Affairs communications. Faculty are beginning to recognize and register for activities they need for promotion, tenure, and advancement.

**Conclusions:** The adoption of the competencies for success from the Senior Associate Dean's study has enriched faculty development offerings providing a recognizable structure allowing faculty to easily identify competency areas for development.

**Take-home Message:** Clear organization of faculty development activities aligned with competencies for success can lead to a comprehensive approach to career development and growth for medical school faculty.

066

Curriculum design/programming for faculty development

### Do teachers embrace eLearning for faculty development? Experience with an online training module

R. Bordman<sup>1</sup>, L. Mayhew<sup>2</sup>, A. Shahid<sup>2</sup>

<sup>1</sup>Foundation for Medical Practice Education, Toronto, ON; <sup>2</sup>Foundation for Medical Practice Education, Hamilton, ON

**Background:** For Medical Educators attending Faculty Development offerings in person can be challenging. The Foundation for Medical Practice Education supports medical schools across Canada with facilitated small group learning. Maintaining the skills of over 700 Facilitators countrywide requires a contemporary approach. We developed an online self-learning module and evaluation to refresh trained facilitators.

**Summary of Work:** The module curriculum was developed using a needs assessment. A Learning Management System was chosen. Interactivity was introduced using quizzes, games, short videos and open text for feedback. The module was pilot tested. All Facilitators were surveyed about their proficiency with technology and their comfort with eLearning. They were invited to view a 2-minute preview with a link to the full module. Reminders to complete the module were sent. Completers and Noncompleters were surveyed electronically about potential barriers and enablers to completing the module. A subset of each group will be interviewed to investigate issues in more depth.

**Summary of Results:** 140 out of 382 completed the initial survey. 20 people completed the eLearning module. Facilitators who rated themselves as more proficient in EMR usage were significantly more likely to commence the eLearning module. Others factors (location, internet skills, age, gender, etc.) were not significant. Several barriers and enablers to enhance eLearning will be identified.

**Discussion:** The uptake of the eLearning module of 14% highlights the need to know your audience before embarking on creating this expensive and time-consuming modality. Pinpointing the perceived need, keeping the module short and using a variety of marketing tools could help promotion.

**Conclusions:** eLearning modules are one answer to reach disseminated Faculty but they require significant program support.

**Take-home Message:** An eLearning module is a viable method for Faculty Development, especially in a distributed model but it requires careful design and active marketing to enhance uptake.

067

Curriculum design/programming for faculty development

### Development of an educational curriculum for simulation facilitation by nurse educators

J. Dale-Tam, P. Menard, G. Posner

The Ottawa Hospital, Ottawa, ON

**Background:** Simulation based education is at the forefront of healthcare professions education where an essential part is the debriefing. Best practices indicate the debriefing should be facilitated by a trained simulation instructor. The Ottawa Hospital nursing education department implemented a large simulation-based orientation program that requires trained instructors.

**Summary of Work:** Using the Plan-Do-Study-Act (PDSA) quality improvement framework, a six-hour workshop, "Introduction to Simulation", was developed and implemented. To further support the development of the educators new to simulation facilitation, simulation "champions" were recruited and completed a four-hour workshop on coaching and meta- debriefing. These champions observed the nurse educators debriefing and provided coaching after one session and meta-debriefing after three sessions using the Observational Structured Assessment of Debriefing (OSAD) tool.

**Summary of Results:** Preliminary results from the workshop pre and post evaluations indicate improved comfort and confidence levels in debriefing skills. Further analysis will occur over the next four months looking at the quality of debriefing using the OSAD tool and qualitative evaluation using focus groups and surveys with the nurse educators and simulation champions.

**Discussion:** Learner centered development of simulation facilitator curriculum using the PDSA framework created a program that met the needs of the new nurse educators and nursing education at The Ottawa Hospital. Further capacity has been built through the creation of the simulation champions which will contribute to the sustainability of this program.

**Conclusions:** Development of a simulation facilitation curriculum requires a multipronged approach to meet the initial educational needs of the learners. In addition, it also provides further coaching and professional development of the learners for translation of knowledge to simulation educational practice.

**Take-home Messages:** Engage with learners on an ongoing basis. Apply simulation facilitation best practices. Consider translation and sustainability in initial curriculum design.

068

Curriculum design/programming for faculty development

### **New junior faculty development program: Preliminary outcome**

M. Gowrishankar, E. T. Rosolowsky, M. Hawkes, K. Forbes, A. Osornio-Vargas, M. Belletrutti, B. Islam, H. Leonard

University of Alberta, Edmonton, AB

**Background:** Assistant Professors (AP) face many challenges in achieving their career goals. Their promotion is based on evaluation of the multiple tasks they perform. Yet they may be ill-prepared. They may be new to the environment, have incomplete understanding of policies/procedures, not formed connections/network, and overwhelmed with day-to-day activities (patient care, electronic charting etc) and changes in administrative policies and expectations.

**Summary of Work:** Our departmental faculty development committee conducted a needs-assessment survey of all AP anonymously and also gathered information from the Chair and promotion committee. A 2-year curriculum was developed and provided as 2-hour workshops. Written feedback obtained at the end of each workshop facilitated ongoing curriculum updates.

**Summary of Results:** Survey response rate was 100%: 65% completed >85% of questions. Curriculum developed covered teaching, research, clinical, administration, dossiers and annual report preparation, mentorship, wellbeing and leadership-skills. There were 29 registrants. During the first and second years, 6 and 7 new AP joined respectively. Attendance rate was 70-95%. Rating was 4.2-4.8/5. Narrative comments were highly positive. Those promoted and those applying for promotion next year, reported that this curriculum was beneficial. AP reported that they developed collaborations and became familiar with each other and their work due to workshop participation.

**Discussion:** Our program is multifaceted and focused on many aspects for growth and development of AP at our institution. It is continuing to be well received and appears to be making a meaningful difference.

**Conclusions:** Preliminary data suggests that our curriculum is assisting AP in achieving their career goals. Such curriculum needs to be delivered on an ongoing basis. Follow-up data will be collected to determine if this trend continues and translates into identifiable achievements.

**Take-home Messages:** AP in any institution will benefit from a well-planned and delivered faculty development curriculum. This requires institutional recognition of the need and champions to execute.

069

Curriculum design/programming for faculty development

### Faculty development in the Pacific

L. Young<sup>1</sup>, S. Kado<sup>2</sup>, L. Sweet<sup>3</sup>

<sup>1</sup>James Cook University, Townsville, QLD, Australia; <sup>2</sup>Fiji National University, Suva, Fiji; <sup>3</sup>Flinders University, Adelaide, SA, Australia

**Background:** Since 2006, students from Pacific island nations have been sent to Cuba to train as doctors in a health system that emphasizes community and primary health care. They are now returning as interns to their home country. It was found that they are not well prepared for hospital work as interns, and their supervisors have had little experience supervising and providing medical education for interns. Faculty development for this role was required.

**Summary of Work:** This paper reports outcomes from a series of one week medical education faculty development workshops that have been undertaken in the Solomon Islands, Kirribati, Vanuatu, Palau and Fiji. These workshops aim to upskill clinical supervisors in contemporary knowledge, skills and attitudes related to learning, teaching and supervision in their clinical settings.

**Summary of Results:** The presentation will describe the theoretical basis for the workshops, using action research cycles, as well as the topics and skills covered. Outcomes from the workshops, including participant feedback will be described. A main outcome was the increase in teaching confidence as well as the development of educator skills. Recommendations for faculty development in other low resource countries will be discussed.

**Discussion and Conclusion:** One week workshops are effective for developing faculty educator skills for clinical supervisors in Pacific Island nations. Core concepts such as learning as opposed to teaching and active rather than passive learning are readily adopted by participants. Whilst a week long workshop is not the optimum time, it works well in resource poor nations for developing a positive teaching culture and supervisor skills as educators.

**Take Home Messages:** Week long workshops are effective in increasing faculty knowledge and skills in medical education in low resource settings and where there is no previous teaching culture.

070

Curriculum design/programming for faculty development

### Developing a longitudinal program to promote role modeling in clinical educators

S. Mortaz Hejri<sup>1</sup>, E. Mohammadi<sup>2</sup>

<sup>1</sup>McGill University, Montreal, QC; <sup>2</sup>Tehran University Of Medical Sciences, Tehran, Iran

**Background:** Role modeling is an essential component of clinical teaching in medicine. However, many of attending professors find it challenging to act as an effective role model. In this study, we aimed at exploring clinical educators' performance regarding role modeling during a longitudinal enhancement course.

**Summary of Work:** We designed a longitudinal program, composed of four face-to-face sessions in which lectures, group discussions, role plays, and self-directed learning were used, in addition to assignments presented virtually to facilitate reflection in participants. The three-month course was held for 18 faculty members, randomly allocated to the intervention group. A questionnaire was administered to both intervention and control groups. Medical students and residents were asked to complete the Role Model Apperception Tool (RoMAT) for faculty members of both groups, before and after the course. The intervention group, before and one month after the course, wrote reflective papers regarding their real experiences of being a role model.

**Summary of Results:** Participants' awareness and perception as being role models improved significantly after the course: 3.3 to 4.3 [p value < 0.000]. Medical students and residents completed a total of 542 RoMATs. Before and after the course, the average scores for intervention group were 4.20 and 4.26, respectively; while in control group they were 4.34 and 4.33, respectively. By performing content analysis on the participants' reflective papers, some new themes were emerged after the course: Reflecting on behaviors and modifying them, self-control, demonstrating deliberate role modeling, getting and giving feedback, creating a safe educational environment, and prioritizing professional behavior.

**Discussion:** Helping clinical teachers become a better and effective role model is necessary. Considering the busy schedule of clinical educators, this study introduced a quite effective way to promote role modeling in clinical faculty members.

071

Curriculum design/programming for faculty development

### **Applying coaching concepts from quality improvement to inform the design of effective continuing education**

P. O'Brien, J. Peranson

University of Toronto, Toronto, ON

**Background:** Quality improvement (QI) coaching and continuing education are characterized by the mutual goals of improving and learning. We proposed that QI coaching concepts could inform effective continuing education design to facilitate improvement in knowledge, skills, behaviours, and also in patient and system outcomes.

**Summary of Work:** A literature review was completed on QI coaching concepts and frameworks with an emphasis on the primary care context. Literature on best-practice in continuing education in the health professions was also reviewed. Common themes were compared for the purpose of identifying coaching concepts that demonstrate relevance to, and alignment with, effective program design. The utility of these concepts was then explored through application to a hypothetical education scenario.

**Summary of Results:** Six QI coaching concepts were found to demonstrate relevance to education design including: adaptation to practice culture; attending to adaptive reserve; goal-setting/gap identification; readiness assessment; role tailoring; and competence in improvement approaches.

**Discussion:** The successful mapping of QI coaching and facilitation concepts to educational program design presents an opportunity for developers of continuing education activities to focus on impact that is beyond the usual attempt to influence attainment of knowledge, skill and attitude. The potential for practice impact could be described from the lens of the learner, team, patient, organization or system.

**Conclusion:** Designing continuing education to support attainment of knowledge, skills and attitudes, and that achieves the goal of improving patient outcomes should be a healthcare professional educational goal. Application of QI coaching concepts supports effective continuing education design in pursuit of both.

**Take-home Message:** Application of QI coaching concepts, described in education design through a focus on learning, including reflection and application, before, during, and following an educational event, has the potential to improve care simultaneously while improving competence, confidence and quality.

072

Curriculum design/programming for faculty development

### **MacAdemia: Meeting the faculty development needs of community physician teachers in distributive medical education**

X. Tong<sup>1</sup>, A. Kundi<sup>2</sup>, A. Wong<sup>3</sup>, A. Bell<sup>2</sup>, C. Morris<sup>1</sup>

<sup>1</sup>McMaster University, Kitchener-Waterloo, ON <sup>2</sup>McMaster University, St. Catharines, ON; <sup>3</sup>McMaster University, Hamilton, ON

**Background:** Physician teachers in distributive/decentralized medical education (DME) sites who practice at varying distances from the main campus face increasing clinical and teaching demands. Although institutions offer ongoing faculty development programs, DME physician teachers do not participate optimally due to many barriers.

**Summary of Work:** The McMaster University Program for Faculty Development (PFD) Team administered a needs assessment survey to DME teachers. The results showed that although enthusiastic, they lack confidence in their skills and desire more feedback. In 2018, the PFD team launched MacAdemia, a new faculty development certificate program designed for physician teachers in two distributive campuses. Compared to the main campus programs, MacAdemia is uniquely interactive, personalized, self-directed, and accessible. It is designed to support the very busy physician teachers to reach their goals without incurring significant burden to their existing clinical and teaching practices.

**Summary of Results:** Eleven clinician teachers from various practice locations and specialties have enrolled in the program. One has completed the program. Although it is too early to evaluate the program from the participants' point of view, it has succeeded as a vehicle for faculty development delivery and a scaffold for building a teaching community-of-practice. As such, it potentially benefits all DME physician teachers including those who do not register in the program.

**Discussions and Conclusions:** Through MacAdemia, McMaster University PFD Team has started to succeed in engaging more DME physician teachers. As we support physicians in achieving their individual teaching goals and building a teaching community, we help deliver the university's academic mission in the DME setting.

**Take-home Message:** Delivering faculty development effectively in the DME setting is challenging. The McMaster PFD team has seen initial success in the first cohort of the MacAdemia program.

073

Faculty development for research and scholarship

### **Raising the scholarly bar by developing a community of peer review practitioners**

R. Bing-You, V. Hayes, W. Craig

Maine Medical Center, Yarmouth, ME, United States

**Background:** Conducting peer reviews (PR) of manuscripts is a learned skill not often covered in faculty development programs. These same skills may help reviewers to hone their own scholarly efforts.

