

Programme for the Rogano meeting 2013



Corinthia Hotel Prague

Kongresová 1, Prague

Welcome

Welcome all to the third Rogano meeting. The first one was held in 2011 in Vienna and the second in Lyon in 2012. It is fair to say that the meetings have been a success, despite being still in their infancy. The purpose of the meeting is to allow researchers in health professional education from the various centres in the world to meet each other both in a collegial and personal manner. For the professional meetings we have invited the more junior researchers to present their work and discuss it with their peers and near-peers. The more senior researchers provide round tables and workshops. Coffee breaks, lunch breaks and dinner are the perfect moments to meet and get to know each other in a more informal or personal way.

The success of the past meetings clearly shows in the large number of abstracts received both from more junior and from more experienced researchers. As a result the programme is quite full and it is almost unavoidable that there will be moments where you would like to attend two sessions that take place simultaneously and you have to make a choice. We hope you understand that in an attempt to give each presenter sufficient time and attention there was no way to avoid this.

When reading through the abstracts, we were enthused by the diversity of topics, the flexibility in the use of theories and epistemologies and the creativity of the research approaches.

We sincerely hope that you will share our enthusiasm and have a inspiring, meaningful and pleasant meeting.

Anne-Mette Mørcke,
Charlotte Silén,
Tim Dornan,
Lambert Schuwirth

The Venue

Address:

Corinthia Hotel Prague

Kongresová 1

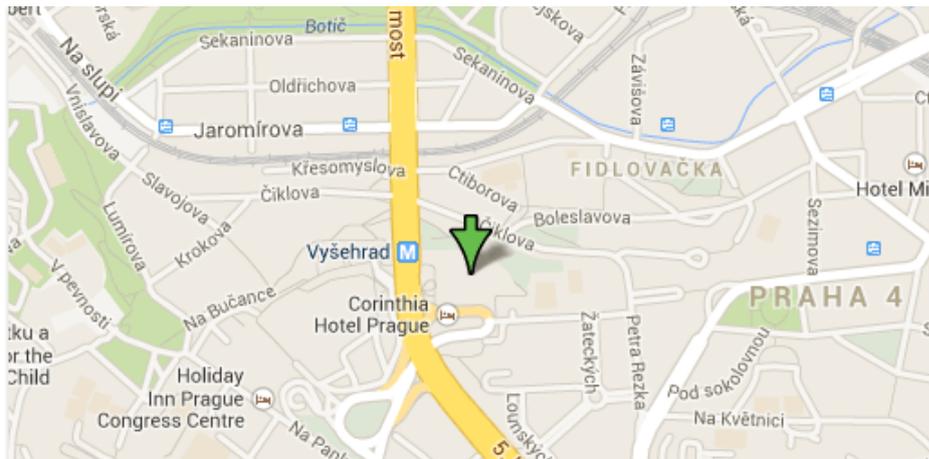
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Floorplan



Rooms

11: Volga

12: Amstel

13: Danube

14: Douro

15: Oder

Participant instructions

As a result of the evaluation of last year's Rogano meeting we have made some slight changes to the set-up. There will be three types of activities: presentations, round tables and workshops.

PhD/Student Presentations

PhD/Student Presentations are activities that PhD students and other more junior researchers have submitted an abstract for. There are three presentations per block of 1.5 hour, so each presenter has half an hour. We suggest the following scheme:

- 7-10 minutes presentation of the topic and presentation of the topics/questions for discussion
- 15 minutes discussion with peers and near-peers
- 5 minutes suggestions and tips from more senior colleagues

Start by giving a 7-10 minutes introduction/presentation of your topic, related to your abstract, that will enable participants to join in on a discussion based on your specific questions (area of interest to discuss). You have already provided these when you submitted your abstract.

In your presentation/introduction you may want to make optimally clear what it is you want feedback on or wish to discuss.

Some of you have indicated to want to discuss making sense of the data and the results; others want to discuss where to go from here with follow up research. The implications for the educational practice have been mentioned but also questions relating to theoretical frameworks or methodology.

In the scheme for the presentations we have made clear that we think that interacting with other students/post-docs and only in a second instance with seniors during these sessions will provide new insights for your continuing work. Please feel free to be creative to introduce your research as you think best in order to get the most out of these discussions!

For senior researchers; *please keep your comments and suggestions brief or even look for possibilities to provide them on a one-on-one basis during coffee breaks, lunch breaks or over dinner. We do know that you are able to provide pearls of feedback and we encourage you to do so, but we do want to foster peer feedback and building of a future generation of health professional education researchers.*

You will have access to a lap top (power point) and a projector. If you wish to use power point/the lap top for visual aid you need to bring your presentation material on a USB-stick.

To make the most of these interactive sessions, we ask everyone to read through all abstracts in your own session and prepare questions and comments. There will be 3 student-/post-doc contributors in each session lead by a senior researcher. The senior researcher will make sure that all contributors "get their time".

Round tables/meet-the-experts

There are 6 round tables/meet-the-experts planned. The experts have provided an abstract for their activities for you to read and choose.

Round tables/ meet-the-expert sessions will last for 90 minutes and will start with a brief introduction of the topic by the expert. The focus is on discussion in the broadest sense of the word.

We urge you to make best use of it. So please don't be shy, ask your questions and seek advice in applying the general theme of the session to your local needs, your own research or any other relevant context. Don't be afraid of dumb questions. First, dumb questions are often not as dumb as you may think (actually they are often quite clever). But, more importantly, if you ask a dumb question it will only be a dumb question for a couple of minutes; if you don't ask it, it will remain so for the rest of your life.

Forty-five minutes is not much for an engaged discussion and you may want to continue over lunch or after the meeting. We encourage you to do so if possible.

Workshops

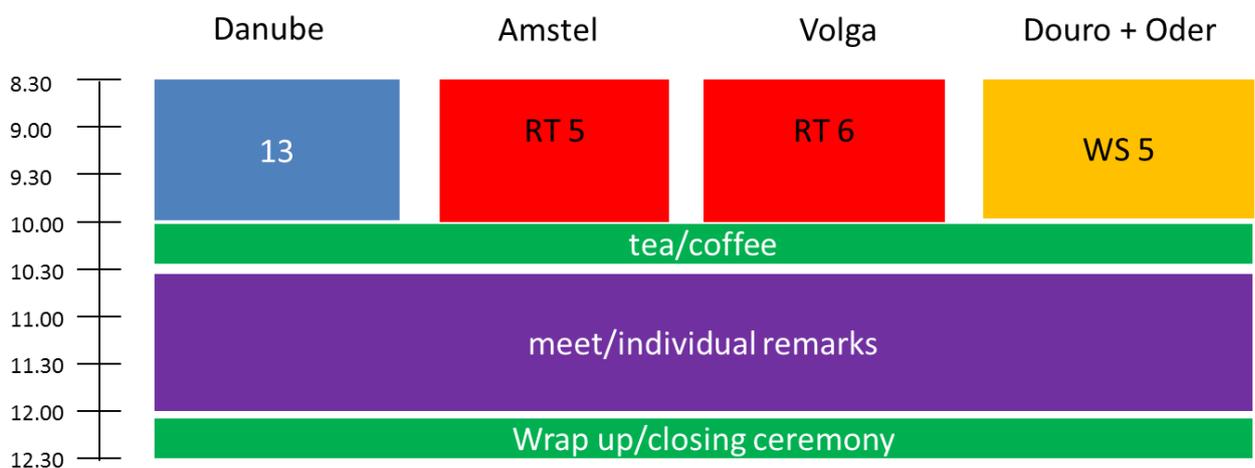
In addition to the presentations and the round tables there are workshops. Each workshop takes 1.5 hours and they are run either parallel to each other or with round tables, but never concurrent to PhD/Student presentations. The workshop leaders have submitted an abstract in which they explain what their workshop will entail for you to make a choice.

Programme

Friday 23 August



Saturday 24 August



Session 1 abstracts

Session 1.1: Friday 23 August 8.30 - 09.00. **Room:** Danube

Title: Gathering validity evidence for virtual-reality simulators

Presenter: Lars Konge

Background: Successful competency-based education presupposes reliable and valid assessment of trainees' performance. Direct observation by the supervisor is patient-dependent, time-consuming, and prone to bias. Virtual-reality simulators provide a standardized stress-free environment where trainees can perform procedures without untimely interference from the supervisor. Immediately following each procedure they "assess" the performance through a multitude of un-biased metrics. However, the reliability and clinical relevance of these metrics has to be explored, and credible pass/fail standards are necessary for summative assessment.

