3E SHORT COMMUNICATIONS: The Teacher
Location: Brown 1, Level +2, MiCo

3E1 (23187)
Developing as a Medical Educator from the Outside In
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Background: It is not uncommon for medical educators to be expatriates from other domains of higher education, such as psychology, engineering, and leadership. These people bring diverse perspectives on teaching and learning from their native professions, which stimulate innovative approaches to curriculum design, performance assessment, and educational research, among many other endeavors. Enculturating into medical education is no small task, requiring the acquisition of a foreign language, adoption of new social norms, and integration into established interpersonal networks. There is no one “right” way to develop as an immigrant to medical education; the openness of our field provides numerous opportunities to develop professionally and make a difference if one keeps busy doing what they love. This brief presentation will tell the story of how I created a home at Southern Illinois University School of Medicine by quickly becoming involved in curriculum evaluation, an activity that allowed me to apply my background to solving problems valuable to the school and personally meaningful to me. This initial engagement opened doors to research collaborations with clinical and basic science faculty and publishing in medical education journals, to participation with faculty and medical students on their own professional development journeys, and to the editorship of Teaching & Learning in Medicine, where I have the honor of working to advance our field with staff and contributors from all over the world. I hope my story will help other medical educators (and those who develop them) to seize the wealth of developmental opportunities in their everyday work.

3E2 (22764)
Evaluating clinical teachers in postgraduate medical education: Does it improve the quality of teaching? Results of a longitudinal study

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Background: There is mixed evidence whether evaluations lead to more effective teaching and higher ratings. We assessed changes in resident ratings of their teachers, using a validated questionnaire (EFFECT). We interviewed supervisors to understand what changes they plan to make, and how to realise them.

Summary of Work: Supervisors of nine medical specialities were evaluated, using EFFECT. Mean overall scores (MOS) and mean scale scores were calculated and compared using paired T-tests. Semi-structured interviews were conducted based on predefined topic lists. Interviews were transcribed and analyzed in ATLAS-Ti.

Summary of Results: 89 Supervisors were evaluated at two subsequent years. 12 Out of 18 supervisors (67%) with a MOS 0.2 in their MOS. We interviewed 12 supervisors. A first analysis shows that supervisors experience a high job autonomy concerning teaching, improve their teaching but are not aware of their strategies, and don’t expect support from the head of the department. Supervisors rarely learn from their colleagues. Feedback from residents is useful.

Discussion and Conclusions: Evaluating teachers with EFFECT is associated with a positive change in residents’ ratings, predominantly in supervisors with low initial scores. Supervisors formulate intentions but do always not have clear strategies on how to realise them.

Take-home messages: Evaluating supervisors helps to further improve teaching. Supervisors could be supported in realising their intentions after an evaluation.
3E3 (18590)
Faculty Assessment in Healthcare
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Background: Many administrators are reluctant to have their college tackle comprehensive faculty assessment. While universities typically have an annual review together with student assessment of their classes or instructors, this may not provide faculty the input they need to enhance their skills.

Summary of Work: A healthcare college with 11 different graduate programs developed an assessment process based on solid research data that is both ongoing and dynamic. First created in 2006, with help from R. A. Arreola and his book, “Developing a Comprehensive Faculty Evaluation System”, it has undergone refinements so that it is “owned” and appreciated by faculty and is comprehensive in approaches to teaching, service and scholarship.

Summary of Results: The results have led to a better alignment of shared, measureable goals, ability to plan for and support professional growth and development without being seen as threatening or non-collegial. At the same time, the process clearly needs to be dynamic and reflect the changing healthcare environment. As a result, the process is reviewed and refined annually.

Discussion and Conclusions: Faculty can be given a foundational understanding of the research behind faculty assessment and, when given the authority, can develop a shared system of self and peer evaluation as a way of improving instruction and leading to overall growth.
Take-home messages: Faculty must “own” a faculty evaluation system that they are involved in creating and that takes into account both solid research and the changing external and internal environments of today's healthcare.

3E4 (21266)
The influence of the work environment on teaching performance: Work engagement as a perspective
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Background: Work engagement offers insight in the influence of the work environment on teaching performance and well-being. Different levels of work engagement have been quantified for the roles of teacher, clinician and researcher for medical faculty. Our aim is to explore which aspects of the work environment affect work engagement for teaching specifically.

Summary of Work: We interviewed 16 medical faculty at two Dutch university teaching hospitals, who were purposively sampled to ensure a wide range in professional roles and backgrounds. We asked them to elaborate on the influences on their work engagement based on the work engagement model. The interviews were iteratively coded and analyzed using the template analysis method and regularly discussed in the research team.

Summary of Results: Besides aspects of the work environment inherent to teaching, participants identify several positive influences from combining clinical work or research with teaching, despite the effect of increased work pressure. Furthermore, several aspects of the work environment were perceived oppositely between participants and could not be unequivocally labeled.