**Summary of Work:** We created a 5-week online (Canvas) course, Best Practices in Manuscript Peer Review that was open to any faculty. Topics included: the value, challenges, and personal benefits of PR; checklists; EQUATOR guidelines; evidence-based practices. Each week included a brief video, quiz, group discussion, readings, and assignments. To complement the course, we also launched a monthly Group Manuscript Peer Review (GMPR) luncheon session, where faculty could present, in a nonjudgmental forum, their own manuscripts at any stage of development, or (with permission) those that they were reviewing for a journal.

**Summary of Results:** The course was conducted in 2017 and 2018 and to date an interprofessional group of 14 faculty have participated (physicians, basic scientist, nurse, pharmacist, physician assistant). Sample quotes: *"It teaches an evidenced-based approach to PR with an emphasis on incorporation of reporting guidelines. The material I learned in this course helps me produce high-quality PR reports efficiently."* "More importantly, the course taught me how to review the material in an organized and systematic manner." The GMPR has been held monthly since April 2017 and typically, an interprofessional group of ~10 faculty and learners attend.

**Discussion:** Faculty development programs to enhance PR capabilities are feasible. Besides supporting the scholarship of authors and reviewers, involvement in PR may satisfy faculty accreditation requirements.

**Conclusions:** (1) There is interest amongst interprofessional faculty to learn PR skills; (2) Formal education increases self-perceptions of such skill; (3) A regular, safe forum to critique manuscripts is a helpful complementary activity.

**Take-home Message:** Establishing a system and community of practitioners to promote PR may support the scholarly activity and excellence within an institution.

074

Faculty development for research and scholarship

### The ALiEM faculty incubator: An outcomes-driven approach to faculty development

M. Gottlieb<sup>1</sup>, S. Krzyzaniak<sup>2</sup>, J. Sherbino<sup>3</sup>, R. R. Cooney<sup>4</sup>, F. Ankel<sup>5</sup>, L. Yarris<sup>6</sup>, M. Lin<sup>7</sup>, T. M. Chan<sup>3</sup>

<sup>1</sup>Rush University Medical Center, Chicago, IL, United States; <sup>2</sup>University of Illinois, Peoria, IL, United States; <sup>3</sup>McMaster University, Hamilton, ON; <sup>4</sup>Geisinger Medical Center, Danville, PA, United States; <sup>5</sup>HealthPartners Institute, Bloomington, MN, United States; <sup>6</sup>Oregon Health and Science University, Portland, OR, United States; <sup>7</sup>University of California San Francisco, San Francisco, CA, United States

**Background:** In-person faculty development opportunities are often limited in the types of data they can accrue for program evaluation. Often outcomes for such programs are limited to participant satisfaction and rarely can gather analytics about other higher-order outcomes.

**Summary of Work:** The Academic Life in Emergency Medicine (ALiEM) Faculty incubator program is a digital faculty development experience that spans 12-months. Over this time, participants engage in multiple small group projects and are asked to engage with each other via a closed social media platform (Slack). Participants were polled for their annual academic productivity at the culmination of the year's participation to determine their scholarly outputs over the course of the year.

**Summary of Results:** From 2016-2018, we have graduated two classes consisting of 60 total incubatees. We had 38 participants answer the outcome survey (63% response rate). Participants shared 1,816 files and exchanged a total of 38,876 messages (approximately 53 per day). Of these, 5,834 (15.0%) were via channels which were open to all participants, 8,038 (20.7%) via small groups, and 25,010 (64.3%) via direct messages. During the faculty incubator year, participants averaged an increase in publications of 3.68 (SD 2.97), and conference presentations of 1.11 (SD 1.96).

**Discussion:** By creating a faculty development program targeted at developing skills and also providing opportunities to engage in outcome-driven activities, we created a program which was able to generate increased scholarly output. More research is needed to determine which strategies are most effective in further enhancing academic performance.

**Conclusions:** The ALiEM Faculty Incubator is a proof-of-concept for a true longitudinal, online scholarly program that can foster greater scholarly success.

**Take-home Message:** By harnessing the power of technology, faculty development programs can identify additional metrics of engagement and higher-level outcomes.

075

Faculty development for teaching, learning and assessment

**Strengthening faculty development: The McGill nursing collaborative for education and innovation in patient- and family-centered care**

A. Chevrier, A. Arnaert, C. Armistead, C. Maheu, M. Lavoie-Tremblay

McGill University, Montreal, QC

**Background:** The McGill Nursing Collaborative for Education and Innovation in Patient- and Family-Centered Care is a donor-supported initiative intended to advance nursing research, education and practice in the McGill community, especially in ways that enhance cooperation between the three founding partners, the McGill University Health Center, the Jewish General Hospital (an affiliated McGill teaching hospital) and the Ingram School of Nursing, McGill University.

**Summary of Results:** Common strategic priorities among the partners were established that aligned the clinical, education and nursing research interests of the three sites through executive and coordination committee structures. More than 35 projects have been developed and implemented that involve over 1000 nurses and Interprofessional teams around three themes: 1) Developing clinical competencies, 2) leadership and mentoring and 3) e-learning Initiatives. The McGill Nursing Collaborative has provided an opportunity to strengthen and advance an academic nursing network in Montreal, Canada. Outcomes from the projects include a better alignment of priorities and projects across clinical areas as well as stronger linkages and synergy within the network.

**Discussion:** Collaborative projects benefit from researcher expertise, rigor and support, while being embedded in sound educational principles and everyday clinical realities. This has had a positive impact on successful project implementation and uptake, as well as optimizing the sharing of expertise.

**Conclusion:** Health innovation involves the interplay between research, education and clinical practice, which leads to the translation of new knowledge and new models for effectively delivering care.

**Take-home Message:** Collaboration among clinical practice sites and academic centers of nursing are essential for aligning research, education and clinical practice needs and priorities.

076

Faculty development for teaching, learning and assessment

### **Motivating teachers through microteaching sessions in faculty development programs**

K. Dharanipragada

Jawaharlal Institute of Postgraduate Medical Education and Research, Puducherry, India

**Background:** During regular faculty development programs held at JIPMER, a medical school in South India we conduct a live microteaching (MT) session. This survey was conducted to determine the impact of MT on workshop participants.

**Summary of Work:** An online questionnaire using Google forms was sent to 217 participants. They were asked if they were able to continue practising microteaching at their home institutions, the factors that influenced this and their view on the relevance of microteaching as a faculty development tool.

**Summary of Results:** All 56 respondents opined that it was a valuable component of the faculty development program. Sixty-four percent valued self-assessment and feedback from all members of the audience because it offered varying perspectives which motivated for self-improvement. 83.9% had been able to practice microteaching after the workshop commonly focusing on skills such as lesson planning, pupil participation and time management. 25% of the responders had participated in more than 5 microteaching sessions. 45% had been able to enlist the participation of their colleagues through discussions explaining the importance of MT. Lack of time and opportunity and difficulty in getting the co-operation of colleagues were the main reasons cited by those who had not been able to practice MT. 93% were of the view that MT should be regularly practised in medical schools.

**Discussion:** Teachers attach significant value to feedback on their teaching from multiple perspectives. MT provides an opportunity to obtain this in an efficient manner and motivates them to improve themselves in one or more areas of their lecturing skills.

**Conclusions:** Regularly practising MT motivates, and its successful implementation requires the support of colleagues, administration and the medical education unit.

**Take-home Message:** MT is a valued component of faculty development programs.

077

Faculty development for teaching, learning and assessment

### Faculty development à la carte: Getting hungry?

R. Engbers

Radboud University Medical Center, Nijmegen, Netherlands

**Background:** During the development of a new curriculum at the Radboud University Nijmegen Medical Centre, the Netherlands, new educational insights are applied. As a consequence, medical teachers need to further develop their teaching skills. We tailored the faculty development program to the educational insights underlying the student curriculum.

**Summary of Work:** Curriculum change fundamentals are: Learning 1) is an active process, 2) needs collaboration, 3) is prospered by meaningful contexts, and 4) by self-determination. Based on these fundamentals, we developed an à la carte menu with 27 bite-size items on educational development, didactic skills, and testing and assessment.

**Summary of Results:** An à la carte menu for faculty development is offered to teachers as a free service. They actively organize themselves into small groups of people having the same learning question. Together with an expert, they work collectively, and hands-on, on questions and cases from their own teaching practice.

**Discussion:** The installed à la carte menu for faculty development possesses established effective features like community building, experiential learning, and relevant context (Steinert et al., 2016). We would like to discuss how to derive the maximum benefit from these features. A take-away version of our menu will be available on sight.

**Conclusions:** The à la carte menu for faculty development has been introduced only recently. However, teachers, Heads of Department and program directors endorse this new à la carte menu with enthusiasm, because it is more tailored to the needs of a busy medical teacher compared to more time-consuming courses on fixed dates.

**Take-home Message:** A flexible menu with bite-size activities brings together supply and demand in educational development. By applying new educational insights from the student curriculum to the faculty development menu, basically asking from teachers what we ask from our students, we seem to tap into teachers' motivations to develop their teaching skills.

078

Faculty development for teaching, learning and assessment

**OSCE examiner training: The development of an interactive faculty development program to reduce intra-examiner variability**

C. J. Gibson

Keele University Medical School, Staffordshire, United Kingdom

**Background:** It is recognised that there is variation between different OSCE examiners marking the same station: Literature suggests that approximately 10 % of variance is due to rater differences at either end of the leniency-stringency spectrum. An interactive faculty development programme has been developed using video and blind marking utilising voting remotes (TurningPoint).

**Summary of Work:** A novel training approach was trialled, delivering education sessions using video of stations, then using 'voting remotes' to evaluate individual scores, which were then moderated in an interactive feedback discussion. Over three years 327 doctors attended examiner training; the results demonstrate that there is standardisation of the scores given by examiners, although there is still variation between them. Despite this there are still examiners who mark using an 'internal' mark scheme rather than the allocated assessment criteria.

**Summary of Results:** A panel of four highly experienced examiners arrived at an ideal score of 19 marks out of 29. During the first iteration of the video, most total scores (73.4%) ranged from 16 – 22 and 83.4% ranged from 17 – 21. During the second iteration of the video (same station, different candidate) most scores (78.7%) ranged from 16 – 22 and 90.4% from 17 – 21. Total scores outside the 16 – 22 range showed considerable variation with little consistency although some 'hawks' and 'doves' could be identified.

**Discussion:** The training sessions reached a significant number of raters and targeted the reliability and consistency of marking. The results demonstrate that there is standardisation of scores although there is still variation between them.

**Conclusions:** Findings of this study suggest standardised training may reduce examiner variability. It is necessary to determine whether training makes a difference to examiner behaviour during OSCEs or impacts on the reliability of marking.

**Take Home Message:** Standardised OSCE examiner training reduces rater variance.

079

Faculty development for teaching, learning and assessment

### Using Kirkpatrick model to evaluate the faculty development programs

S. Hosseini, N. Eslami, H. Gholami, A. Makarem

Mashhad University of Medical Sciences, Mashhad, Iran

**Background:** Evaluating the empowerment programs for novice faculty have always been a challenge for the universities administrators. Kirkpatrick model may provide a conceptual framework to evaluate the effectiveness of such programs. It conceptualizes the evaluation process in four levels as "Reaction", "Learning", "Behavior", and "Results". The purpose of this study was to evaluate the effect of a faculty empowerment program using Kirkpatrick model in Mashhad University of Medical Sciences (Iran) in 2017.

**Summary of Work:** Novice faculty that were eligible to attend the empowerment program, took part in the study. A questionnaire was used to assess the participants' satisfaction (Reaction level) on the scientific content of the program, program teachers' competencies and other aspects. To evaluate the second level of the Kirkpatrick model (Learning), a pretest before the program and a post-test after completing it were applied for the participants. The evaluation process of the third (Behavior) and fourth (Results) levels are ongoing at now.

**Summary of Results:** The highest satisfaction scores for basic sciences faculty were for the "Instructional design" and "Student-centered teaching methods" courses, respectively. Also, the most clinical faculty satisfactions were for the "New clinical assessment methods" and "E-learning and novel educational technologies", respectively. The mean of the post-test scores of the faculty were improved after taking part in the program, significantly.

**Discussion:** Although, such empowerment programs may provide the needed knowledge for the faculty, assessing the "Behavior" of the faculty in real situations and the long term "Results" for the universities are more difficult.

**Conclusions:** Faculty empowerment is a multidimensional process and needs enough time to be evaluated. Kirkpatrick model can provide a holistic view to faculty development programs.

**Take-home Message:** More than formal faculty development programs, the other formats such as mentorship may provide a framework to plan faculty development activities.

080

Faculty development for teaching, learning and assessment

### Formative evaluation in problem-based learning: Strengths and weaknesses

C. Iamada<sup>1</sup>, M. Senger<sup>2</sup>, R. de Oliveira<sup>2</sup>

<sup>1</sup>Centro Universitário de Votuporanga, Votuporanga, Brazil; <sup>2</sup>Pontifícia Universidade Católica de São Paulo, Sorocaba, Brazil

**Background:** In Problem-Based Learning (PBL), students are expected to learn with autonomy and, in this context, the way the students are evaluated should also be observed, especially in their formative dimension.

**Summary of Work:** Identify weaknesses and strengths in the application of formative evaluation in the PBL tutorial sessions in a medical course; analyze the functionality of the used instrument; clarify the understanding of the students and teachers about this evaluation. A case study was conducted with focus groups of 29 students and 14 teachers from a private higher education institution. The material was analyzed according to content analysis, thematic modality from the perspective of Grounded Theory.