Aim: Our aim was to develop a systematic approach to gathering validity evidence for test programs based on virtual-reality simulators, and to establishing credible standards.

Materials and Methods: We developed a 5-step model:

1. Identify simulator metrics with discriminative ability
2. Create an aggregate score that combine these metrics into a single score
3. Test the reliability of the QS under different circumstances using Generalizability Theory
4. Perform a standard-setting procedure to set the pass/fail standard
5. Check the consequences of this standard (pass/fail ratio of different groups)

Results: We have tested the model on an endobronchial ultrasound simulator, a hip-surgery simulator, and a colonoscopy simulator (on-going studies on a vaginal ultrasound simulator, an arthroscopy simulator, a temporal bone-drilling simulator, and a cataract surgery simulator). Discriminatory ability was found for some, but definitely not all, simulator metrics. Performance of several procedures was necessary to ensure reliable assessments. Credible pass/fail standards with reasonable consequences could be established.

Conclusion: We recommend a five-step approach for systematic gathering of validity evidence before using virtual-reality simulators for assessment of competence including certification.

Session 1.2: Friday 23 August 09.00 - 09.30. **Room:** Danube

Title: Do simulated performances correlate to subsequent clinical performances?

Presenter: Mette Madsen,

Background: Traditional clinical ultrasound training is characterized by long learning curves. It has been shown that simulation-based clinical training is superior to traditional training when learning new procedural skills in other procedures such as laparoscopy and central line placement but this has yet to be shown for ultrasound simulators. Further, it remains unclear whether simulated performances correlate to subsequent clinical performances, i.e. predictive validity of simulator metrics in terms of identifying the population of trainees, who will perform well in a clinical setting. Predictive validity has implications for who should be trained and how much in future simulation-based curricula.

Aim: The aim of this study is to explore the correlation between performances on a Virtual Reality ultrasound simulator and subsequent clinical performances. The research questions are:

In a group of midwives training on Virtual Reality ultrasound simulators,

- I) How does simulator performance-scores correlate to subsequent ultrasound performance in a clinical setting?
- II) How many repetitions are needed on the simulator to achieve proficiency and how does it correlate to the number of repetitions needed for clinical proficiency?

Methods: The ultrasound training starts with a theoretical introduction to ultrasound, followed by proficiency training on a high- and a low-fidelity ultrasound simulator. The validity evidence of the simulator metrics used to assess proficiency on the high-fidelity simulator and the assessment instrument (Objective Structured Assessment of Ultrasound Skills) has been addressed in previous studies. Instructor feedback is given after each trial on both simulators. After completed simulation-training, the midwives need to conduct at least three consecutive acceptable ultrasound scan in clinical setting on real patients before considered proficient.

Hypothesis: High simulator performance-scores may correlate to high clinical performance-scores, suggesting predictive validity of simulator metrics in terms of consistency in performances between the simulated setting and in the clinical setting. We also hypothesize that midwives who use few attempt to reach proficiency in simulated setting also need fewer repetitions in the clinic before proficiency. However, the opposite situation may also be observed as time spent on a simulator may translate to better clinical performance due to automaticity rather than proficiency. Thus, midwives who need many repetitions on a simulator may subsequently need fewer repetitions in a clinical setting due to automaticity of their ultrasound skills.

Session 1.3: Friday 23 August 9.30 - 10.00. **Room:** Danube

Title: Measurement, explanation and improvement of teaching performance in residency training

Presenter: Renée van der Leeuw

Topic and context

The topic of my PhD thesis is the measurement, explanation and improvement of teaching performance in residency training. Since medical education is built on the assumption that training is essential for high quality care, we investigated the role of teaching performance of faculty (synonyms: supervisors, clinical teachers, consultants) in residency training (synonyms: (post) graduate medical education). More specifically, we focused on the feedback residents provide for faculty in order for faculty to improve their teaching performance.

Aim or research question

In three studies, we focused on narrative feedback, or written comments of residents' feedback. We found that especially the suggestions for improvement are an important predictor of teaching performance improvement. I would like to discuss the methodology of my plan to further investigate the use of narrative feedback. The aim would be to investigate the experiences of faculty with receiving and residents with providing suggestions for improvement on actual performance. Translated into a research question it could be: 'What are the experiences of residents and faculty with giving and receiving suggestions for improvement on teaching performance?'

Theoretical background

We have made use of the work of Myers et al. and Boendermaker et al. to investigate the content of the suggestions for improvement by applying their categories: teaching skills, teaching attitude, personal characteristics and embedded positives i.e. 'nothing to improve'. Hattie and Timperley's work on 'the power of feedback' has been the main theoretical basis to develop a coding scheme to examine the wording or specificity of the suggestions for improvement. This paper is soon to be published in Academic Medicine and will be available at the time of Rogano 2013.

What you have established thus far

We found that the amount of suggestions for improvement predicts teaching performance improvement in subsequent years.

What is still unknown/unresolved

How residents and faculty experience the use of narrative feedback for performance and in particular the suggestions for improvement. What motivates them? And what is challenging?

Specific topics you wish to discuss

I am interested in your thoughts on the topic and aim of the research, but more specific questions would be: What methods could I use to investigate the research question? How could I best include motivating and challenging factors? What kind of triangulation would be suitable to investigate the influence of suggestions for improvement on teaching performance?

Session 2 abstracts

Session 2.1: Friday 23 August 8.30 - 09.00. **Room:** Amstel

Title: The links between organisational, group and individual medical postgraduate workplace learning in paediatric departments.

Presenter: Mads Skipper

Topic and context

Reviews and studies have examined how doctors learn in the workplace. However research is needed in order to answer, how organisational structures such as training programs and work organisation influences actual clinical workplace learning.

Aim or research question

Aim: To elucidate the significance of work organisation in relation to adapt and develop training to the reality of the clinical departments in paediatrics.

Research question: What is the explanatory link between: (a) Learning culture and the organisation of work, (b) Group of junior learners and senior doctors, (c) Individual learners?

How do senior doctors' espoused theories of learning influence on their way to organise and plan the medical training of junior doctors (theories in use)?

Theoretical background

Experiential learning theories explain how individual people learn, the project will focus on how doctors learn in the workplace by using amongst other Lave and Wengers situated learning theory, Billett's "pedagogy of workplace learning" and Eraut, "informal learning in the workplace".

In regards to the projects focus on organisational learning we will look upon Argyris and Schön's theories on double loop learning, espoused theories and theories in use. The project aims to elucidate how to make change in organisations by using a framework by Engeström on activity systems and change laboratory in a possible translational interaction study.

What you have established thus far

I have conducted an observational pilot study in a paediatric university department following junior and senior doctors as informants. The project is conducted in an iterative way, where the observational study is used to elucidate which themes to approach in a following focus group study. The focus has amongst other been on the Consultants Responsible for Medical Education (Crfme) and a wish to identify if the Crfme's "espoused theories" are similar with their "theories in use."

So far the pilot study has shown that a systematic approach is needed when planning the daily work for junior doctors and at the same time taking in consideration the educational demands. Decision-making involves both individual considerations and prioritisation but also managerial responsibilities and skills of the Crfme.

What is still unknown/unresolved

The next stage in the project is to conduct a focus group interview with Crfme in paediatrics to elucidate their espoused theories and which governing variables that exist about postgraduate medical learning by the key stakeholders in the departments. Currently I am conducting a thematic literature review and analysis of existing studies of workplace learning in postgraduate medicine.

Specific topics you wish to discuss

As I am in an early stage of my PhD.-project I would like to discuss the use of qualitative analysis in the above-described projects as well as the application of the experiential learning theories in the studies.