Discussion and Conclusions: While previous research has found different levels of work engagement for different roles, our research suggests there is an interaction which is also beneficial. In addition, distinct differences exist between medical faculty in the emergence of work engagement. Our finding that certain aspects of the work environment are perceived oppositely, may have consequences for how educational innovations are designed, implemented or provided.

Take-home messages: Influences on work engagement for teaching extend beyond education into the realms of clinical work and research.
New Medical Teachers Climbing the Hill Of Academia

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Background: New medical teachers (NMT) face many challenges at the beginning of their career. This paper will explore the challenges experienced by NMTs in two countries and suggest ways how these teachers can optimize their academic career progression.

Summary of Work: In this comparative longitudinal qualitative research, NMTs were interviewed three times over one year about factors affecting their learning processes at the early stage of their career. These interviews were conducted in Malaysia and the United Kingdom. 8 NMTs completed the three interviews in Malaysia and 4 NMTs completed the interviews in the United Kingdom.

Summary of Results: There are similarities and differences in the challenges faced by NMTs in the two countries. Both male and female NMTs expressed collegial support as the best form of support during their transition into academia. In terms of hindering factors, female NMTs expressed a strong need for female academic role models especially when it involved making decision about family planning and career progression.

Discussion and Conclusions: The finding of collegial support as the best form of support for NMTs is consistent with other studies on novice teachers for example by Burke et al. (2013) and Pogodzinski (2013). The need for female academic role models is a long standing issue and have been highlighted in other studies for example by Suzanne H. Lease in 1999 and Valantine & Sandborg in 2013. Additional supporting and hindering factors, such as familial support and heavy workload will also be discussed. This paper will suggest ways how hindering factors can be overcome so that NMTs can optimize their academic career progression.

Take-home messages: In order for a smoother transition into academia, it is important that universities look into the factors affecting the learning processes of NMTs and provide the support needed by these NMTs.

Factors which facilitate or impede clinicians from teaching undergraduate medical students

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Background: Changes in public (and political) expectations mean that senior clinicians have an increasingly hard task to balance the competing demands of clinical service, education of the professionals of the future and their own research programmes. To establish the beliefs that underlie the decisions they make, two theoretical frameworks have been applied: Fishbein and Ajzen’s (2010) reasoned action approach and Archer’s (2012) reflexive imperative model.

Summary of Work: A series of 20 semi-structured interviews were undertaken, recorded, transcribed, anonymised, and inductively coded, including items previously identified in the literature (time, primacy of research, appropriate level of training, lack of recognition for teaching, lack of understanding or “their place” in the programme.

Summary of Results: To the elements mentioned above, one must add the respect of colleagues, pleasure at being a role model, and a desire to make things better for the current generation. The primacy of research was mentioned by most participants but no participant mentioned “time” as a significant factor.

Discussion and Conclusions: It is possible to identify participants underlying beliefs about their behaviour (education of undergraduate medical students), the effect of those beliefs upon their attitudes, and the influence of controlling factors (peer/senior pressure, enjoyment) and a desire to be seen as a good role model. There is evidence in favour of the application of both frameworks to trying to understand colleagues’ motivations to teach.

Take-home messages: By understanding better the motivating and demotivating factors that impact upon our colleagues, we can devise the structural changes that will ensure an increased engagement between senior clinicians and undergraduate medical students.
Teacher Effectiveness in Clinical Teaching: Structural Equation Model

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**Background:** Clinical teaching is a complex activity that includes all domains of learning (Knowledge, Psychomotor and Attitude). Teaching medical students during their clinical rotation is critical to their education, as it prepares them for patient management in their future practice. It is therefore important for teachers to understand the factors that influence learning (i.e. principles) and the processes that underlie it (i.e. theories) to both promote students’ learning and facilitate students’ success in exams and future work and study.

**Summary of Work:** Based on adult and social learning theory, a model was developed to test the factorial relationship between teacher characteristics (input), student’s perception (process), and students’ assessments (outcome) in clinical teaching, along with the effect of additional input and outcome factors.

**Summary of Results:** A three step analytic procedure with three separate sub-samples from medical students was used to explore the correlation between clinical teaching and student outcome. The results from latent variable path analysis showed a good fit to the data (comparative fit index = .93) which converged in 6 iteration, with a standardized residual mean error of 0.05 and RMSEA of 0.092, SRMR =0.043.

**Discussion and Conclusions:** Students’ success was closely related to teacher’s characteristics and their clinical coaching and teaching skills in the process of clinical teaching.

**Take-home messages:** The Structural Equation Model is a great opportunity for medical education research; it helps to link learning theory with medical practice. Importantly, SEM is a powerful technique that can combine complex path models with latent variables to produce a comparative result with clear correlations.