**Summary of Results:** Thematic analysis resulted in four categories (evaluate to learn, feedback (for good and bad), change of traditional culture in education, use of evaluation tool) and 12 subcategories. The material was analyzed according to content analysis, thematic modality from the perspective of Grounded Theory.

**Discussion:** The participants considered the formative evaluation as important for the teaching-learning process and understood the characteristics involved in this evaluation. The obstacles described were the lack of culture for its practice, the lack of preparation of tutors, the difficulty in time managing for its execution and the doubts in the institutional instrument use.

**Conclusion:** Teachers, students and educational institution committed to the formative evaluation are essential for its accomplishment. The shift to a self-rated perspective and student independence requires collective construction. There is a need for ongoing education and exchange of experiences.

**Take-home Message:** Discussion, reflection and commitment will lead to evaluations consistent with the learning process of students, teachers and managers. And, it will possibly result in overcoming the weaknesses and strengthening the teaching-learning processes, including the evaluative ones.

081

Faculty development for teaching, learning and assessment

### Can self-selected writing assignments be an effective faculty development strategy?

M. Kvernenes

University of Bergen, Bergen, Norway

**Background:** In faculty development (FD) programs, university teachers are often taught how to use writing-to learn strategies to facilitate student learning. In our FD program in Bergen, Norway, we applied this strategy to promote learning amongst faculty members. As part of the program, participants are writing a 2000 words paper on a self-selected topic related to and relevant for their work as medical educators.

**Summary of Work:** We analyzed 35 papers from two cohorts to map what topics our faculty members were interested in and how they approached their topic of interest. We also collected data from the program evaluations to learn how they valued this approach to FD.

**Summary of Results:** Most papers fall into the following four categories; literature summaries, evaluations, course revision or reports of educational interventions. In term of topics of interest, we found that most papers addressed assessment, teaching methods, supervision or curriculum planning. In the evaluation, 88% agreed (totally or partially) to the statement "I found it useful to focus on a self-selected topic in the written assignment".

**Discussion:** We observed that although many teachers initially struggled to identify suitable topics and approaches for their papers, most eventually found the assignment motivating and rewarding. Many of the mini-projects resulted in spin-offs such as local interventions, collaborations between colleagues, and paper presentations at national conferences. This suggests that allowing faculty to have an influence on their FD activities can have benefits beyond building individual competence.

**Conclusions:** By using self-selected writing assignments as an approach to FD, teachers are allowed to focus on topics and challenges that are relevant for them in their daily work. This boosts motivation as well as sense of agency.

**Take-home Message:** The combination of self-selected topics and written assignments can serve as a useful FD strategy both for individuals and teaching communities.

082

Faculty development for teaching, learning and assessment

### Faculty development builds education networks: But are they used?

P. S. O'Sullivan, V. Ruddick, D. Irby

University of California San Francisco, San Francisco, CA, United States

**Background:** New knowledge and skills derived from faculty development (FD) workshops are not always translated into action in the workplace. To improve enactment of new skills, proponents of social network theory argue for strengthening education networks. This study examines the application of education skills/concepts in the workplace and whether social networks strengthen such actions.

**Summary of Work:** Building from social network theory research, we created a 15-item survey of participants in our FD program from July 2017-Dec 2018. The survey asked about demographics, networks and how those networks enabled practice, using a scale from strongly disagree (1) to strongly agree (5). We surveyed a 50% sample from 610 eligible participants (n=305), and report percentages combining agree and strongly agree.

**Summary of Results:** Respondents (107 (35%)) were physicians (66%) from the School of Medicine (56%) who attend FD frequently (50%). Their networks included individuals at work (85%) and to a lesser extent external to work (25%). Respondents discussed ideas from FD with peers (88%) and leadership (66%); 9% discussed with no one. Respondents applied skills/concepts learned in FD to their teaching (91%). Over half (56%) indicated that their education network increased with FD, but to apply what they learned, only 38% used their educational network while 78% identified "my own efforts."

**Discussion:** Respondents reported being engaged in FD, both sharing and applying what they learned. While FD increased their education networks, few perceived that the networks helped them apply skills. Faculty developers should emphasize the importance of networks.

**Conclusions:** While participants share and apply what they learn in FD and build education networks, they tend to rely on their own efforts more than on education networks.

**Take-home Message:** Frequent engagement in FD expands education networks. Programs should encourage faculty to look to networks as a valuable resource to apply new skills/concepts.

083

Faculty development for teaching, learning and assessment

### **Train future junior staff about teaching, learning and assessment: The Italian Society of Medical Education green line experience**

A. Lotti

Università di Genova, Genova, Italy

**Background:** The need to create a new generation of future medical educators, who could work in both academic and health system fields, pushed the Italian Society of Medical Education to create a winter school, so-called Green Line, with the ultimate goal to train young professionals.

**Summary of Work:** The Italian Society of Medical Education (SIPeM) planned and implemented four workshops, held in a residential format, about competency-based education, teaching and learning methods, simulation, and assessment methods. Twenty young professionals (medical doctors, nurses, osteopaths, educationalist and psychologists). coming from some Italian universities and/or health services, identified by senior staff belonging to SIPeM, attended the 4 workshops and acquired good competencies as medical educators. A questionnaire was sent to all the participants to collect the initiatives started after the winter school.

**Summary of Results:** The questionnaire was sent to all the participants and almost all replied. Many initiatives took place: creation of a national working group to propose a national reform of postgraduate medical education, a master degree proposal in medical education, a workshop about research in Medical Education, a national survey about educational needs of health personnel in health services, a working group about osteopaths' core competence.

**Discussion:** Many initiatives took place after the first edition of SIPeM Green Line and there will be analyzed in detail. Some participants changed their role and now are associate professor, assistant professor, advisers in Italian Society of Medical Education.

**Conclusions:** Italian Society of Medical Education Green Line seems to be a very promising initiative to disseminate Medical Education.

**Take-home Message:** Investing in new generation of health educators, in an inter-professional format, seems to be very fruitful.

084

Faculty development for teaching, learning and assessment

**Regular training strengthens the development of teachers in the medical course of the University Center of Votuporanga / SP.**

M. Hernandez, M. Chinelato, S. Vayego, V. Santos, L. Machado

Centro Universitário de Votuporanga, Votuporanga, Brazil

**Background:** The course has a structuring faculty with 5 teachers: 1 biologist, 2 physicians and 2 nurses, who evaluate the results of the progress test, conceptual maps of problem-based learning and elaboration of test questions. When identifying deficiencies, they plan specific training for the 62 teachers involved in the curricular content.

**Summary of Work:** Present the experience of periodic training for teacher development. The tutors give a conceptual map at the end of each problem studied. During the semester, the core teachers evaluated the pertinence of the learning objectives elaborated with the Bloom Taxonomy. The results of the progress test are distributed to specialist teachers, who issue opinions on relevance, relevance and consistency of the items in the curricular context. The core of teachers collaborates directly with the preparation of bimonthly assessments, managing to identify the need for further training.

**Summary of Results:** 48 trainings were conducted between 2013 and 2018. The workshops on conducting the PBL tutoring and Bloom taxonomy obtained higher frequency and teacher adherence.

**Discussion:** The workshops held at the beginning and end of the semester have a high attendance rate due to the specific schedule for planning academic activities. Recent academic interurrences favor the discussion and verbalization of difficulties, strengthening the connection between teachers and the sharing of experiences and solution of problems.

**Conclusions:** The periodic training has reduced the weaknesses in the coherence in the elaboration of items for the evaluations and their respective response patterns. Teachers feel more empowered to deal with the inexperienced in the dynamics of the tutorial session.

**Take-home Message:** The quality of the medical curriculum is directly related to the qualification of its teachers for the teaching profession.

085

Faculty development for teaching, learning and assessment

### Challenges of the permanent pedagogical education of doctors in the teaching process

C. Iamada, C. Matarucco, A. Mello, S. Vayego, M. Chinelato, M. Hernandez

Centro Universitário de Votuporanga, Votuporanga, Brazil

**Background:** It is crucial to implement continuous professional development in universities to develop skills and competencies in doctors who are professors taking into account the new curricular guidelines and the increasing opening of new medicines courses.

**Summary of Work:** The present study analyzes the continuous professional development of professors of the medicine course of Centro Universitário de Votuporanga (UNIFEV); identify potentialities and difficulties in the continuous professional development of professors of the medicine course of UNIFEV; verify the applicability of such development in the teaching process and propose improvements in the continuous professional development of professors of the medicine course of UNIFEV.

**Summary of Results:** Descriptive quantitative research with nine doctors who are professors that participated in the teaching training program of UNIFEV using guiding questions and reports obtained in the focus group. The reports were analyzed by means of the content analysis methodology.

**Discussion:** Time constraints, the lack of previous scheduling, recognition and motivation, as well as the absence of a minimum require attendance were some of the aspects identified as obstacles for the participation in continuous professional development. The facilitating aspects were: the use of new methodologies, the exchange of experiences, the opportunity and need of learning among others. The applicability was in the field of the different active methodology techniques and of the evaluation of the teaching-learning process. The contributions for the improvement of continuous professional development were related to scheduling and feedback of its applicability.

**Conclusion:** The continuous pedagogical development for professors has contributed to the medicine course. Based on the results, we suggest changing schedules according to doctor's availability, incorporating hybrid teaching and addressing specific themes according to professors' needs.

**Take-home Message:** Teacher training is fundamental to teaching and the new medical curriculum

086

Faculty development for teaching, learning and assessment

### **Essentials of teaching: Interprofessional faculty development in the clinical and classroom settings**

R. van Wylick, E. K. Soleas, L. McDiarmid, M. De Sousa, I. Harle

Queen's University, Kingston, ON

**Background:** New faculty in medicine undergo extensive training in their residency but receive little training in being an effective teacher. Effective training as a teacher includes quality teaching in the clinical and classroom environments which is a skillset that typically occurs outside the scope of residency training. Therefore, it falls to Faculty Development initiatives in addition to new and established faculty seeking out self-driven opportunities to develop their skills.

**Summary of Work:** To this end, with our partners in the Faculty of Health Sciences, Queen's CPD offers recurring full-day accredited Faculty Development programs entitled 'Essentials of Classroom Teaching' and 'Essentials of Clinical Teaching'. The Essentials series programs are composed of interprofessional mix of active and didactic learning for faculty teaching nursing, rehabilitation, and medicine with breakout sessions into heterogeneous small groups.

**Discussion:** The program evaluation surveys conducted after each cohort indicate that the events are well-received (94%), but faculty members favour a change towards active and blended learning as opposed to the didactic learning commonly favoured in the past. In particular, faculty express the need for teaching resources and learning about teaching settings outside the conventional classroom with a particular focus on effective feedback strategies and how to structure meetings with students and trainees to develop self-regulated learning.

**Conclusion:** Although didactic teaching development is a crucial component of interprofessional faculty development it is the special cases that draw the most attention including teaching groups on short notice and teaching at the bedside and across professions.

**Take-home Message:** Interprofessionalism in the education sessions creates a culture of cross-pollination where successful practices in one health profession program diffuse into other programs and encourages the collaboration of faculty across health professions.

087

Faculty development for teaching, learning and assessment

### **Empowering medical educators: Faculty development programs for health education professionals in China--Shantou University Medical College (SUMC) as an example**

Z. Zhang, P. Tan, G. Xin

Shantou University Medical College, Shantou, China

**Background:** More than 100,000 medical students graduate from 159 medical colleges in China every year. However, few formal faculty development programs were available in medical teachers in past decades, despite the challenges of increased student enrollment and rapid shifts of healthcare systems to meet the contemporary needs of an aging population. In 2009, SUMC took a lead in opening the first Center for Faculty Development (CFD-SUMC) in health education professions in China and this center has provided effective supports to medical teachers.

**Summary of Work:** The mission of CFD-SUMC is to help medical educators to improve their instructional skills necessary for medical education and also provides them with personal academic growth. Hands-on training of education philosophy and learning theory, education technique and teaching skills, personal career and leadership development were offered to medical teachers from not only SUMC but also many other medical universities. In the past 10 years, a total of 1,239 seminars and workshops were conducted with about 30,000 medical teachers being benefited.

**Summary of Results:** Changes were observed in teachers' teaching behaviors. Survey on effectiveness of faculty development activities showed improved confidence in lectures and bedside teaching and CFD proves effective in improving education skills of medical educators in China.

**Discussion:** CFD-SUMC insisted on faculty-centered philosophy and moved away from a top-down model of management embracing concepts of distributed leadership. Our training programs were designed to support curricular, instructional needs of medical teachers and meanwhile nurture and empower innovative perspectives to reduce the impact of stress encountered by teachers.

**Take-home Message:** Faculty development is a shared responsibility that is rooted in sensible feedback from all participants.

**Conclusions:** We believe that a nurturing, empowering and teacher-directed philosophy of faculty development is needed to encourage teachers to embrace the services of the CFD.

088

Faculty well being

**Examining burnout among US medical school faculty**V. M. Dandar, D. Lautenberger

Association of American Medical Colleges, Washington, DC, United States

**Background:** While academic medicine has entered into rich discussions about physician burnout and wellness, less attention has been paid to understanding the experiences of research faculty within the field. This study provides a snapshot of burnout across faculty at U.S. medical schools, by rank, gender, race, and department type (i.e., faculty in clinical departments providing primary care, faculty in clinical departments providing no patient care, and faculty in basic science departments).