Session 2.2: Friday 23 August 09.00 - 09.30. **Room:** Amstel

Title: Understanding and clarifying the role and tasks of the residency directors in postgraduate training

Presenter: Hanna Frydén

Topic and context

In order to become a specialist, physicians undergo postgraduate medical education. At the clinical department and health care units, the responsibility of the quality of postgraduate medical training is often held by senior consultants. This study focuses on these consultants; clinicians who occupy formal positions in postgraduate education for the purpose of managing and supporting the training of residents, hereafter called residency directors.

In all, three studies will be conducted.

Aim or research question

The overarching aim is to understand and clarify the role and tasks of the residency directors in postgraduate training. The central research questions are:

1. Exploring the role and function of residency directors - when and how are residency directors executing their educational leadership in the postgraduate training?
2. What aids respectively hinders the execution of their educational leadership?

Theoretical background

The point of departure for the entire project is Bolman and Deal's theoretical framework¹. They formulate four theoretical perspectives from which leadership can be understood and analysed; structural-, human resource-, political- and symbolic perspective. The data will be analysed through the four frames presented.

What you have established thus far

The first study is an explorative interview study. The data collection has started, and according to the plan, all data will be collected during spring 2013. A set of hypothesis will be derived from this study, in order to be tested on a larger population in study 2.

What is still unknown/unresolved

Since I am just in the beginning of my PhD studies as well as my first study, much is still open for discussion, from analysing the interviews in study number one, to using the result as a platform for the two following project.

Specific topics you wish to discuss

The project is using a mixed method approach, where an interview study will form the bases for a questionnaire. I would like to discuss the participants' experience of using mixed method and what to think about when transferring the result from an interview study into a descriptive questionnaire study.

Another subject I would like to discuss is how to use a theoretical framework when analysing interview data.

¹ Bolman LG, Deal TE. Reframing organizations: artistry, choice, and leadership. 4th ed. San Francisco: Jossey-Bass; 2008

Session 2.3: Friday 23 August 09.30 - 10.00. **Room:** Amstel

Title: The clinical learning environment of undergraduate students, foremost medical and nursing students

Presenter: Matilda Liljedahl

Topic and context

The topic of my thesis is the clinical learning environment of undergraduate students, foremost medical and nursing students. The context is clinical education on an undergraduate level in Stockholm county council.

Aim or research question

The overall aim is to understand how different clinical learning environments impact the learning experiences of undergraduate students and how a strong learning environment can be described.

Research questions are e.g.:

- How can a strong learning environment be described?
- What are the characteristics for a strong learning environment?
- How does the leadership impact the development and sustainment of the strong learning environment?

Theoretical background

The research approach in this project is constructivism, meaning that it is assumed that knowledge is relative and consists of social constructions and that the researchers are not an objective observer but a participant in, and facilitator of, the research project.

The project I am currently working on is a case study of four learning environments using observational studies and interviews.

A socio-cultural perspective on learning and a cultural view of clinical education have been taken in the project meaning that learning is considered to take place in the interaction between human beings and that the context and social environment is considered to impact the learning experience of students.

What you have established thus far

In the first study, interviewing medical and nursing students, we have been able to describe how they experience their respective cultures of learning (not discussed here).

What is still unknown/unresolved

In the current project the environments have been selected through a process where leaders of departments and students have nominated environments regarded as successful and “strong” when it comes to clinical education and they are therefor considered to be a good starting point for studying strong learning environments. However, one can argue that our findings will not be transferable since the environments are selected because they are “strong” or successful.

Specific topics you wish to discuss

I would like to discuss the following topics:

- How can we study an environment and find characteristics for a “strong” learning environment when assuming that the environment is “strong” or “successful” based on individuals’ opinions, such as leaders and students? Can we find a definition of a “strong learning environment”?
- How can I conduct qualitative research of high quality within a university that highly value quantitative research and publications in journals with high impact factor?

Session 3 abstracts

Session 3.1: Friday 23 August 8.30 - 09.00. **Room:** Volga

Title: Factors influencing seminar learning and academic achievement.

Presenter: Annemarie Spruijt

Topic and context

Many medical schools, inspired by social constructivist theories of learning, have embraced small group learning in their undergraduate curricula by introducing tutorials, seminars and group practicals. There has been surprisingly little research on small group learning other than in problem-based learning (1).

Aim or research question

To enhance the understanding of seminar learning and to determine how seminar learning can be optimized it is important to investigate this. Questions we have asked are: What aspects are of influence on learning in seminars according to stakeholders? What is the importance of these aspects and how are they related to students' perceived learning effect and to students' grades?

Theoretical background

In seminar learning, groups of some 25 students, facilitated by a teacher, discuss questions and issues emerging from assigned readings on a topic of practical relevance (2). It offers students opportunities to discuss and refine their understanding of complex issues, learn how to solve problems and reflect on their attitudes and feelings (3). In a quantitative study Jaarsma et al. (2008) showed that the teacher and the quality of seminar questions were considered to be important factors for seminar learning. Other factors influencing seminar learning need further investigation.

What you have established thus far

We have finished two qualitative studies and extracted nine key aspects influencing seminar learning according to students and teachers. In class aspects are the teacher, student, group functioning, seminar questions, seminar format and facilities. Out of class aspects influencing seminar learning are quality and amount of preparation, course alignment, coherence, schedule and assessment. To investigate the relationship between these aspects and to be able to link this to outcomes, we took different levels (student, group and seminar level) into account during analysis. For example, some of these aspects have to be analysed on students' level (amount of preparation) while others are group level characteristics (quality of group interaction) or seminar characteristics (seminar questions). We have analysed, conducting a multi-level study, the effect of these different levels on different seminar outcomes, like student grades and perceived learning effect. The data gathering and analysis will be finished by the end of the summer of 2013.

What is still unknown/unresolved

Students and teachers acknowledge preparation as one of the most important aspects of influence on seminar learning. However, many students do not always do the assigned preparatory work. Reasons for (not) preparing are influenced both by student factors, as well as contextual factors. Surprisingly there is very little research on the connection between student preparation, group functioning and seminar outcome.

Specific topics you wish to discuss

I would like to discuss the difficulties we encountered when analysing results on different levels and the methodological and statistical choices we have made. When possible I would also like to discuss follow-up studies that would be most suitable.

References

1. Edmunds S, Brown G: Effective small group learning: AMEE Guide No. 48. Med Teach 2010, 32(9):715-726

2. Jaarsma ADC, de Grave WS, Muijtjens AMM, Scherpbier AJJA, van Beukelen P: Perceptions of learning as a function of seminar group factors. *Med Educ* 2008, 42(12):1178-1184.
3. Steinert Y: Twelve tips for effective small-group teaching in the health professions. *Med Teach* 1996, 18(3):203-207.

Session 3.2: Friday 23 August 09.00 - 09.30. **Room:** Volga

Title: Undergraduate prescribing education: developing an educational intervention for safer prescribing.

Presenter: Lucy McLellan

Topic and context

Prescribing is a highly complex skill, situated within complex workplace environments. Our proposed research addresses how students can be encouraged to develop expertise in the whole task of prescribing, rather than competence in atomised components of the task.

Aim or research question

My research programme sets out to explore how addressing the metacognitive aspects of learning and performance could improve newly qualified doctors' ability to prescribe safely. My objectives are to review what is known from previous research, gather empirical data on how students learn to prescribe, conduct a cognitive task analysis, and conceptualise an educational intervention for safer prescribing.

Theoretical background

Prescribing is a core skill for junior doctors which requires them to apply previously acquired knowledge, skills and attitudes in the complex context of clinical workplaces and demands a high level of cognitive and metacognitive functioning. Metacognition, or 'thinking about thinking', is an important aspect of learning and performing a complex skill. It involves monitoring cognitive functioning and regulating cognitive processing and outcomes. We are taking a metacognitive approach to studying how students experience learning to prescribe. We are also seeking to understand the cognitive and metacognitive processes required for the successful performance of the prescribing task.

What you have established thus far

Our literature review demonstrated that medical school curricula focus predominantly on knowledge and skills, with very little recognition of social context, metacognition, feedback and the problem of learning transfer. We concluded that a more integrative approach to developing an intervention for prescribing, which covers more of the requisite elements of the skill, could encourage the development of the expertise that graduates require in order to prescribe safely. Our ongoing work explores the realities of learning to prescribe as a year 5 medical students. We are beginning to understand how the process occurs and how it could be improved.