**Work/Results:** Data reflect faculty responses to the AAMC StandPoint Faculty Engagement Survey from 13 institutions and 7,653 faculty members who responded to the survey between 2016 and 2018. We examined the prevalence of burnout across groups and whether burnout is related to engagement. Results include that all types of medical school faculty report burnout. Across all faculty, 29% reported experiencing 1 or more symptoms of burnout. Slight differences, however, do exist between groups, with 31% of faculty in clinical departments who provide patient care reporting 1 or more symptoms of burnout, compared with 28% of faculty who are in clinical departments not providing patient care, and 26% of faculty in basic science departments. When examining burnout across gender and race, 35% of URM and Non-URM women faculty report burnout, compared with 26% of Non-URM men and 21% of URM men. Correlation tests demonstrate that burnout is associated with engagement outcomes including satisfaction with one's institution, as well as intent to remain.

**Discussion/Conclusion/Take-home Message:** This study illustrates that all types of faculty at U.S. medical schools are reporting burnout. Given that burnout and engagement are correlated, and both constructs are linked to individual and organizational outcomes, faculty engagement, or lack thereof, is important to track and measure. Results can inform institutional interventions that address the organizational factors contributing to burnout, in addition to individual interventions addressing faculty wellness.

089

Faculty well being

**Developing an online induction program to support our sessional tutors: Does it reduce the 'distance' in distance tutoring?**M. Moffat, J. Scopes, S. Schofield

University of Dundee, Dundee, United Kingdom

**Background:** Our successful distance Masters Programme relies on growing, supporting and developing our vibrant talented pool of online sessional tutors. How best can we support and develop this heterogeneous group? Previous work has highlighted that some online tutors can feel isolated in their practice with few expectations of support and development. Induction activities have been highlighted as a way of supporting new sessional tutors. Previously induction tended to be informal and one-to-one. Taking a socio-cultural focus, can employing strategies to increase feelings of belongingness through group induction activities help combat potential feelings of professional isolation?

**Summary of Work (so far):** We have rebuilt our online induction process including a group welcome meeting, recordings with key members of CME staff, sharing key information on getting started together with recorded 'walk throughs', 'top tips', being explicit about expectations and providing a supported grading/ feedback activity. Having recruited 20 new tutors in January 2019, our aim is to have new tutors complete Induction before the next term commences (May). As we are planning on future recruitment rounds we are keen to evaluate our new Induction process and identify key learning points for our community to thrive and develop longer term. Aim is to explore new tutors' experiences of engagement and belongingness during the induction phase and first term for these new tutors and what impact this has on their perceptions of support and being part of the community. We plan to invite new tutors to take part in a short online structured interview around their tutor experiences so far in terms of support and suggestions for future development. We wish to explore factors such as esteem, connectedness and efficacy.

**Summary of Results:** To be shared at the conference.

090

Faculty well being

**Self-care in the timeline and being a professor**F. Soares. Novaes<sup>1</sup>, M. Ribeiro<sup>2</sup>

<sup>1</sup>Foundation for Advancement of International Medical Education and Research, Petrolina, Brazil; <sup>2</sup>Universidade Federal do Vale do São Francisco, Petrolina, Brazil

**Background:** Taking care of caretakers is a fundamental point in programs that develop docents and healthcare professionals. From this perspective, care promotion strategies and spaces for reflection on the meaning of being a professor are essential to strengthening docent development programs. The objective of this report is to reflect on and share the educational experience of work in docent self-care, thus strengthening the health-education interface.

**Summary of Work:** This work occurred in a federal public university in the interior of Brazil, with 12 participants who shared their teaching and self-care experiences in a timeline activity. Initially, there was a physical relaxation activity, followed by peer presentation, reflection on care and self-care, life storytelling, and timeline drawing with perception on self-care throughout life.

**Summary of Results:** Participants' speech brought forth themes and nuclei of meaning related to emotional exhaustion, limits between energy for giving and emotional protection barriers, social engagement, and docents becoming ill. Self-care was registered graphically in each participant's timeline. Good practices were suggested, such as drinking water frequently, taking aromatic baths, having good relationships, and practicing physical exercise and meditation.

**Discussion:** The culture of docent wellbeing diverges from productivity culture. Means of preventing Burnout Syndrome and protecting docents' physical and mental health are strongly recommended.

**Conclusions:** Care and self-care are points of convergence in Health and Education. From this perspective, it is important to create connections and spaces to rethink our own practice from a personal, institutional, professional, and self-care point of view.

**Take-home Message:** Take care of yourself in order to take care of others.

091

Faculty well being

**Analysis of gender in professoriate compensation for PhDs/PharmDs in the faculty of medicine and dentistry, University of Alberta**P. Lacy, A. Oswald, R. Rosychuk

University of Alberta, Edmonton, AB

**Background:** Canadian universities report concerns regarding pay equity for women and men. A Task Force at the University of Alberta found compensation inequity between women and men in 2016. Interfaculty variation motivated our study in the Faculty of Medicine and Dentistry (FoMD) for PhD, non-MD, non-DDS faculty to reduce variability.

**Summary of Work:** We linked data from three sources: (1) 2017 University of Alberta Compensation Disclosure List, providing compensation above \$127,765; (2) University of Alberta Continuing Academic Staff List from 2015-2019; and (3) Scopus database, January 2019. Professoriate in FoMD with PhD or PharmD degrees, and who were not MDs or DDSs, were retained for analyses. Statistical analyses included numerical summaries and tests by gender. Linear regression modeling of compensation on variables, including interactions with gender, were performed.

**Summary of Results:** The professoriate (150) consisted of 65% full professors (22 women, 75 men), 34% associate professors (21 women, 30 men), and 1% assistant professors (0 women, 2 men). The median *h*-index was 24 for women and 29 for men. Overall, \$165,720 was median compensation for women and \$180,250 for men ( $p=0.02$ ). When only gender was considered, women had <\$24,429 than men ( $p=0.02$ ,  $R^2=0.04$ ). When years since hire, rank, and years at rank, and *h*-index were added to the model, women earned < \$4,708.40 ( $p=0.54$ ,  $R^2=0.47$ ). Based on this analysis, women with an *h*-index of 29 would have < \$7,321.13 compensation than men with the same *h*-index, even if they both had the same years since hire, rank, and years at rank.

**Discussion and Conclusions:** Our analyses showed differences in compensation between women and men. A comprehensive examination of non-public data for professors across Universities is needed.

**Take-home Message:** Women continue to be compensated at a lower rate than men for the same job description at the University of Alberta.

092

Interprofessional faculty development

### Interprofessional faculty development for capacity-building in Competency-based Education: Adaptive design for reach and impact

S. Glover Takahashi, J. Lazor, D. Richardson, S. J. Wagner

University of Toronto, Toronto, ON

**Background:** Competency-based Education (CBE) is a current trend in health science programs featuring competencies, curricula and assessment designed to optimize learning. Professional associations and regulatory bodies typically create competence standards, with educational programs, learners, faculty, clinicians and administrators adapting to them. Therefore, faculty development is essential to enable successfully implementation.

**Summary of Work:** An interprofessional faculty development workshop was created to build capacity for CBE and to develop basic knowledge, skills, behaviours and attitudes. Learning objectives included: 1) recognizing and defining the language of CBE, 2) comparing teaching and assessment differences in CBE and 3) exploring an integrated model for faculty development. The workshop was given twice over two years.

**Summary of Results:** Based on learner evaluations (n=36/43), although the workshops were highly rated overall ( $\bar{x}$ =4.3/5), the length ( $\bar{x}$ = 3.87/5) and interactive learning components ( $\bar{x}$ =3.68/5) of the workshop were not. Additionally, instructors found that after making on-line changes to respond to participant learning, not all of the content was covered nor as optimally. However, cross-pollination of ideas was promoted among participants.

**Discussion:** Therefore, the workshop has been reconfigured as a two-part series with the first workshop a starting point for health professions' educators to obtain foundational knowledge and skills about CBE. The second workshop will then build upon these mastered foundational elements. In this way, the cross-pollination of ideas that occurred among the diverse group in the first workshops can more effectively be enhanced.

**Conclusions:** An interprofessional workshop on CBE is challenging to develop and effectively meet the needs of a diverse range of learners. Therefore, an adaptive design is essential in enhancing reach and impact to build capacity.

**Take-Home Message:** Interprofessional faculty development on competency-based education enables capacity-building and adaptive design is essential in reaching and meeting the needs of a diverse audience.

093

Interprofessional faculty development

### Impacting our health professions education community through a virtual medical education journal club

A. Fornari<sup>1</sup>, K. Friedman<sup>2</sup>, W. Herman<sup>1</sup>, C. George<sup>2</sup>

<sup>1</sup>Hofstra/Northwell, Hempstead, NY, United States; <sup>2</sup>Northwell Health Organization, New Hyde Park, NY, United States

**Background:** Since their advent in 1875 by Sir William Osler, journal clubs have played an integral role in medical education. The initial intent of journal clubs was to provide physicians with an opportunity to keep up-to-date with current research. More recently, the clubs have provided a setting to facilitate discussion of topics such as critical appraisal, research design, and statistics. One major drawback of journal clubs is the inability of participants to attend in-person meetings due to logistical barriers.

**Summary of Work:** To bridge the issue of geographical barriers, enhance interdisciplinary and interprofessional discussion and to provide opportunities for faculty development a monthly synchronous medical education journal club was created for the health professionals. All meetings are hosted using a web conferencing platform. Medical education articles, based on a specific theme, are selected for each session by the faculty presenter. The presenter deconstructs the article and a discussant provides probing questions. A medical librarian covers the limitations, bibliometrics/altmetrics of the article.

**Summary of Results:** On average there are 25-30 (N=451 since inception in April 2015) participants per session. The respondents consistently self-reported that the program met its learning objectives. 75.8% of respondents agreed that the content covered during the sessions would positively impact personal and/or professional life. 75% of respondents reported that their overall knowledge/skill level changed positively. 60% of respondents intended to make changes in their clinical and/or educational environment as a result of the sessions.

**Discussion and Conclusions:** Web based modalities have allowed journal clubs to remove geographical barriers and reach a larger array of participants from different disciplines.

**Take-home Messages:** A limitation noted was whether the participants thoroughly read the articles before the meeting. Lack of familiarity with the article content can affect the depth and quality of the discussion. A discussant adds to learning environment.

094

Leadership development

**'Can't get no satisfaction' results from a satisfaction survey in a department of medicine**W. Dafoe, B. Ballermann, L. Dieleman, A. Wagg

University of Alberta, Edmonton, AB

**Background:** A strategic planning retreat for the Department of Medicine resulted in a satisfaction survey which assessed the extent of members engagement and if significant problems were present.

**Summary of Work:** The survey included work engagement, satisfaction, work-life quality of life, wellbeing, and autonomy. The Faculty of Business provided expertise to develop a tailored survey. Focus groups identified the primary domains for questions.

**Summary of Results:** About 10% of the respondents 'preferred not to answer' regarding their sex. The survey identified a largely happy workforce which appears to be well supported, treated fairly and well-motivated. Women had higher levels of burnout, but this was balanced by high levels of motivation and self-efficacy. Potentially meaningful (>9% difference) differences in views between the sexes were observed. New challenges, low mental energy, "Worn-out", mental exhaustion, fatigue, "work too hard", burn out, used up and disrespectful behaviour were all dominated by women. Men dominated favourable views in "well-being", "choice in work" and "recognition for teaching" Respondents who preferred not to give their sex were generally more disaffected with various aspects of the department than those who gave their sex.

**Discussion:** Although the faculty were generally happy and felt supported, the female faculty reported higher degrees of burn out. Interventions to address these challenges are underway.

**Conclusions:** The satisfaction survey, although challenging to construct, was important. The survey credible by its design, although a briefer version is required for repeat analyses. Some important differences exist between the sexes .

**Take home Message:** A satisfaction survey was useful for assessing departmental functioning and addressing problems

095

Leadership development

**Challenge or opportunity: The importance of women in orthopedics**T. Topalovic<sup>1</sup>, A. Kapatkin<sup>2</sup><sup>1</sup>AO Foundation, Dübendorf, Switzerland; <sup>2</sup>University of California-Davis, Davis, CA, United States

**Background:** Based on an identified gap of diverse leadership, within and beyond the AO Foundation (a medically guided, not-for-profit organization led by an international group of surgeons specialized in treatment of trauma and disorders of the musculoskeletal system), research was initiated to identify and overcome barriers, to promote diversity with a first focus on female leadership within the organization. Summary of Work: The AO Foundation, a global education provider in the health sector, collected quantitative data which shows a lack of women holding faculty, governance and leadership roles, within the organization.

**Summary of Results:** Research shows that diverse groups are more creative and effective in problem solving, making an organization more resilient and adaptable; leading to benefits in research and innovation, as well as increased funding opportunities; all the above leading to improved patient health care.

**Discussion:** How to change the existing culture? Expand data collection focusing on other diversities currently difficult to access. Educate and motivate to create new behaviour. Addressing people's mindsets, scope and awareness.

**Conclusion:** Patients want surgeons to look like them, with young graduates being more likely to engage with organizations with people in leadership positions serving as role models that one can associate with. Both aspects are important for future sustainability and success.

**Take-home Message:** Identifying the diversity gap, and its barriers, leads to concrete steps to be developed and implemented to address the identified gap allowing for transformation and approaching diversity on a comprehensive rather than an event-based approach.

096

Leadership development

**A driver for individual and organizational change—Leader Education Program (LEP)**T. Topalovic<sup>1</sup>, T. Lund<sup>2</sup>, C. Subramaniam<sup>3</sup>

<sup>1</sup>AO Foundation, Dübendorf, Switzerland; <sup>2</sup>Helsinki University Hospital, Helsinki, Finland; <sup>3</sup>AO North America, Wayne, PA, United States

**Background:** Based on the need for leaders within the organization to develop, the AO (a medically guided, not-for-profit organization led by an international group of surgeons developed a leader education program, for the organization to progress based on its leaders and shared values.

**Summary of Work:** The LEP, as a forum for exchanging ideas and therefore as a driver for change has been offered five times (globally). Quantitative methods, as well as qualitative methods (including feedback and commitment to change as evaluation instruments) guided us during our data collection process of the LEP participants (~80 participants). Working through specific examples (eg, communication, sharing a vision, creating an environment of trust, etc.) highlighted the learners' experiences on what is going well and what needs to be done differently. This process led to developing a cohort of leaders who learn together and work with a common purpose based on shared values.

**Discussion:** Through practices such as (self-)reflection and self-assessment encouraged/taught at the LEP, as well as additional evaluation instruments we are assessing learners' standpoints, strengths and weaknesses, and whether this process leads to improved team building, leadership and management competencies, therefore creating opportunities for change.

**Conclusion:** Over the last thirteen months and based on assessment data from various evaluation instruments collected (quantitative and qualitative) we have identified that the LEP serves as a driver for change. Mentioned barriers to overcome are eg, time constraints; resistance to change; channelling new strategies upwards and therefore change can be slow. Change is possible; getting a group of people together and building a community that works and learns together has proven to be successful. Leadership and its value are critical to move the organization forward; enabling change through practice and development; the LEP as a forum for exchanging ideas, as well as sharing concerns.

097

Program evaluation beyond measurements of satisfaction

**Best practices in medicine project: Using a personalized audit and feedback methodology to improve clinician resource utilization in a hospital setting**

E. Wooster<sup>1</sup>, D. Arab-O'Brien<sup>2</sup>, C. Barnes<sup>2</sup>, M. Jackman<sup>1</sup>, A. Kapur<sup>2</sup>, R. Kherani<sup>3</sup>, S. Mulsant<sup>2</sup>, M. Pasic<sup>2</sup>, R. Seth<sup>2</sup>, J. Taher<sup>1</sup>, V. Tron<sup>2</sup>, J. Maniate<sup>4</sup>

<sup>1</sup>University of Toronto, Toronto, ON; <sup>2</sup>Unity Health Toronto, Toronto, ON; <sup>3</sup>University of British Columbia, Vancouver, BC; <sup>4</sup>University of Ottawa, Ottawa, ON

**Background:** Canadian demographics are undergoing a profound shift resulting in a continually adapting healthcare environment for clinical practice. In this milieu, resource utilization and stewardship are important discussions. Health care providers need to be current with regards to guidelines and their implementation to maximize resource utilization. Successful faculty development programs can support this and may require integration of diverse methodologies.

**Summary of Work:** The Best Practices in Medicine (BPiM) project utilizes a personalized audit and feedback methodology combined with online education activities to right size resource utilization at an academic community hospital.

**Summary of Results:** The BPiM project has released a series of scorecards and educational activities. Clinician interest and engagement has been positive with 30% participating in online reflective activities. The repeat audit demonstrated a trend towards decreased TSH total orders and an increased rate of abnormal test results (17% vs 37%;  $p < 0.001$ ).

**Discussion:** The use of methodologies traditionally associated with continuing professional development (CPD) and quality improvement (QI) have assisted in providing clinicians with up to date guideline information. Additionally, it has allowed clinicians to review a snapshot of their practice profile, encouraged reflection and benchmarking within a busy context.

**Conclusion:** Being up to date on guidelines and appropriate resource utilization are important components of providing quality patient care. Incorporating diverse faculty development methodologies, as well as those that align with CPD and QI, can be used to assist in addressing these gaps and may facilitate the uptake of these projects.

**Take-home Message:** Clinicians provide care in a diverse, altering healthcare environment. Creating development opportunities that align with current clinical data allows clinicians to review a snapshot of their practice, discuss and benchmark with colleagues. Encouraging clinician engagement in these projects may results in an environment that promotes continual learning on both an individual and institutional level.

098

Program evaluation beyond measurements of satisfaction

### **Realignment of an established faculty development program for new teachers: A systematic approach**

V. Antao, J. Lazor, C. Faculty Development

University of Toronto, Toronto, ON

**Background:** Family Medicine teachers need robust faculty development (FD) that aligns with learner, current institutional, and accrediting requirements. In 2005 at University of Toronto a 3-day annual BASICs program was implemented to support new faculty to function optimally in their roles as teachers. Over the years sessions were revised, but there was growing evidence of misalignment and faculty disengagement. The realignment had three key objectives: Evaluate the existing BASICs program; Examine alignment with our current diverse faculty needs, and organizational, educational, and practice requirements; Redesign to address identified gaps and stakeholder needs.

**Summary of Work:** The FD committee used existing quantitative and qualitative evaluations, focus groups and a systematic 9-step instructional design process<sup>1</sup> to redesign. Despite a 95% satisfaction rate, participants wanted shorter didactic sessions and more options for workplace FD. An analysis of learner characteristics, task analysis around teaching-level expectations, and review of content and sequencing, revealed a much-needed realignment, especially around Competency by Design, Quality Improvement, Wellness and Resilience, relevance for inter-professional audiences, and building an academic identity. Three theoretical models were identified to guide the teaching approach: adaptive expertise; self-determination theory; and a learning-centered approach.

The redesigned program included:

A blended learning design of 3 core face-to-face sessions with developmentally sequenced modular streams of teaching and assessment

Pre-designed workplace FD components facilitated by local FD leads for peer coaching

The development of a local Community of Practice.

**Summary of Results:** The first cohort of the re-designed program described their experience as reflective, collaborative, and developmental.

#### **Take-home Messages:**

Faculty Development is an essential tool to support teachers in alignment with new curricular, institutional and accrediting requirements. The poster will provide an overview of the redesign process as well as key components of the new BASICs program. Next steps include an analysis of the new BASICs to be implemented for the 2020 version.

099

Program evaluation beyond measurements of satisfaction

### Evaluating clinical placement program: A geography lens

I. Epstein

York University, Toronto, ON

**Background** The international literature on clinical placements in health professional programs report these placements are very stressful for students and faculty. In particular, students who identify with a disability in programs with clinical placements report higher student drop rates. Faculty teaching clinical (practice) courses are seeking to find ways to better evaluate clinical placement and understand how to accommodate students with disability.

**Summary of Work:** This pilot study asks nursing students who identify with a disability about their experiences and responses to the physical and social environment of a nursing clinical placement. Using one-on-one interviews, students who identify with a disability were asked about challenges and successes in their clinical placement program. Their responses have been analysed thematically and are discussed in the context of health technology and place. This includes the idea that different education program landscapes (e.g., clinical placements) enable or impede the success of students due to social and spatial inequalities among people.

**Summary of results:** We interviewed twelve students across two large nursing schools in Toronto Canada. Three overarching themes emerged including: (a) diverse classroom accommodations allow success; (b) there is a lack of accommodation in clinical settings; (c) proposed suggestions for change.

**Discussion:** Our pilot study revealed that while accommodations are being implemented in classroom (e.g., lecture recording; extra test time) students' classroom accommodations are not used in clinical placements programs resulting in the exclusion of students with disability.

**Conclusions:** The application of place as a theoretical lens is a key contribution to the international literature on clinical program evaluation.

**Take-home Message:** We will discuss the implications of the pilot study result for suggestion on how faculty can support students with disabilities in health programs. As well, the result of the study will shed light on a new technology guided data collection tool.

Program evaluation beyond measurements of satisfaction

### **Bloom's taxonomy as a learning evaluation tool in a medical course using active learning methods.**

D. Machado<sup>1</sup>, L. Sampaio Neto<sup>2</sup>, M. Chinelato<sup>1</sup>, P. Carvalho Junior<sup>3</sup>, M. Hernandez<sup>1</sup>, L. Machado<sup>1</sup>

<sup>1</sup>Centro Universitário de Votuporanga, Votuporanga, Brazil; <sup>2</sup>Pontifícia Universidade Católica de São Paulo, Sorocaba, Brazil; <sup>3</sup>NRE Educacional, Brasília, Brazil

**Background:** This research analyzed the use of the Bloom Taxonomy by medical students in PBL during the progression of these students from the first to the eighth period.

**Summary of Work:** To evaluate the verbs used by the students in their learning objectives construction. Cross-sectional, descriptive, retrospective and quantitative approach study. The non-probabilistic convenience sample was composed of 511 concept maps referring to eight academic semesters, from 2013-2 to 2017-1, where the learning objectives were recorded. There were included 3.480 learning objectives, submitted to descriptive statistical analysis with average and standard deviation; Pearson's inference analysis at 5% for normal distribution data; Kolmogorov-Smirnov test with 5% normality level significance for non-normal data, in addition to Kruskal Wallis analysis for comparison of averages.

**Summary of Results:** The 'Knowledge' category was composed by 912 (26.20%) verbs of the total; the 'Understanding' category: 2,371 (68.13%) verbs; the 'Application' category: 17 (0.48%) verbs; the 'Analysis' category: by 167 (4.79%); the 'Synthesis' category by 7 (0.20%) and the 'Assessment' category by 6 (0,17%) verbs. The semester average of verbs used was 435 ( $\pm$  55.94).

**Discussion:** In the 'Knowledge' and 'Understanding' categories, students used a large number of verbs, which are not in the list presented by Bloom, but which have similar meanings in the Portuguese language. There was a progressive increase in the students' use of taxonomy verbs with higher evidence in the seventh and eighth periods, as the course progressed. The lack of teacher training for the use of the Bloom Taxonomy collaborated for the identified results

**Conclusions:** It was concluded the need of teacher and student training to use the Bloom Taxonomy as an optimizer of the method's use.

**Take-home Message:** scientific research should guide teacher education

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# 2019 International Conference on Faculty Development in the Health Professions - call for workshops

CC-01

Cross-cultural faculty development

## Addressing Diversity, Equity and Inclusion (DEI) in Faculty Development (FD)

A. C. McKee<sup>1</sup>, P. O' Sullivan<sup>2</sup>, Y. Steinert<sup>3</sup>, T. Ungaretti<sup>4</sup>, M. A. Blanco<sup>5</sup>

<sup>1</sup>King's College London, London, United Kingdom; <sup>2</sup>University of California San Francisco, San Francisco, CA, United States; <sup>3</sup>McGill University, Montreal, QC; <sup>4</sup>John Hopkins University, Baltimore, MD, United States; <sup>5</sup>Tufts University School of Medicine, Boston, MA, United States

**Background:** This workshop addresses the AMEE Faculty Development (FD) Committee aims to, advance best practices and foster research in health professions FD. We examine issues of Diversity, Equity and Inclusion (DEI) to support health professions educators address the needs of diverse learners, recruited to reflect the patient populations they will serve. Faculty developers are our target audience.

**Structure of Workshop:** We begin with asking participants to share with the group: *Why DEI is important to you?* (5 minutes.)

Presentation 1: This presentation explores the question: *How does the FD literature address DEI and what strategies for enhanced practice and research are suggested by this field of work?* (10 Minutes)

Group Task 1: Participants form small groups to discuss: How does your institution address DEI in faculty development? How do your approaches resonate with the literature presented? Small groups will report back to the larger group. (20 Minutes)

Presentation 2: This presentation explores the question: *What are the critical factors within institutions that enable or challenge DEI in FD practices?* An example from UCSF will be examined through the lens of a systems-based FD research model. (10 Minutes)

Group Task 2: Participants are asked to discuss: What are critical factors within their institutions that enable or challenge DEI in FD? Small groups report back to the larger group (20 minutes)

Group Task 3. Participants are asked to discuss: What next steps are needed through practice and/or research to address DEI in FD at their institutions? How can the FD Community advocate and support this work? (15 Minutes)

Plenary. We will collate information about good practices, next steps and potential collaborations. (10 minutes.) Total 90 Minutes.

### Intended Outcomes:

Participants will have appraised those: Commonly noted good practices, and next steps that require additional interventions and/or study.

Identified those interested in DEI FD.

**CC-02**

Cross-cultural faculty development

**Using faculty development to address bias and harassment: Creating cultures of respect, allyship, and faculty well-being**

D. Lautenberger

Association of American Medical Colleges, Washington, DC, United States

**Background:** Faculty experiences of bias, harassment and microaggressions is an expanding area of focus for faculty, administrators and leaders in the health professions as awareness of these experiences has increased. According to the AAMC StandPoint Survey, nearly a third of U.S. women in academic medicine feel actively disrespected because of their gender, with similar results for minority faculty. Research on microaggressions and bias has shown to have significant negative impacts on faculty confidence, physical health, and overall wellbeing (D.W. Sue, 2007). Therefore, this workshop will present foundational information to understand bias and harassment as well as use a variety of instructional methods to teach participants how to become allies, respond to microaggressions, and create inclusive and respectful environments for all faculty.

**Target Audience:** Taking an inclusive approach, this workshop is designed for a broad array of faculty in the health professions, from junior to senior ranks with a focus on those responsible for faculty development at their institutions. This highly interactive workshop equips faculty development leaders with tools and strategies they can bring back to their institution to begin addressing bias, harassment, and microaggressions in a variety of settings.

**Structure of Workshop:** The workshop will begin with basic information on implicit bias, privilege, as well as allyship and bystander intervention as behavior strategies, to ensure all participants are at the same level regarding terminology. This section, lasting about 30 minutes, will be mostly didactic but will also include two activities for participants to explore implicit bias more deeply. The remainder of the workshop will be dedicated to interactivity to cover: developing allies, bystander intervention methodologies, as well as strategies to respond to microaggressions. Using a small-group discussion, case studies, and group role-playing, this section will actively workshop participant's experiences in real time to problem solve and identify promising allyship strategies and responses for future situations.