What is still unknown/unresolved

We need to develop a detailed understanding of the cognitive and metacognitive processes which underlie prescribing behaviours and define the features of the prescribing task in more detail. We want to define the prescribing task as foundation year 1 and 2 doctors experience it, as preliminary research has shown that their task is considerably different from that of a more senior prescriber. We will build on our theoretical model of performing complex skills by developing a cognitive framework for specific prescribing situations. We hope that this will enable us to develop a successful intervention for educating medical students to become safer prescribers.

Specific topics you wish to discuss

I will provide a brief overview of my programme of work and introduce my theoretical model of how learning a complex skill such as prescribing could work (based on my published literature review). I'd like to discuss the progress of my task analysis study and would welcome the opportunity to open up an exchange of ideas around the role of task analysis in designing educational interventions and, more specifically, how it could contribute to our understanding of prescribing education.

Session 3.3: Friday 23 August 09.30 - 10.00. **Room:** Volga

Title: Student's learning processes in clinical education especially related to a supportive pedagogical framework such as a clinical education ward

Presenter: Katri Manninen

Topic and context

In my research I am inquiring into student's learning processes in clinical education especially related to a supportive pedagogical framework such as a clinical education ward. Different types of clinical education wards have been established with the aim of giving students more autonomy and responsibility to facilitate their transition from student to professional.

Aim or research question

Four sub-studies explore how and what nursing students at different levels learn at a clinical education ward. Students' learning processes are studied from the perspective of the students, the patients and the supervisors. Also patients' and supervisors' perceptions of their roles and impact are studied.

Theoretical background

Transformative learning theory is used as framework concerning learning in this study. At the clinical education ward supervision is based on work-based learning focusing on allowing students to act independently as professional nurses with supervisors supporting them when needed. Students train their profession, teamwork and interprofessional collaboration. Concepts of authenticity and threshold provide a framework for discussion and interpreting of results from the first two sub-studies.

What you have established thus far

First year students create mutual relationship with patients and experience being for real a part of the caring team. Final year students experience uncertainty and resistance to engage in patients which is characterized by self-centeredness and ambivalence. Uncertainty seems to constitute a threshold for creating relationships with patients and being a part of the caring team. Caring for patients with extensive need for nursing care helps the students to overcome the threshold. The results show that creating a relationship with the patient is essential for the students to experience both external and internal authenticity resulting in understanding and learning the complexity of nursing and their professional role.

What is still unknown/unresolved

Two sub-studies have the students' perspective on learning at a clinical education ward. The next two studies will have patients' and supervisors' perspectives on students' learning.

Specific topics you wish to discuss

I have collected data by observing ten caring situations and conducting follow-up interviews with patients, students and supervisors. I wish to discuss the strengths and limitations of different approaches in the analysis process and how different kinds of data can illuminate patients' and supervisors' perceptions related to students' learning. Further, I wish to discuss how to present the findings in order to give the readers an understanding of all different angles the data provided.

Session 4 abstracts

Session 4.1: Friday 23 August 08.30 - 09.00. **Room:** Douro + Oder

Title: Empathy in medical students and practising physicians

Presenter: Sarah Mahoney

Context

'Ethical erosion' and decrease in empathy is described as occurring in medical students particularly with the onset of clinical work. Recent studies suggest that there is less loss of empathy in students in longitudinal integrated clerkships.

Flinders University offers a four year graduate entry medical program. Third year students study in a variety of settings including hospital block rotations, year-long rural primary care immersion, and urban hybrid programs.

Research questions

1. Exploration of empathy in medical students
2. Compare with empathy scores of practising doctors
 - a. Does loss of empathy occur in Flinders medical students?
 - b. If there are differences in empathy, is there any correlation with site of third year study?
 - c. Are there differences in empathy scores of doctors and if so what are the correlations?
 - d. Is there any correlation between student and practitioner empathy scores?

Theoretical background

Since Feudtner et al described 'ethical erosion' in 1994, there have been numerous studies that have shown a loss of empathy occurring predominantly during the clinical years of medical education. One of the outcomes described by the authors of research into longitudinal integrated clerkships (LICs) in USA is a beneficial effect on maintenance of empathy.

We have not found any evidence of research into empathy being done in an Australian medical school. We therefore believe there is a need for this research.

What you have established thus far

Thus far we have:

1. Obtained ethics approval to use the Jefferson Scale of Empathy (JSE) student version, the Narcissistic Personality Inventory short version (NPI16) and an open question for a student survey.
2. The first component of the survey has received approximately a 50% response.
3. The second component will take place in November 2013.
4. Obtained ethics approval to use the JSE physician version to survey practising physicians.

What is still unknown/unresolved

No results are available yet, and only one student survey has been offered so far. The physician surveys are yet to be offered.

Specific topics you wish to discuss

1. How can a satisfactory response rate be achieved?
 - a. Ethics committee limitations
 - b. Student questionnaire overload?
 - c. No immediate gain for participants
 - d. Lack of interest?
2. How to identify potential strategies to address maintenance of empathy?
3. How to ensure balance between empathy, professional boundaries, and over-empathy?

Session 4.2: Friday 23 August 09.00 - 09.30. **Room:** Douro + Oder

Title: Developing a comprehensive conceptualisation of the role of emotions in the professional development of medical students or residents

Presenter: Esther Helmich

Topic and context

Understanding and managing emotions in oneself and others is crucial for the well-being of medical students and physicians and their relationships with patients and colleagues. Emotions are strongly intertwined with professional behaviour and the development of a professional identity. Nevertheless, little is known about what kinds of emotions students experience during medical school, how they give meaning to these emotions, and how the process of emotional socialisation interrelates with the identity formation of a student becoming a doctor.

Aim or research question

The aim of the proposed line of research is to develop a comprehensive conceptualisation of the role of emotions in the professional development of medical students or residents.

Theoretical background

Emotions have traditionally been studied within a psychobiological framework, thinking of emotional reactions as predictable consequences of environmental stimuli, independent of a person's cultural milieu. As learning in the clinical workplace necessarily takes place in interaction with patients, doctors, nurses and other health care professionals, I propose a conceptualisation of emotions as embedded in social practice, paying attention to the symbolic, relational, communicative, and cultural aspects of emotions.

What you have established thus far

I have completed a PhD on the emotional development of medical students during early clinical experience. Learning to deal with emotions seemed to be an important feature of (early) clinical experience. During their (first) clinical placements, students experience a broad variety of both positive and negative emotions. Developing a professional identity is a highly emotional process, involving issues such as identification, getting access to a new and unknown community, negotiating meaning and trying to fit in. There are differences between students in how they give meaning to emotions and engage in patient care, resulting in four different 'paradigms': feeling insecure, complying, developing and participating.

What is still unknown/unresolved

In most educational or developmental theories the role of emotions is underrepresented. In particular within socio-cultural learning theories a clear conceptualisation of the role of emotions is lacking. There is almost no evidence on how medical students learn to deal with emotions and how medical education might support this process.

Specific topics you wish to discuss

How can different conceptualisations of emotions (psychobiological, social, cultural) advance our understanding of the role of emotions in the professional development of medical students and residents? Is it possible to identify different student paradigms and what does this mean for medical education?

Session 4.3: Friday 23 August 09.30 - 10.00. **Room:** Douro + Oder

Title: What physical and mental activities do clerks use to maximise their learning experience by self-regulating their learning, relying on both formal and informal learning opportunities

Presenter: Joris Berkhout

Topic and context

Students experience a big transition at the start of the clerkships because they need to adapt their learning habits as learning in the clinical setting is different from learning in the preclinical undergraduate medical curriculum and heavy expectations are placed on trainees to recognise and capitalise on opportunities to self-regulate their learning in the clinical context.

Aim or research question

We are interested in finding what physical and mental activities clerks use to maximise their learning experience by self-regulating their learning, relying on both formal and informal learning opportunities. How do they self-regulate their learning to become part of a particular community of practice? What motives do students have to exert this behaviour? What scaffolding do educators use to support the self-regulated learning process in students?

Theoretical background

Self-regulated learning is a learning process involving actively setting learning goals, selecting a strategy to achieve these learning goals, controlling emotions and behaviour whilst reaching for these goals, monitor the progress towards these goals and ultimately assessing and reflecting on oneself, on how the goal was achieved and selecting a strategy for achieving future similar learning goals. By selecting a strategy for future use, self-regulated learning becomes a cyclical process that can be separated in three phases: The forethought phase (before an activity), the performance phase (during an activity), the self-reflection phase (after activity).

What you have established thus far

We are currently conducting a narrative interview study to find what informal self-regulated learning activities/methods clerks use to maximize their learning in the clinical setting and investigating what motives play a role in this. The data gathering and analysis should be finished by the end of the summer of 2013.

What is still unknown/unresolved

Self-regulated learning is influenced by both personal and contextual factors. Little is known about how these factors interact with each other or how they influence the cyclical process of self-regulated learning, in particular the self-reflection phase of self-regulated learning.

Specific topics you wish to discuss

After having explored what physical and mental activities clerks use to self-regulate their learning in the clinical workplace and what motives form the ground for this behaviour, which we investigated in our first study, it might be interesting to discuss what possible follow-up studies would be most suitable. Would it be interesting to do an observational study on the clinical workplace to see this in action? What best method could be used for such an observation?

Session 5 abstracts

Session 5.1: Friday 23 August 10.30 - 11.00. **Room:** Danube

Title: Going through the motions: medical students' experiences of learning physical examination

Presenter: Anna Vnuk

Aim or research question

To understand the learning experience of medical students in physical examination

Theoretical background

Direct phenomenology using focus groups and individual interviews (Titchen & Hobson, 2005). Data analysed using interpretative phenomenological analysis (Smith & Osborn, 2008)

What you have established thus far

For the students interviewed in this study, the learning of physical examination was strongly influenced by the assessment and the teaching process. The students described how, in the pre-clinical years, they learnt physical examination exclusively on peers and their assessment was on standardised patients without signs. This led to the students memorising the checklist and the list of expected findings in a disease free patient for each system which they simply reproduced in the examination, without engaging with the patient or with the actual examination process. The students described how they did not (and did not need to) engage their perceptual skills or clinical reasoning skills. So, while they gave the appearance of examining the patient, they were simply "going through the motions". This learning behaviour had significant consequences on their physical examination skills when they entered the clinical years.

What is still unknown/unresolved

Is this phenomenon universal or unique?

Is it a development phase or, in fact, a necessary step in the learning?

What can be done to improve the learning experience for medical students?

Specific topics you wish to discuss

Further areas for research

Do the effects of learning this way persist into clinical work as doctors?

What about the role of teachers?

Would intervention trials be possible/feasible?

Session 5.2: Friday 23 August 11.00 - 11.30. **Room:** Danube

Title: Exploration of how medical student learn differently between regional medical centres and traditional settings to understand how professional identity evolves differentially.

Presenter: Brett Schrewe

Topic and context

There is a growing awareness of the importance of the role of professional identity formation in undergraduate medical education and its implications for training, practice and patient care. Leaders in the field have articulated that the making of appropriate professional identity be a key curricular goal. While there has been sustained anthropological and sociological attention to professional identity in medical education, much of this work predates the advent of regional medical centres (RMC). IN their exclusive focus upon training experiences within traditional academic health science centres, these works are underpinned by tacit assumptions conceptualizing students as a generic whole to the detriment of recognizing their individuality. Exploration of how medical students learn differently between RMCs and traditional settings offers an opportunity to understand how professional identity evolves differentially.

Aim or research question

- 1) How do actors, in constant relationship with their environments combine and integrate, as Gee (2005) notes, “language, actions, interactions, ways of thinking, believing, valuing, and using various symbols, tools, and objects to enact a particular sort of socially recognizable identity”?
- 2) If medical students differentially form their professional identity in different contexts, what is the balance between variability in the profession and cohesion of the profession itself?

Theoretical background

I am using Good’s seminal work (1994) on clinical medical training as background. I am considering using Butler’s concept of performativity to critique the assumption that “medical student” is a fixed and enduring category. From that stance, I am interested in how medical students differentially use language to index themselves as medical professionals. Specifically, I am interested in understanding how they learn to use language differently in different training contexts at a critical early phase of their medical formation.

What you have established thus far

This project builds upon the conclusions from my MA thesis, which explored the role of case presentations in medical students’ adoption of biomedical discursive practices.

What is still unknown/unresolved

This project is in its very early planning phases.

Specific topics you wish to discuss

I would like to flesh out my theoretical stance further and would greatly appreciate a discussion as to how best to explore professional identity formation.

While several methodological options are possible, I am considering doing ethnographic comparisons of the four regional medical campuses of the University of British Columbia. However, I would appreciate method suggestions in terms of optimal capture of data and feasibility of this project.

Session 5.3: Friday 23 August 11.30 - 12.00. **Room:** Danube

Title: Non-clinical challenges physicians face as they transition to practice and why are these challenges? What are the solutions?

Presenter: Roona Sinha

Topic and context

Transition to Practice for physicians who have completed post-graduate training and are entering medical practice in Canada.

Aim or research questions

1. What are the non-clinical challenges physicians face as they transition to practice and why these are challenges?
2. How can solutions to these challenges be approached.

Theoretical background

Many graduating resident physicians struggle with some of the non medical expert parts of the profession as they make the transition to the practice environment. Learning points during the transition to practice period include the non-clinical needs of future consultants including practice management, leadership and teaching skills. These skills are crucial parts of a medical practice, but often not learned well during medical education and this can result in a more challenging and stressful transition. In order to transform the transition to practice period from a threat into a learning opportunity, the medical education system needs to better support individuals in developing appropriate coping skills to face the new environments and the challenges they face during the transition period. Thus, there is a need for transition to practice materials to be available for transitioning physicians in an anticipatory way that also allows for transfer of learning to various practice settings. In order to develop these programs we need to better understand the details of why learning some of these non-medical expert skills are a challenge. Moreover, we must consider what are the opportunities in the learning environment to ensure that the learner's experiences result in productive and transferable learning. Lastly, we need to better understand how learning these skills contributes to the learner's developing physician identity.

What you have established thus far

Methodology includes interviews with transitioning physicians and key actors. A template analysis will be used.

What is still unknown/unresolved

How the template analysis will work in practice!

Specific topics you wish to discuss

Preliminary results and how to ensure richness of the data is not lost in the analysis and interpretation phases of the project. Understanding my role as the researcher within the interpretation of the data and use this as a strength rather than a limitation of

Session 6 abstracts

Session 6.1: Friday 23 August 10.30 - 11.00. **Room:** Amstel

Title: Intercultural communication between doctor and patient in a medical consultation.

Presenter: Emma Paternotte

Topic and context

The topic of this PhD is intercultural communication between doctor and patient in a medical consultation. As a doctor in the hospital you see patients from all over the world. Communication with these patients can be difficult because of difference in culture and language. During medical education intercultural communication is almost not educated.

Aim

The aim of this PhD is to learn more about intercultural communication in medical education and to implement a training in the medical education for residents who work with patients from a different ethnic background.

What you have established thus far

The first study is a systematic review on intercultural communication during medical consultation. In this study we included 34.918 articles. The research question for the review is 'How do patient and caregiver from different ethnic backgrounds communicate (or interact) during a medical consult? We use the research method from medical education 2013 (Qualitative synthesis and systematic review in health profession education). From this guideline we use the realist synthesis to look at the qualitative and quantitative data from empirical studies.

The second study will be an analysis of the current content of education programs for medical specialties in the Netherlands in combination with a questionnaire to different countries worldwide to find out if intercultural communication is a worldwide issue or only a Western issue. The question for the second study is 'Is intercultural communication a worldwide issue?'

The third and fourth studies will focus on enhancing the intercultural communication in the doctor-patient relationship by means of an observational and intervention study.

What is still unknown/unresolved

- Is intercultural communication a Western issue or is it a worldwide issue?
- What kind of intercultural communication is offered in medical education program worldwide?

Does training of intercultural communication help the doctor in communication with patients from different ethnic backgrounds?

Specific topics you wish to discuss

- Brainstorm about an intervention for intercultural communication training for residents
- Tips & pitfalls for such an intervention study
- The approach follows the positivistic paradigm. What are other theoretical possibilities?