**CD-02**

Curriculum design/programming for faculty development

**Developing clinician educators: A faculty development framework**

D. Brandt Vegas, T. M. Chan, Q. Ngo

McMaster University, Hamilton, ON

**Background:** Across academic institutions, many educational leaders in undergraduate and postgraduate medical training programs have little to no formal training in medical education. This presents challenges when addressing educational problems at a program level, or implementing innovative education interventions, as they may not consider current theories, conceptual frameworks, and evidence in health professions education. At McMaster university, we developed the Clinician Educator Program (CEP) to offer programmatic faculty development for local educational leaders to develop basic knowledge and applied skills in medical education. We have sought and received accreditation for our program as a site for the Royal College of Physicians and Surgeons of Canada's Clinician Educator Area of Focused Competency (AFC) program.

**Target Audience:** Clinician Educators and Educational Leaders.

**Structure of workshop:** Lecture-style presentation about the architecture of our program in a story-telling format (20 min)

Local analysis small group activity (up to 3 groups with up to 5 participants each) Individuals will identify problems related to their local institution related to medical education training of their faculty members. Each small group will analyze one or more of the identified problems and propose practical solutions with their group mates adapted to the specific academic location. (40 min)

The larger group will reunite and reflect on the previous activities and how they may influence their approach to faculty development in medical education moving forward. (30 min)

**Intended outcomes:** Participants will discuss and develop a draft design of how a CEP or a CE AFC program may look like in their own institution. They will also identify local problems related to faculty development and develop potential solutions.

## CD-03

Curriculum design/programming for faculty development

**Implementing a successful educational consultation service: Tips for success**

G. Singhal<sup>1</sup>, T. Turner<sup>1</sup>, S. Thammasitboon<sup>1</sup>, P. Bhansali<sup>2</sup>

<sup>1</sup>Baylor College of Medicine, Houston, TX, United States; <sup>2</sup>Children's National, Washington DC, Washington, DC, United States

**Background:** In this ever increasing academic culture of increasing productivity and expectations for promotion and scholarship, faculty are facing pressures that they have not confronted before. At one of the largest pediatric departments in the United States through strategic, vision and financial support of the chair, a center to support faculty promotion and scholarship was established 5 years ago. This innovative center offers educational grants, statistical support, faculty development initiatives and provides one-on-one consultations with educational leaders to faculty across the department. A team of 4 educational leaders have been providing consultations to faculty for over 5 years; consultation questions addressed have ranged from educational portfolio preparation, grant preparation, methodology of educational research, scholarship, CV preparation, career development, and promotion questions.

**Structure of workshop:** In this dynamic and fast-paced workshop, we will share "twelve tips" with participants about how to implement and maintain an effective consultation service. We will begin with an icebreaker to encourage networking. After a brief didactic presentation to outline the foundation of our program, we will ask participants to analyze educational consultation cases. We will share our tips that we have learned, such as defining metrics for program evaluation, working with faculty in difficulty and ensuring inter-consultant reliability, as some examples. Then, working in small groups, we will facilitate discussion across different institutions to propose best practice in establishing a program or updating an existing one. Within the small groups, the participants will design and formulate a draft consultation service proposal that will be presented to the large group for feedback. Finally, participants will leave with resources such as a toolkit for providing effective educational consultation, program evaluation and evidence-based literature to support this endeavor. The guiding principle for the facilitators will be to encourage collaboration across countries and academic settings to foster conversations about how best to support our faculty.

## CT-01

Career transitions and development

### Promoting connections through mentoring networks

M. A. Blanco<sup>1</sup>, A. Fornari<sup>2</sup>, K. Huggett<sup>3</sup>, L. Hurtubise<sup>4</sup>, N. Borges<sup>5</sup>

<sup>1</sup>Tufts University, Boston, MA, United States; <sup>2</sup>Hofstra University, New Hyde Park, NY, United States; <sup>3</sup>University of Vermont, Burlington, VT, United States; <sup>4</sup>The Ohio State University, Columbus, OH, United States; <sup>5</sup>University of Mississippi, Jackson, MS, United States

**Background:** Mentorship continues to be recognized as a critical approach to support successful careers in academia (1). Mentoring networks, through which faculty identify and depend on several different mentors throughout their careers, has been found to be more successful than the traditional model of one mentor for an entire career (2).

**Target Audience:** Faculty developers who are leading mentoring programs, and administrators who are seeking promising mentoring approaches. Educators who are seeking mentoring opportunities in their work environment. Beginners to intermediate level.

**Structure of Workshop:** Presenters will introduce the workshop with a quick-start activity (10'). Presenters will then provide an overview of existing mentoring frameworks and describe a mentoring network program at one of their institutions (5'). In small groups, participants will then be invited to discuss ideas for implementing mentoring network programs at their institutions and identify challenges they might face in doing so (15'). Small groups will record their ideas and challenges in wallpaper charts and report back to the larger group (15'). Presenters will then lead a discussion to address the challenges by seeking the participants' insights (20'). Participants will complete a mentoring network plan worksheet and share their plans with a peer (15'). Presenters will ask participants lesson learned using word cloud (10').

**Intended Outcomes:** By the end of the workshop, participants will be able to: (1) Distinguish approaches to mentoring used in faculty development; (2) Identify the benefits of mentoring networks; (3) Formulate a plan to expand their mentoring approaches at their local institutions.

### References

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## FWB-01

Faculty well being

### The cultivation of cognitive curiosity: Key for learning, clinical competence, engagement, and well-being in the healthcare profession

V. Rajput<sup>1</sup>, A. Mookerjee<sup>2</sup>, M. Henning<sup>3</sup>, P. Wales<sup>1</sup>

<sup>1</sup>Nova Southeastern University, Davie, Fort Lauderdale, FL, United States; <sup>2</sup>Rowan University, Camden, NJ, United States; <sup>3</sup>University of Auckland, Auckland, New Zealand

**Background:** A contemporary view of clinical competencies falls short of building engagement and well-being for both learners and faculty. In 1899, William James called curiosity “the impulse towards better cognition.” The current working definition of curiosity is a “penchant for seeking new experiences, knowledge, and feedback and an openness to change.” The deprivation sensitivity, joyous exploration, social curiosity, stress tolerance and the seeking of thrills are five dimensions of curiosity described and analyzed in current literature by George Mason. The dopaminergic neural system is the primary intrinsic reward system for curiosity. The generation of intrinsic reward can create “curiosity contagion:” the phenomenon when someone’s curiosity is contagious and can spread from one observing another’s curiosity. This can be used when “role modeling curiosity”. The “Learning Progress” hypothesis shows an association with positive feedback between curiosity and learning. The exploration trait of curiosity also has a positive association with well-being through the Broaden-and Build Theory of positive emotions and psychological research. Curiosity helps decrease diagnostic error by reducing confirmation bias. Faculty members who are curious tend to be more innovative and less adversarial within teams, more openly communicative, and collaborative.

#### Structure of workshop:

Identify gaps in knowledge from participants – 10 minutes

Make a case for curiosity as competence and review current literature – 20 minutes

Participants respond to a brief personal curiosity instrument and compare their scores with national reference scores – 10 minutes

Participants discuss and reflect on their score with colleagues (Dyad) 10 minutes

Participants in groups of 4-6, identify practical methods to bolster curiosity in learners and faculty ( 15 minutes)

Take home points and messages ( 10 minutes)

**FWB-02**

Faculty well being

**Using appreciative inquiry to foster a culture of wellness**

J. R. Shapiro<sup>1</sup>, A. Fornari<sup>2</sup>

<sup>1</sup>University of Rochester, Rochester, NY, United States; <sup>2</sup>Hofstra/Northwell, Hempstead, NY, United States

**Background:** Burnout in clinicians has increased nearly 9% over the past 3 years. Individuals perform their best work when they are doing things they find personally meaningful and when their work makes a difference. Looking for what works well and doing more of it is more motivating and effective than looking for what does not work and labeling it as problems. Appreciative Inquiry (AI) is an asset-based model focused on discovery on “what is” and take what is going well to “create what should and could be”. This approach can be used to effectively navigate issues encountered in the clinical environment, and to foster a culture of wellness and positive change.

**Target Audience:** Educators interested in advancing a culture of wellness at their institution.

**Structure of workshop:**

## 1. Overview of Workshop and Key Tenets of AI

Presenters will discuss drivers of burnout among physicians and healthcare professionals, and provide an overview of AI.

## 2. Think-Share Activity

Participants will think and share positive stories and themes from their organization as they relate to wellness and burnout prevention.

## 3. Large Group Activity

Each table will report examples from their table discussion and insights that arose from their discussion.

## 4. AI as a Driver of Institutional Change

Presenters will discuss programs, tools and resources that incorporate AI into the daily educational and clinical environments.

## 5. Group Discussion

Presenters will invite participants to discuss their impressions of how the AI framework can apply to their responsibilities at their home institutions; participants will leave with one strategic plan to apply AI to a home-based project as a positive addition.

**Intended Outcomes:**

1. Appreciate the drivers of burnout among physicians and healthcare professionals

2. Explain the tenets of AI

3. Apply AI to individual clinical and educational environments to promote wellness, and boost resilience and collaboration.

**FWB-03**

Faculty well being

**Bringing Balint into the spotlight: A tool for fostering personal and professional wellness and resilience**

M. Roberts<sup>1</sup>, S. Klein<sup>2</sup>

<sup>1</sup>University of Toronto, Toronto, ON; <sup>2</sup>North York General Hospital, Toronto, ON

**Background:** So many of our clinical encounters do not cease when we write a prescription or send a patient for a lab test or x-ray. Providing patient care touches us on a level that can be mysterious, profound or disturbing. In our busy lives as family physicians, there are few venues or opportunities to debrief from these profound personal and professional experiences. Joining in conversation with colleagues in a Balint Group, allows one to emotionally metabolize these experiences, rather than letting them seep too deeply into one's personal life.

**Structure of workshop:** In this participatory workshop, you will learn about the fascinating history of Balint Groups and appreciate what makes for a successful group process by showcasing an award-winning Resident Balint Group Program. By participating in a mock Balint Group, you will have an opportunity to discover the power and vital importance of reflective practice as a tool to promote your personal and professional wellness and resilience.

**FWB-04**

Faculty well being

**Creating stability from chaos**

B. Hardie

University of British Columbia, North Vancouver, BC

**Background:** Preceptors in the UBC residency program were uncertain regarding the boundaries of their role. They try to be coaches, mentors, teachers, preceptors all while providing care for their patients, and caring for themselves. This uncertainty leads to a sense of chaos or confusion and can contribute to burnout. With 3000 clinical faculty teaching 370 residents at 19 sites distributed across the province, we wanted to create a unifying description that was applicable in all contexts and that guided them toward a pattern of behaviour that is sustainable for them and the program. The intent is to bring a practical, shared vision of a preceptor, that will create stability in our distributed program while allowing flexibility in the local context.

**Structure of workshop:** In this workshop we will use our case-study regarding the process we undertook that merges recent literature on clinical teaching with our own unique realities. The result is a one-page document that outlines recommendations for effective precepting. In small groups, participants will practice one way it can be used to stimulate conversations about how each of us may be approaching the role similarly and differently, and encourage reflection on teaching in light of the recommended approaches. The patterns that emerge from that session can help to identify and share things preceptors are already doing well and identify competency areas they wish to develop further. The result is linking self-reflection on teaching for the individual, while seeing patterns amongst the group that can identify faculty development for future sessions.

Reducing uncertainty and finding agreement can bring stability from chaos in distributed programs. Please join for a positive, supportive, highly-interactive conversation about effective clinical teaching, and experience how a tool can allow clinical faculty to reap the benefits of self-reflection, while creating the conditions for good teaching to emerge in divergent contexts.

**IFD-01**

Interprofessional faculty development

**How to intentionally build communities of practice within faculty development programs?**

H. Roebertsen, M. van Kooij, D. Dolmans

Maastricht University, Maastricht, Netherlands

**Background:** Several studies indicate that faculty development interventions contribute to community building among the participants but also with other staff members at the workplace, which is related to an increased collaboration and increased motivation for teaching especially in longitudinal programs (Steinert et al., 2016). Wenger (1998) defines a community of practice as a group of people who are informally bound by shared practices related to a set of problems. Originally communities emerge naturally. Nevertheless, many faculty developers are searching for ways to intentionally build communities to enhance the professional development of teachers. So far, little is known about how to intentionally build a community in the workplace.

Akkerman et al. (2008) investigated the deliberate initiation of communities of practice. Their study demonstrated that it is important to first answer as a group questions such as “How are we relevant to one another?” (define meaningful activities) and “Who are we in relation to each other and do we have a shared way of thinking (define shared activities) before starting coordinative activities (Akkerman et al., 2008). So, start with creating space and time for groups to determine themselves why and how it is meaningful for them to collaborate. The question remains how this can be translated to the daily practice of faculty development.

**Structure of the workshop:** After a plenary introduction on intentional community building and what makes communities successful, group work will follow. Within small groups, participants use the method of Idea Writing; i.e. over three rounds of written activities they sequentially answer structured questions to list ideas to enhance community building. The assignments’ outcomes are geared towards tips for developing faculty development programs which support community building.

**IFD-02**

Interprofessional faculty development

**Standardized patients in health profession student roles: Faculty development for interprofessional debriefing**

M. Daly, L. Asseraf-Pasin, M. Mondou, C. Perlman, M. Purden, K. Root, N. Auclair-Ouellet

McGill University, Montréal, QC

**Background:** Interprofessional education courses are mandatory for all health profession students within the Faculty of Medicine at McGill University located in Montreal, Canada. The student's final course takes place at the Steinberg Centre for Simulation and Interactive Learning (SCSIL) and requires approximately 50 small group facilitators who supervise over 700 students. In order to prepare facilitators for the experience a faculty development workshop was created in collaboration with the SCSIL.