Session 6.2: Friday 23 August 11.00 - 11.30. **Room:** Amstel

Title: Teaching anatomy in context in the undergraduate medical curriculum to improve acquisition, retention and recall of knowledge.

Presenter: Esther M. Bergman

Topic and context

Teaching anatomy in context in the undergraduate medical curriculum to improve acquisition, retention and recall of knowledge.

Aim or research question

- Does teaching in context lead to increased acquisition, retention, and recall of (anatomical) knowledge?
- And if so, can this improvement be attributed to the cognitive dimension of the context model: increased activation of prior knowledge and/or retrieval cues provided by the given context?
- Is the amount of activated prior knowledge and retrieval cues influenced by characteristics of the context, i.e. the familiarity and/or relevance of the context?

Theoretical background

Teaching in context is said to improve learning: the acquisition, retention and recall of knowledge. Koens et al. (2005) identified a model with three different dimensions of context: the physical, affective and cognitive dimension. The cognitive dimension states that teaching in context creates superior memory because it increases activation of prior knowledge and provides retrieval cues. Semantic networks are knowledge networks as stored in one's memory. No two persons have exactly the same knowledge about a topic as semantic networks are based on individual experiences. Therefore, we hypothesized that characteristics of the context, defined as students' familiarity with the context and relevance of context to content, may influence prior knowledge activation and retrieval cue storage, and thus the quality of semantic networks.

Methods

Learning task is dissection room session; to-be-learned content 4 musculoskeletal subjects. ± 200 students divided over 5 groups: a control group taught without context (1) and experimental groups respectively being taught with relevant familiar (2), relevant unfamiliar (3), irrelevant familiar (4) or irrelevant unfamiliar context (5).

Pre-, post- & retention tests are mcq's with and without context, and a free recall task (frt). The mcq's measure students' knowledge, the frt measure (activated) prior knowledge and stored retrieval cues. Students will fill out questionnaires about their familiarity with the provided context, and measurements of cognitive load, perceived competence and perceived learning value will be included.

What you have established thus far

Data collection will be done April, and data analysis June-July-August 2013.

What is still unknown/unresolved

As I still need to execute the experiment at time of submitting this abstract, I have no unresolved issues to write about. However, at time of the Rogano meeting I most probably will have.

Specific topics you wish to discuss

At the Rogano meeting I would like to focus on my research findings by presenting my (preliminary) results, get the other participants' interpretation of them and suggestions for the discussion section of my manuscript.

Session 6.3: Friday 23 August 11.30 - 12.00. **Room:** Amstel

Title: Design of bedside teaching activities to optimally facilitate student learning based on the cognitive apprenticeship model

Presenter: Hegla Virginia Florencio De Melo Prado

Topic and context

During medical course, Bedside Teaching (BST) is one of the most important clinical training activities and traditionally considered the cornerstone of clinical education.

Aim or research question

How should a BST activity be designed in order to optimally facilitate student learning based on the cognitive apprenticeship learning model? How does current practice of BST fit with and differ from theoretical insights about it? Which aspects need improvement?

Theoretical background

Bedside teaching (BST), defined as teaching in the presence of a patient, has been an integral, respected part of medical education throughout the history of modern medicine. It occurs when a clinician takes a group of learners to the bedside of a patient, listens to the history, elicits physical signs, makes a provisional diagnosis and decides on the best diagnostic and therapeutic options. Although BST is traditionally considered the cornerstone of clinical education, their standards of effective and efficient performance are not well studied.

What you have established thus far

1. BST is highly valued by clinicians and trainees, who recognize its importance and the need for greater emphasis on it in medical education.
2. Critical for success of this activity is the preceptor's overall understanding of the skills and knowledge required for independent competence.
3. Clinical skills are traditionally taught at the bedside in a non-standardised manner.

What is still unknown/unresolved

1. It's unclear under what conditions BST is a valuable activity.
2. There's a need to design and evaluate a new format for BST in order to improve medical students learning.

Specific topics you wish to discuss

We're developing a prototype for BST based on the literature evidence about it and on cognitive apprenticeship learning model (modelling, coaching, scaffolding, articulation, reflection and exploration). This prototype will be tested against the opinion of experts on BST and educationalist to analyze if:

- 1) it does fit with current insights about optimally student learning during BST;
- 2) BST taking place in our days fits with or differs from the prototype.

Based on this, I'd like to discuss during ROANO who (educationalists and physician experts on BST) and how to enrol in this study:

- Should I enrol subjects only from my institution/city or extend this to other centres around the world?
- If I extend to other centres around the world, how to do it? How to select centres? How to contact them?

Session 7 abstracts

Session 7.1: Friday 23 August 10.30 - 11.00. **Room:** Volga

Title: Entrustability for residents given by supervisors

Presenter: Karsten van Loon

Context

My main research interest is the entrustability for residents given by supervisors. The activities which are needed to make a successful transition from resident to hospital consultant are better known than before, thanks to the creation of Entrustable Professional Activities (EPAs). However, it is still unclear when and how to entrust the resident with these activities, especially when it comes to complex ones like working the night shift.

Background

Competency based medical education is widely used. There are some minor differences between the systems in different countries, but all are meant to train the residents in more than only medical expertise. For supervisors this entails a different way of entrusting residents than they did before. Measuring the level of medical expertise is not enough to entrust the resident in complex situations where general competencies are needed as well. The creation of EPAs made it possible to cluster certain activities in which all the needed competencies are described. Still, the question when a resident is progressively independent remains.

The reason to map the entrustment strategy is to investigate what is needed to make the entrustment a more valuable concept in the residents' education. Formalisation of progressive independence is likely to be a more efficient way of educating in which a resident can focus more on the competencies in which he or she is less independent and needs extra attention.

Research aim

The aim of this first research is to clarify when residents are entrusted with certain complex activities. Two speciality training programmes will be compared to find out whether there is a difference in entrusting residents. By comparing the education outlines and interviewing programme directors and residents it will be possible to see variation in the approach of entrustment.

Specific topics to discuss

- Is a comparison of the approach of entrusting residents between two Dutch speciality training programmes interesting for other countries as well or is an international view required to make it a more relevant study? Will this differ when the entrustment focuses on two similar activities within the two programmes?
- In this research the entrustment issue is approached from the perspective of medical expertise and the general competencies. Is this adequate or is there a perspective missing?

Session 7.2: Friday 23 August 11.00 - 11.30. **Room:** Volga

Title: What is at stake in the definition of health advocacy as a concept and as a practice?

Presenter: Cristian Rangel

Topic and context

Health advocacy in Canada is one of the seven core roles that are expected from doctors in order to fulfil their professional and social responsibilities. However, as a concept and as a core role for physicians, Health Advocacy has proven difficult to conceptualize, quantify, and teach. A review of medical education literature was conducted to trace the emergence of health advocacy as part of physicians' practice and to identify the ways in which the advocate role is taken up and used by the public and by academics.

Aim or research question

What is at stake in the definition of health advocacy as a concept and as a practice?

Theoretical background

Conceptual apparatuses that describe social realities and process, such as medical advocacy are inherently unstable and fluid. They emerge out of empirical social realities that are simultaneously informed by previous forms of knowledge that are both theoretical practical. As such these forms of knowledge describe specific problems and solutions but also ideals of moral good and authority.

What you have established thus far

The emergence of the doctor advocate can be traced to the early 1980s in the Canadian media. At the time, medical advocacy on behalf of AIDS patients and torture victims, and more recently refugees appears as a social practice in Canadian public discourse. However, the definition and scope of doctors' advocacy work is heavily debated in medical journals. Analysis revealed that physician participation in social causes enhances the profile of the medical profession in society by bringing targeted political action and the active exercise of citizenship into medical practice. Physicians' advocacy practices seems to be an important part of the processes of social legitimation of the medical profession

What is still unknown/unresolved

I still need to identify the ways in which debates within the medical professions, in particular the training of physicians inform and is informed by larger societal debates on social responsibility.

Specific topics you wish to discuss

I would like to discuss two main issues: 1) The potential of sociologically informed research to provide frameworks for tracing and developing meaningful understandings of medical advocacy; 2) How sociologically informed concepts could help to develop the parameters of the medical advocate as a legitimate area of professional development in medicine.

Session 7.3: Friday 23 August 11.30 - 12.00. **Room:** Volga

Title: A deeper understanding of the range of ways that family physician preceptors think about Health Advocacy

Presenter: Maria Hubinette

Topic and context

The CanMEDS competency-based educational framework describes seven roles of physicians: medical expert, communicator, collaborator, manager, health advocate, scholar and professional. Little is known about different ways in which family medicine preceptors conceptualise the role of family physician as Health Advocate, how they role model and explicitly teach residents about health advocacy and which opportunities best support residents' learning.

Aim or research question

The objective of this study is to gain a deeper understanding of the range of ways that family physician preceptors think about Health Advocacy and how they believe the Health Advocate Role can best be taught and learned.

Theoretical background

There is little theoretical underpinning of conceptual models of health advocacy and sparse literature within medical education to situate the health advocacy activities of physicians in the broader context of other health advocacy activities. As such, I was driven to extend my literature review beyond the constraints of medical education to help further elucidate my understanding of health advocacy. From the health promotion literature, and incorporating and integrating definitions and conceptual frameworks of others, Carlisle (2000) suggests that health promotion, advocacy and health inequalities can be located on two axes, resulting in four categories of health advocacy: representation, community development, community activism and social policy reform.

What you have established thus far

In a study informed by phenomenography, it was determined that family physician preceptors conceptualize health advocacy in one of three ways: as a clinical activity, as a clinical and paraclinical activity, or as a paraclinical and supraclinical activity. Conceptions of family physician preceptors map onto one quadrant of Carlisle's framework. Moreover, preceptors in these three groups had commonalities in their approach to teaching and learning, but also large differences. As conceptions are not overlapping, residents taught by these preceptors will have great variations in their experience with health advocacy teaching, learning and assessment. Preceptors seems to progress from one conception to the next by qualitative shifts in thinking. Further, there appear to be a number of enabling factors that facilitate the surmounting of barriers to health advocacy for these preceptors.

What is still unknown/unresolved

How Carlisle's framework can be adapted for use in medical education.

Specific topics you wish to discuss

My results and next steps.

Session 8 abstracts

Session 8.1: Friday 23 August 10.30 - 11.00. **Room:** Douro + Oder

Title: Transition research in medical education

Presenter: Michiel Westerman

Topic and context

My interest and expertise lies within transition research in medical education. My thesis concerned the transition from specialty trainee to working as a hospital consultant. This resulted into a new approach on transitions in which we postulate transitions as developmental and social processes resulting from a dialectical interplay between educational, psychological, and contextual factors. This approach on transitions as learning periods contrasts with the current view on transitions as undesired interruptions of the medical education continuum resulting from inapt preparation through training.

Theoretical background

Throughout my thesis we used theoretical concepts derived from transition psychology and organisational socialisation research as well as pedagogy.

Aim

Since a few months I am combining my specialty training in internal medicine with a post doc position in which I am aiming to further explore transitions as learning periods. I am in search of how clinical practise and medical education research are best combined to launch an effective research agenda in which I can supervise junior researchers and further develop my academic skills and expertise.

Specific topics you wish to discuss

I would like to discuss how an effective line of research could be launched when time is limited. Furthermore, I would like to absorb their tips and tricks regarding the supervision of researchers. Finally, I hope to learn from the present expertise on how to further close the gap between medical practise and medical education (research) that I am currently experiencing in daily practice.

Session 8.2: Friday 23 August 11.00 - 11.30. **Room:** Douro + Oder

Title: Problem-based learning across cultures: how to avoid stereotypes?

Presenter: Janneke Frambach

My project is about the globalization of problem-based learning (PBL) in medical education. I evaluated PBL's cross-cultural applicability by investigating and comparing PBL processes and outcomes in different cultural regions worldwide. I asked two main questions: 1) How is PBL affected, 2) How are students and doctors affected? I concluded that a) PBL is not straightforwardly applicable to different cultural contexts, as contradictions with local contexts were particularly present in the non-Western settings, and students faced more challenges here, and b) in all settings, PBL did seem to 'work' in its own way, as students adapted their learning behaviors to PBL, and seemed better prepared for practice than students from a conventional school. I feel (part of) my conclusions reproduce the stereotypes I seek to avoid, as a result of how I approached the concepts of PBL and culture, the questions I asked, and the literature I used. I aim to review my own work critically, and explore alternative, less 'stereotyping' ways of investigating PBL's globalization and cross-cultural applicability. I will present the studies I conducted and what in my view is 'right and wrong' about them. I hope the discussion helps me to set up a future research agenda.

Session 8.3: Friday 23 August 11.30 - 12.00. **Room:** Douro + Oder

Title: Phenomenology in health professions education: discussion of a framework for understanding and locating oneself in the field.

Presenter: Robin Hopkins

Topic and context

In my PhD work, I have been exploring the experiences of anatomists who have transitioned to teaching within an integrated curriculum. My goal has been to see how basic scientists are teaching differently under this new “clinically relevant” model of teaching anatomy, and to explore the implications of this sort of a transition to their own understanding of themselves as basic scientists and members of the medical training team. The development of the study led me to the methodological domain of phenomenology, and I have been delving into this approach to research and trying to translate it to the field of medical education. This presentation is a representation of a paper I am writing both for my thesis methodology section and (hopefully) for publication separately.

Theoretical background

Phenomenology is a research approach used to better understand something through the experience of others. Rather than a series of steps or methods, phenomenology is first and foremost, a philosophical stance. And to make matters more confusing, phenomenology is not one philosophy but many. There is growing concern in the health professions literature that researchers use phenomenology as if it were “one” approach. This is a concern as methodology (philosophy, grounding theory, or beliefs) frames the research questions and legitimates the research methods (procedures or actions). Thus, when an investigator's actions when conducting their study do not make sense with respect to their beliefs, the research can be confusing to follow and difficult to interpret.

Aim or research question

In addition to addressing the question of how the study of experience can be useful in medical education, my goal was to develop a framework that would offer researchers in health professions education a way to understand and locate themselves within the various philosophical perspectives of phenomenology.

What you have established thus far

I have developed a model that describes various dimensions that are common across the different forms of phenomenological inquiry. The intent of this framework is to help health professionals articulate their underlying assumptions and justify their methodological approaches when conducting phenomenological inquiry. The framework includes three dimensions on which the perspectives of phenomenologists tend to diverge including, the general and the particular, reduction and reflexivity, and description and interpretation. There is also a fourth dimension that is integral to phenomenological inquiry but rarely made explicit – the process of writing.

Specific topics you wish to discuss

- 1) General feedback and input regarding the model itself
- 2) Where is an audience for this in terms of publication? and,
- 3) What would make this a useful piece for medical education?

Session 9 abstracts

Session 9.1: Friday 23 August 14.30 - 15.00. **Room:** Danube

Title: A situational analysis for the Dutch national postgraduate CanMEDS based curriculum of Obstetrics and Gynaecology

Presenter: Nadine van der Lee

My Phd thesis concerns a situational analysis for the Dutch national postgraduate CanMEDS based curriculum of Obstetrics and Gynaecology. In this analysis, internal and external factors are researched that might influence the content of the curriculum. The situational analysis strives to give directions for adjustments to the curriculum in order to align education with practice, and make the curriculum more social accountable and future proof. In previous studies we researched gynaecologists' perspective on their future practice in 2025 and societal stakeholders' perspective on the current performance of Dutch gynaecologists. Also we studied the collaborative performance of gynaecologists from the perspective of a collaborative partner, the community midwives. To get a better understanding of the collaboration between gynaecologists and community midwives we set a questionnaire on collaboration within both professions. This questionnaire will be followed by focus group interviews. The final study of my thesis will be an intervention study in which residents experience community midwifery care. In this study we explore what the effect of such an intervention is on the interprofessional collaborative performance of residents.

As the last studies of my thesis focus on interprofessional collaboration, I have been searching literature concerning this field of research. However, I experienced this field to be numerous in terminology and theories.

At the Rogano meeting I would like to come in contact with other researchers in the 'collaboration' field and exchange synonyms, fields of practice and research encountered in literature (e.g. medical, business, management), and theories found applicable to medical practice and education. Also, to widen my own perspective, I would like to explore what other researchers mean by collaboration (e.g. an interaction between people, a process, communication), what situations they appoint as professionals collaborating (e.g. in providing care, teamwork, quality control and improvement), and what kind of professionals are involved.