During the workshop participants assume their role as small group facilitator. However their "students" are standardized patients trained to assume the roles of students in nursing, medicine, speech-language pathology, physical and occupational therapy. This training included coaching the actors in their roles and refining the script to provide an authentic representation of what the small group facilitators would likely encounter when debriefing actual students. Participants engaged in one of three simulation scenarios. The scenarios were live-streamed to an adjacent room where all participants and expert faculty observed the interaction. This provided an opportunity for peer-to-peer and expert feedback. Benefits included expanding faculty's debriefing repertoire, increasing their comfort level, and offering peer coaching. Evaluation results indicated an increase in participant's knowledge of debriefing an interprofessional group of students and an increased confidence level to facilitate the activity with the actual students.

**Structure of the Workshop:** The workshop structure will include an interactive plenary, two small group practica, and lessons learned. Best practices will be shared including alignment with the Canadian Interprofessional Health Collaborative competencies. During the small group practica, actual video footage from the original workshop will be viewed. Participants will work in small groups to discuss potential challenges of debriefing an interprofessional group of students, create a list of questions to use during the debriefing, and reflect and share ideas about how they can create a similar simulation-based faculty development workshop in their context.

**LD-01**

Leadership development

**Developing faculty developers: Capacity-building to enhance impact**

Y. Steinert, M. Boillat

McGill University, Montreal, QC

**Abstract:** It has been said that faculty members are our most important resource in health sciences education. We also know that faculty development is needed to assist faculty members in their roles as educators, researchers and leaders. However, what do we know about those who are involved in the teaching and development of faculty members? What knowledge, skills and attitudes do faculty developers – or those involved in the professional development of their colleagues – need? What backgrounds and experiences are most favorable to this type of teaching and learning? The goal of this workshop is to answer these questions and to focus specifically on the knowledge and skills needed by faculty developers. We will also examine a number of ways in which to develop capacity among faculty developers and highlight strategies that can be used in their formation (e.g. peer coaching; train-the-trainer programs; intentional partnerships). Participants will have a chance to share their experiences throughout the workshop, and based on large and small group discussions, they will have an opportunity to design an action plan relevant to their own settings.

**Structure of Workshop:** The workshop will consist of both large and small group discussions as well as individual exercises including a practical action plan to assist participants in identifying elements that may foster or impede capacity building for faculty developers in their own contexts.

**LD-02**

Leadership development

**Getting beyond buy-in: Engagement and academic leadership**

S. Lieff, C. Creede, J. McCaffrey

University of Toronto, Toronto, ON

**Background:** As the academic and clinical environments are constantly changing, faculty must be agile at creating new curricular approaches to prepare our emerging health professional workforce. Workplace-based learning, feedback with coaching and competency-based education are recent examples of such initiatives. Implementation of these transformations is often the challenge that education leaders and faculty developers struggle with. The refrain of “needing to get buy-in” is commonly expressed as an obstacle to curricular and other change. In this workshop, we will directly address the issue of faculty engagement in new opportunities or imperatives. Attendees will be exposed to new ways of conceptualizing faculty engagement and employing strategies and skills that focus on generating interest and energy for change.

**Target Audience:** This workshop is suitable for any level of participant -- beginner, intermediate or advanced. To maximize learning, participants should come with a change initiative in mind for which faculty engagement is needed.

**Structure of Workshop:** This workshop is designed to provide opportunities for faculty to develop strategies and practice skills related to engagement. Utilizing a generative orientation to engagement, participants will focus on creating attraction for change rather than overcoming “resistance to change”. Relevant information will be presented in interactive mini-lectures followed by skills practice through role-play with feedback as well as small and large group exercises and discussions.

**Intended outcomes:** Participants will appreciate the need to replace the term “buy-in” with “engagement” and “ownership” in their refrain about change. Participants will feel equipped and mobilized to pursue engagement strategies that energize faculty and enhance their sense of contribution and ownership.

**RS-01**

Faculty development for research and scholarship

**What's your hypothesis? Dethroning experimental research methods in the design of medical education innovations**

S. Thammasitboon<sup>1</sup>, B. Rissmiller<sup>1</sup>, K. Brown<sup>1</sup>, T. Turner<sup>2</sup>, T. Ungaretti<sup>3</sup>

<sup>1</sup>Baylor College of Medicine, Houston, TX, United States; <sup>2</sup>Texas Children's Hospital, Houston, TX, United States; <sup>3</sup>John Hopkins University, Baltimore, MD, United States

**Background:** Traditionally, an experimental research model (i.e. hypothesis driven research) has been used to plan and study innovations in health professions education (HPE). However, employing this methodology in the complex reality of a learning environment has met with mixed results as data from many creative educational endeavors simply cannot disprove the null hypothesis or minimize confounders. Educators, therefore, need to embrace alternative paradigms (i.e. constructivism, critical theory), and apply appropriate methods to the design and evaluation of innovations. The workshop will introduce participants to the concept of disruptive innovations and discuss how this translates to HPE.

**Structure of the Workshop:** A facilitated discussion will highlight how principles from design-based research, practical trials, and implementation research can be applied to the HPE innovations. The participants will engage in a 2-part case study of exemplary HPE innovations which were built using these alternative methods. (Unit 1) "Design Thinking" for a point-of-care charting and assessment application. (Unit 2) "Design-Based Research (DBR)" for an ultrasonography mastery learning module. These methods share frameworks and processes such as embracing complexity (rather than controlling it) and focusing on hands-on solutions via iterative improvement cycles (rather than completing an experiment and then assessing pre-determined outcomes). In each unit, a case study will demonstrate the principles and practical steps to aid application by beginners through interactive didactics and small group exercise. Using the Innovative Solution Guide, participants will formulate a plan for applying one approach to their own projects and share reflective critiques of their plans in small groups. Facilitators will underscore how research paradigms, such as constructivism, align with the complex environment of research and innovation in HPE. The workshop will end with a discussion about challenges and strategies to prove practical relevance of the innovation beyond a local context and to improve or advance educational practices.

**TLA-01**

Faculty development for teaching, learning and assessment

**Creating connections between community and curriculum: A new lens for curriculum development**

H. Goetz, T. Hillier, H. Lai, P. Brett-MacLean, J. Rodger

University of Alberta, Edmonton, AB

**Background:** We developed a robust and sustainable method of curriculum development to address the ever-increasing volume of information and demand for social accountability in a medical education program. Our curriculum is becoming increasingly fluid to a) reflect the immediate needs of the profession, b) adapt to knowledge that is relevant to practice and c) respond to increasing demand meet to societal needs from the institution and community. Historically, medical school curriculum has not been responsive due to the mosaic composition of faculty, resources and content. To overcome this challenge, we have developed a process of adopting social accountability content into the curriculum and have made a substantial impact on curricular relevance, accountability, student learning and acceptance.

This innovative approach to modularize social accountability content involves five components that ensures the curriculum design is sustainable, evidence-based, reviewed by experts, engages the community, utilizes active learning, and translates to other practices. Our results show improved knowledge retention and increased student preparedness to serve the population from the diversity lens at graduation. Community satisfaction with the process and outcomes has been demonstrated in public forums.

**Structure of Workshop**

Facilitators will present the approach they have developed to modularize social accountability and diversity content, followed by small group discussions about how this approach could be adapted for other academic settings.

Discussion will focus on approaches to identifying gaps in curricular content; conducting a community consultation process; assessing the sustainability of the proposed curriculum; and evaluating and assessing learning outcomes. Participants will identify a content area relevant to their institutional curriculum and practice, related to diversity and social accountability, and will outline a practical approach to modularizing and introducing new curriculum content, ensuring evidence-based evaluation and assessment of learners' uptake.

Maximum number of participants: n=60 (12 small groups)

**TLA-02**

Faculty development for teaching, learning and assessment

**Faculty development and the learning environment: Moving from blame to an integrative strategy**

M. Elizov, M. Boillat

McGill University, Montreal, QC

**Background:** Addressing learning environment issues is important to medical faculties. Faculty developers are often requested to intervene in some way when there are problems in the learning environment, but the scope and intent of the interventions are often not well defined. This workshop is designed to support faculty developers' ability to evaluate and act on these requests in a more systematic way. We will describe the evolution of our approach to issues in the learning environment and suggest a framework by which incoming requests for faculty development can be analyzed, appropriate data collected and relevant initiatives provided. Finally, we will share strategies to address ongoing challenges.

**Structure of Workshop:** The workshop will include a short presentation on a proposed framework to help faculty developers respond to problems in the learning environment. This will be followed by an exercise completed in dyads or triads and both large and small group discussions.

**Intended Outcomes:** By the end of this workshop, participants will be able to describe how faculty development might intervene when problems occur in the learning environment and an approach to guide the appropriate response.

**TLA-03**

Faculty development for teaching, learning and assessment

**Effective teaching results in effective learning: Using teaching strategies to support learning**

P. Hsieh

University of Texas, Houston, TX, United States

**Background:** Learners are more likely to retain information if they connect it with something stored in long-term memory. Learning is a process of actively constructing meaning from both informal experiences and formal instruction. Ideally, learners should build bridges between what they are learning with what they have learned. However, they are seldom taught how to process and store information efficiently and effectively.

As educators, our goal is not only to use active teaching to *engage* learners but to select teaching techniques that support retention, comprehension, application, and integration of information. Two categories of teaching and learning will be introduced at the workshop, namely the "elaboration" and "organization" strategies. Each category serves its own purpose therefore both educators and learners must be cognizant of the methods they choose to teach and learn. This mindfulness, also known as *metacognition* (the knowledge people have about their own thought processes), is critical to cognitive growth. Learners' metacognition can improve with effective instruction (Schunk, 2004). Therefore, being an effective educator entails being reflective and purposeful in selecting instructional techniques that support learning in various settings.

**Structure of workshop:** In this workshop, the presenter will share with educators the two principles necessary for optimal learning: effective learning demands strategic planning and information processing can be improved through effective teaching. Educators can do a great deal to help learners become critical thinkers and problem solvers. Research indicates that learning increases when students generate meaning and engage in deeper processing. Based on that premise, the presenter will use interactive activities to demonstrate ways to activate learners' prior knowledge and minimize the "illusion of knowing". We will discuss instructional strategies that promote elaboration and organization of new information, techniques to help learners make meaningful associations and interpretations by introducing educational psychology learning theories through case discussions.

Schunk, D. H. (2004). *Learning theories: An educational perspective* (4th ed.), Upper Saddle River, NJ: Pearson

**TLA-04**

Faculty development for teaching, learning and assessment

**An adapted microteaching approach to developing teaching skills for health professionals**

J. E. Lysk

University Of Melbourne, Melbourne, VIC, Australia

**Background:** There is an ever-increasing interest for techniques that will provide clinical educators with the knowledge and skills to make their teaching more efficient, enjoyable and effective. The microteaching approach is a proven technique that is practiced worldwide for developing teaching skills. It has been adopted as part of faculty development programs to develop insight, awareness and to improve teaching skills in clinical teachers (Gelula, *et al* 2002; Remesh, 2013). It is a vehicle for both the diagnostic evaluation of teaching skills and practicing teaching techniques, incorporating several elements such as: collaboration, shared knowledge, knowledge production, observing others, feedback, and reflection. The adapted microteaching approach has been designed so that it not only harnesses the known potential for practicing effective teaching skills, it also opens up possibilities to strengthen teachers' understanding of the learning process.

**Target Audience:** This workshop is suitable for faculty developers and clinical teachers at all levels.

**Structure of Workshop:** The microteaching approach will be briefly introduced and discussed. The workshop will be highly interactive, and participants will receive resources and work in small groups to plan a microteaching activity. Each participant as part of a small group will then be offered the opportunity to teach and be taught. Groups will be encouraged to share their experiences, and then as whole we will discuss future opportunities for the microteaching approach.

**Intended Outcomes:** Participants by the end of the session will be able to: (1) understand the features of the adapted microteaching technique; (2) identify and describe both the learning principles underlying the microteaching experience and the learning outcomes embedded in the activity; (3) reflect on how the microteaching approach activity can be applied to enhance teaching knowledge and skills; and (4) gain insights to enhance and scale up teaching and learning in the clinical context.

**TLA-05**

Faculty development for teaching, learning and assessment

**Reflective zombies? Improving critical reflection of teachers on their teaching practice**

M. Meziani

Maastricht University, Maastricht, Netherlands

**Background:** Teachers' reflection is recognized as a key concept in optimizing faculty development (Eraut, 2004; Hoekstra & Korthagen, 2011). Although there's no unanimity on a definition of reflection (Korthagen, 2010), most authors agree that it involves deliberate cognitive analysis of past experiences, aiming to inform future actions (Sandars, 2009). Reflection can help teachers analyze challenges in their workplace, identify possible solutions and intentionally choose alternative strategies for action.

Despite the potential benefits of reflection, several authors argue that its contribution to improving actual teaching practices remains unproven (Beauchamp, 2015; Boerboom et al., 2015). An important explanation is that reflection of teachers remains too often on a superficial level (Korthagen, 2014), while a deeper level of reflection might play a significant role in changing and improving behavior of teachers. Hatton and Smith (1995) distinguish four levels of reflection; descriptive writing, descriptive reflection, dialogic and critical reflection. While the first two levels are action-oriented, the latter two levels include also meaning-oriented aspects (Hoekstra, 2009) and generate alternative options for improving behavior.

In this workshop, participants are introduced to the different levels of reflection and are introduced to techniques enhancing teachers to reflect deeply on their teaching and define alternative strategies to improve their teaching behavior.

**Structure of the workshop:** After an introduction, participants practice with analyzing the depth of their own reflection, using Hatton's model.

Next, participants discuss their results in subgroups to explore and identify how the quality and level of depth of their reflection could be improved.

This is followed by a plenary roleplay, in which participants practice techniques on how to stimulate deep reflection and define alternative strategies.

**TLA-06**

Faculty development for teaching, learning and assessment

**Upskilling your faculty development planning committee to ensure high impact outcomes and high level evaluation of your programs**

H. Lochnan, R. Parson, P. Hendry

University of Ottawa, Ottawa, ON

**Background:** High impact Faculty Development (FD) requires the input of a highly invested and well informed planning committee. Often planning committees consist of volunteers, content to recommend topics in areas of their expertise and choose topics based on availability of engaging speakers. Following in the footsteps of Continuing Professional Development (CPD) accreditation standards, a more stringent planning process, needs assessment and assessment of impact should be demonstrated. Identifying the competencies needed for planning committee members and upskilling members through workshops is key to supporting a program of faculty development that leads to the intended practice changing behaviours and beyond that, the ability to quantify these changes.

**Who should attend:** Those involved in planning the FD programs, CPD or continuing medical education. This workshop will be of special interest to planning committee chairs and those tasked to form and support CPD planning committees.

**Structure:** This workshop will use facilitated small group discussion followed by large group discussion to address the concept of coherence between needs assessment, learning objectives, teaching and learning (delivery) and evaluation. Groups will work as mock planning committees and will be provided with tools designed to ensure in-depth identification of needs, gaps, barriers that should be addressed through well-constructed learning objectives. Participants will create objectives that incorporate a knowledge of behaviour change taxonomy. Teaching formats will be discussed to ensure alignment with proposed objectives. Finally, options to promote higher level evaluation that tracks practice change and outcomes will be discussed.

**Intended Outcomes:** This workshop will provide tools and skills to Directors of FD programs that will enable them to ensure they and their planning committee members have the necessary competencies to ensure high impact FD. The participant will be able to incorporate tools provided to guide sophisticated needs assessments, select ideal learning formats and high level evaluation..

## TLA-07

Faculty development for teaching, learning and assessment

**“I can’t believe I just did that in front of everyone...”: Using failure as an instructional tool**

R. Lewin<sup>1</sup>, M. Rudolph<sup>2</sup>, S. Fleming<sup>3</sup>, J. Palaganas<sup>4</sup>, J. Rudolph<sup>4</sup>, S. Eller<sup>5</sup>

<sup>1</sup>University of California Los Angeles, Los Angeles, CA, United States; <sup>2</sup>Independent Consultant, Claremont, CA, United States; <sup>3</sup>British Orthopaedic Trainees Association, London, United Kingdom; <sup>4</sup>Center for Medical Simulation, Boston, MA, United States; <sup>5</sup>Stanford University, Stanford, CA, United States

**Background:** Fear of failure and burnout are significant problems in medicine. These are driven by a culture of perfection, in which it is unacceptable for learners to openly discuss their struggles. Medicine embraces failure in the abstract but remains uncomfortable with disclosure of personal failures as an instructional tool. Remaining opaque about one’s failures prevents the instructor from establishing an alliance with the learners, who may also be reticent to explore experiences of failure. When learners and instructors hear stories from peers and superiors about the types of struggles they are experiencing, it normalizes the experiences they are having, and makes it easier to reach out for support.

**Workshop structure:** After, instructors and participants share personal stories of failure, we will give a short presentation on the research around failure, vulnerability, and psychological safety. In groups, participants will discuss scenarios in which learners have failed, aiming to generate educational strategies to support learners in these scenarios. Then, we will crowdsource all educational strategies and methods for unpacking failure during an educational experience. These will be collected in a Google Doc in real time for discussion. Next, small groups will discuss additional strategies that come to mind, questions raised, or interesting failure scenarios not yet addressed. At the end of these small group discussions, we will reconvene as a large group to update the Google Doc, take questions, and summarize the main takeaways. The Google Doc will be provided to all participants.

**Intended Outcomes:** Participants will share personal experiences of failure in small group discussion. Participants will crowd source strategies to counteract the culture of perfectionism and create a climate of psychological safety. Participants will use the strategies generated to develop approaches to clinical teaching and learning that use failure as an instructional tool

## TLA-08

Faculty development for teaching, learning and assessment

### Reflection on reflection: Using reflection for self-assessment and to improve your teaching

M. Rudolph<sup>1</sup>, J. Rudolph<sup>2</sup>, R. Lewin<sup>3</sup>, M. Kolbe<sup>4</sup>, K. Morse<sup>2</sup>, J. Palaganas<sup>2</sup>, Y. Huang<sup>3</sup>, W. Eppich<sup>5</sup>

<sup>1</sup>Independent Consultant, Claremont, CA, United States; <sup>2</sup>Center for Medical Simulation, Boston, MA, United States; <sup>3</sup>University of California Los Angeles, Los Angeles, CA, United States; <sup>4</sup>University Hospital Zurich, Zurich, Switzerland; <sup>5</sup>Northwestern University, Chicago, IL, United States

**Background:** Jump into a pool of reflection with us in a 90-minute workshop that will teach participants new professional development strategies for using reflection to help educators process feedback, debriefing, and difficult conversations. The workshop targets healthcare educators who use an experiential learning model that includes apprenticeship, mentoring, and simulation.

Reflection is the bridge between experience and learning and is touted in countless books and in the media as essential to teaching. Nevertheless, educators often feel stymied by abstract injunctions to “use reflection” and proceed with nothing but their intuition to guide them. This workshop will unpack the meaning and usefulness of reflection and provide concrete instruction in writing process notes, a reflective practice that allows iterative cycles of observation, analysis, and insight from a given encounter after the fact.

**Target audience:** Anyone who engages in feedback, debriefing, or difficult conversations in their profession.

**Structure of workshop:** Following a brief didactic overview of the theory and usefulness of reflective practice, workshop participants will have a shared experience of observing encounters, writing their own process notes, then discussing their writing in pairs and at table groups before engaging in a full group discussion. In addition to this scaffolded training in writing process notes, participants will create process notes based on personal experience, discussing and debriefing those during the workshop as well. Participants will also compare and contrast the writing of process notes with other tools for reflective practice, such as the two-column case, the Learning Pathways Grid, The Debriefing Assessment for Simulation in Healthcare, and video review.

**Intended Outcomes:**

1. Participants will describe and discuss the usefulness of reflection for their professional development.
2. Participants will create process notes as tools for reflection and debrief those experiences.
3. Participants will compare and contrast process notes with other tools for reflective practice.

**TLA-09**

Faculty development for teaching, learning and assessment

**Planning and developing faculty development activities in resource-constrained settings**

E. Olapade-Olaopa<sup>1</sup>, M. Mutebi<sup>2</sup>, N. Hammad<sup>3</sup>, N. Dalgarno<sup>3</sup>, J. Baumhour<sup>3</sup>

<sup>1</sup>College of Medicine, Ibadan, Nigeria; <sup>2</sup>Aga Khan University Hospital, Nairobi, Kenya; <sup>3</sup>Queen's University, Kingston, ON

**Background:** Faculty development (FD) requires resources including leadership and commitment. Not all learning environments have resources available for FD initiatives. Innovative FD initiatives in resource-constrained settings (RCS) are therefore essential for building capacity and fostering educational leadership.

**Target Audience:** The workshop will target faculty and residents interested in planning and delivering FD activities in RCS.

**Structure of Workshop:** Framed by Steinert's quadrants of FD, this workshop will be structured as follows:

Introduction/Agenda (5 minutes)

Completing a needs assessment (10 minutes): Participants describe their teaching environment, and choose the most effective methods of determining the FD needs of key stakeholders within a RCS.

Developing learning objectives (15 minutes): Participants will practice writing their own learning objectives using a case study in a RCS.

Identifying appropriate evaluation methods (20 minutes): Using examples of FD evaluation tools, participants will discuss the usability, value, and adaptability of these in a RCS.

Developing FD content (20 minutes): Using an example of a FD activity, participants will discuss how it and/or other activities can be developed and/or adapted to RCS.

Choosing appropriate platforms and instructional strategies (20 minutes): We will discuss strategies to optimize available resources based on the environment, and ways of harnessing social and cultural factors to optimize delivery methods.

Discussing challenges (15 minutes): Participants will have opportunity to discuss potential challenges to FD in their own context.

Conclusion (5 minutes)

This interactive workshop will engage participants through small and large group activities and discussions (e.g., think-pair-share, case studies, brainstorming, buzz sessions).

**Intended Outcomes:** Intended outcomes include participants developing skills for providing FD and applying best practices in RCS thereby creating local leadership and fostering learning communities. Including residents in this workshop will increase capacity for future FD leadership in RCS.

**TLA-10**

Faculty development for teaching, learning and assessment

**Learning in motion: A beginner crash course in video and animation for the medical educator**

B. Brown, S. Soares

Yale Internal Medicine Primary Care, New Haven, CT, United States

**Background:** Medical knowledge is growing at an exponential rate. This problem, along with the learning styles of millennial learners currently in medical education, argue for leveraging modern multimedia to deliver foundational content in a memorable, easily-disseminated fashion. Despite growing efforts to create educational multimedia, there is limited evidence on best practices for designing and utilizing animated materials. By contrast, animation courses include highly developed curricula focusing on nuances of managing the viewer's emotional experience and attention. To bridge these disciplines, we have immersed in the art of animation and found commonalities with adult learning theory (i.e. cognitive load, dual-coding, advance organizers, and flipped classrooms). In our experience, it is feasible to learn and implement 2D animation as a clinician-educator without prior art or animation experience. Our preliminary data indicate that education via our animated products is effective and well-received.

**Target Audience:** Our target audience is any educator who is interested in digital media as a teaching tool to improve learner engagement. We emphasize the lack of need for prior art or animation skills to participate.

**Structure of workshop:** The workshop will begin with a brief didactic providing basic vocabulary surrounding educational media, including cognitive load theory, flipped classroom learning. With a series of team-based exercises, learners will experience first-hand some fundamental steps of designing educational art and animation media. By the end of the session, each team will have storyboarded a scene that teaches a medical concept. Participants will leave with a handout full of resources and tips to create animation at little or no expense.

**Intended outcomes:** We strive to convince educators of the feasibility of creating animation, and to provide the toolkit to begin learning practical skills, as well as thoughtfully incorporate pedagogical best practices.

## TLA-11

Faculty development for teaching, learning and assessment

### Applying effective learning science to clinical teaching in the moment

R. Farmer<sup>1</sup>, S. Saner<sup>2</sup>, G. Rabalais<sup>2</sup>

<sup>1</sup>University of Louisville, Louisville, KY, United States; <sup>2</sup>University of Louisville, Louisville, KY, United States

**Background:** Faculty members have teaching roles in a variety of venues; in the classroom, in small group settings like problem-based learning sessions, at the bedside, and in the clinic. Clinical faculty teach while providing care for patients accompanied by learners in inpatient and outpatient settings. Learning science has given us well-described teaching strategies that facilitate learning, especially as they apply in the classroom setting, but how best should the faculty member incorporate these while teaching in the moment between patient care responsibilities?

**Structure of Workshop:** Using the strategies outlined in books such as Make it Stick (Brown, P., Roediger, H.L., McDaniel, M., 2014) and Small Teaching (Lang, J.M., 2016), we will provide participants the opportunity to practice effective strategies that are most applicable while teaching in the moment. We will structure the workshop as follows:

Brief didactic session to introduce effective learning strategies

Role-play of a teaching strategy by presenters

Participants will work in small groups to prepare and present a learning strategy in a role-play format

Participants will work in small groups with other learning strategies to determine the best content and clinical setting for which to implement that specific strategy

Participants will be provided a toolkit of learning strategies from which they will choose two that they will implement at their institution.

#### Intended Outcomes:

Participants will describe how they will implement two learning strategies at their institution.

Participants will learn how best to incorporate the strategies known to enhance learning and retention while serving in supervisory patient care roles in inpatient and outpatient settings.

Participants will be able to explain to a colleague key aspects of learning science and apply research-based learning strategies with health care related content while teaching in the moment.

**TLA-12**

Faculty development for teaching, learning and assessment

**The role of faculty development in the changing health professional education continuum**

E. Wooster<sup>1</sup>, M. Jackman<sup>1</sup>, J. Maniate<sup>2</sup>, D. Wooster<sup>1</sup>

<sup>1</sup>University of Toronto, Toronto, ON; <sup>2</sup>University of Ottawa, Ottawa, ON

**Background:** Demographics and demands on health care systems are in a continual change of flux. These demands are creating stresses on health care systems that were not originally anticipated. Additionally, the demographics, distribution, knowledge, skills and behaviours of health care professionals are also shifting as the mix of practicing clinicians changes. These forces result in a moving target for faculty developers when considering how to develop and implement programs aimed at maximizing learning outcomes for health care trainees. The variables that relate to these changing dynamics must be considered and related to individual context to ensure that a maximal impact is obtained. Our workshop will review the factors that influence these forces and assist attendees to place them into a local context by using specific frameworks.

**Target Audience:** All those who are interested in developing faculty development that embrace local context while considering and addressing forces at work in the global health care systems. This workshop is intended for a beginner to intermediate audience. A basic understand of faculty development programming is recommended.

**Structure of workshop:** this workshop will consist of a series of short didactic sessions led by the workshop facilitators. These will be interspersed with interactive sessions including popcorn, think-pair-share, visual likert scales, small and large group discussions and train the trainer techniques.

**Intended outcomes:** At the end of this session, participants will be able to: 1) describes the forces currently influencing health care system change, 2) detail the relationship and role of faculty development in preparing faculty and trainees to face these challenges, 3) assess the differences between local and global context, 4) describe next steps for developing and implementing a context specific faculty development program and 5) understand the steps for implementing a train the trainer program to disseminate their learning on a larger level,

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