Session 9.2: Friday 23 August 15.00 - 15.30. **Room:** Danube

Title: Teamwork in educational teams

Presenter: Irene Slootweg

Topic and context

Residents learn by working in a multidisciplinary context, in different locations, with many clinical teachers. Although clinical teachers are collectively responsible for residency training, little is known about the way educational teams function. In this PHD project we explore the function of educational teams in achieving high quality residency training.

Aim or research question

Study 1: To explore how clinical teachers work together in delivering residency training.

Study 2: To develop a robust instrument for evaluating teamwork in educational teams.

Study 3: To explore how effective leadership of program directors in educational teams being displayed

Theoretical background

The social learning theory emphasises the importance of interaction and participation for learning and working. Teamwork research stresses the importance of: 1) individual characteristics of team members and 2) outcomes of teamwork. [1] Leadership literature shows that leaders are essential for realising creative team processes. [2] To explore leadership in educational teams we use the strategic leadership perspective as is characterised by 1) sensemaking of the external world to make the environment more predictable, 2) designing the organization and 3) promoting learning. [3]

What you have established thus far

Teamwork of educational teams is a dynamic process embracing 7 themes. [4] Based on these themes, we developed an evaluation instrument for teamwork (TeamQ). Content validation was established through Delphi-rounds. We are now collecting data for statistical validation from 120 teams. We target to finish data collection by the summer of 2013.

We are in the analysis phase of study 3 which is an explorative, phenomenographic interview study focussing on strategic leadership by program directors to create collaboration within educational teams. We learned that the focus of the leader is on designing of the educational tasks and sense making of the importance of residency training. [3] Collective learning as a team is less visible.[3]

What is still unknown/unresolved

There are a lot of unknown areas. For example we are interesting in the research questions:

- How can we improve teamwork in teaching teams of residency training?
- What makes excellent teams excellent and why?
- What motivates professionals to work together in teaching teams?
- What is the effect of teamwork on the quality of residency training?

Specific topics you wish to discuss

I am looking forward to get a more international perspective of the unknown areas and I would like to discuss what is the most relevant research question on teamwork in educational teams for researchers in medical education worldwide?

[1] Stewart GL. The Past Twenty Years: Teams Research Is Alive and Well at the Journal of Management. Journal of Management 2010 Jul 1;36(4):801-5).

[2] Mumford e.a. How creative leaders think: Experimental findings and cases. The leadership Quarterly 2003

[3] Mc Daniels e.a Strategic Leadership: a view from Quantum and Chaos Theories Health Care Management Review 1997

[4] Slootweg e.a Clinical teachers' views on how teaching teams deliver and manage residency training. Medical Teacher 2012

Session 9.3: Friday 23 August 15.30 - 16.00. **Room:** Danube

Title: The interprofessional learning and teaching dynamics surrounding medical trainees (senior clerks, junior & senior residents) within the clinical workplace.

Presenter: Renée Stalmeijer

Topic and context

Health care is centred around interprofessional health care teams that collaborate to deal with the complexity of co-morbidities in an ever more dynamic health care system.

It is in this health care system that medical trainees need to learn how to collaborate within the health care team.

Aim or research question

I have been working on building a programme of research which aims to gain insight in the interprofessional learning and teaching dynamics surrounding medical trainees (senior clerks, junior & senior residents) within the clinical workplace.

Currently I'm preparing the first two studies (semi-structured interviews):

Study 1: How do senior clerks, junior & senior residents learn to become a collaborator/member of the health care team? Who do they think are instrumental in this process and in what way? Which processes are instrumental in them learning to become a collaborator/member of the health care team?

Study 2: How do the various health professionals present within the workplace perceive their role in teaching medical trainees (senior clerks, junior & senior residents) to become a collaborator/member of the health care team? How do they perceive their own role in this learning process? Which processes in the clinical workplace do they describe as instrumental in the learning process of medical trainees to become a collaborator/member of the health care team?

Theoretical background

My research questions were inspired by theoretical, empirical and practical work.

Theoretically I'm drawing on Communities of Practice (Lave & Wenger, 1991; Wenger, 1998), theories on workplace learning (Malloch et al., 2011) and interprofessional learning (Hean et al., 2012).

Empirically I'm drawing on the work of Graham et al. (2009), Kennedy et al. (2008), and Lingard et al. (2002) which suggest that allied health care workers have a clear role in the learning process of medical trainees to become a collaborator (not just physicians).

Practically speaking I'm using the CanMEDS Collaborator role (Glover Takahashi et al., 2012) as a guideline in describing the competencies that medical trainees need to attain in order to become an effective member of the health care team.

What you have established thus far

Thus far I have not found any empirical work which looked into the interprofessional learning and teaching dynamic surrounding medical trainees, only empirical work hinting at the importance of this perspective.

What is still unknown/unresolved

To what extent the interprofessional perspective on this issue is valuable.

Specific topics you wish to discuss

At Rogano I would like to discuss my developing research plans and hopefully present some preliminary data from study 1 and 2.

Session 10 abstracts

Session 10.1: Friday 23 August 14.30 - 15.00. **Room:** Amstel

Title: Reliability estimations of the mini-CEX using traditional and construct-aligned scales

Presenter: Alberto Alves de Lima

Topic and context

Reliability estimations of the mini-CEX using traditional and construct-aligned scales

Theoretical background and Aim or research question

Recently, Crossley have demonstrated that in real life settings Mini-CEX scales constructed to reflect the development of clinical sophistication and independence (CS) have higher utility than the traditional ones (TS), since they are more reliable and therefore raises the evidence of greater validity. The aim of this study is to reproduce these findings in a controlled setup and to evaluate the different variance components in both scales.

What you have established thus far

Three encounters were videotaped from 21 residents (R). The patients were the same for all R. Each encounter was assessed by 3 assessors (A) who assessed all encounters for all R. The A assessed the encounters twice. The first time they assessed the encounters using the TS and 30 days later with the CS.

Results:

For both scales, a third of the total variance was associated with universe score variance, TS: 36% vs CS 29%. The largest source of variance in the TS was of general error (49%), followed by the main effect of assessors (7%). In the CS the largest source of variance was of general error (34%) followed by the assessors' variability for some residents (23%) (Table 1). Generalisability coefficients indicated that for both types of scales an approximate sample of 7 encounters was needed, assuming both the presence of one different assessor per encounter and the presentation of different cases per encounter (the usual situation in real practice): 4 encounters when 2 raters were used and 3 encounters in case 3 raters were used

		TS (% of total variance)	CS (% of total variance)
Vr	Systematic variability of residents	36%	29%
Vc	Systematic variability of cases (case difficulty)	0%	1%
Vo	Systematic variability of assessors (leniency/strigency)	7%	10%
Vrc	Variability of residents across cases	0%	1%
Vro	Assessors variability for some residents	6%	23%
Vco	Assessors variability for some cases	2%	3%
Vrco	General error term	49%	34%

Traditional scales and construct-aligned scales showed similar performance in terms of sources of variance and in the resulting reliability

What is still unknown/unresolved

The phenomenon of construct alignment appears to be less straightforward than might be inferred from Crossley's initial work, so further exploration of when and where and how it plays a role in improving assessments will be important for future research to establish.

Specific topics you wish to discuss

I wish to discuss the reasons or possible explanations about these results.

Session 10.2: Friday 23 August 15.00 - 15.30. **Room:** Amstel

Title: Teachers' development of a shared assessment practice as an enacted policy

Presenter: Linda Barman

Topic and context

Point of departure for my thesis project is the societal demands and new educational insights that are transformed into policies and thus exerts pressure on teachers' development of teaching-learning. At Rogano, I aim to present an on-going study of how teachers enact policies through their joint effort to develop a shared assessment practice. Narrative method is used to study teachers' development of assessment criteria for professional competency, related to the implementation of outcome-based education and a demand for transparency.

Aim or research question

The aim of this study is to gain a deeper understanding of teachers' development of a shared assessment practice as enacted policy.

Theoretical background

Overall, in my thesis project I have an interpretative (hermeneutic) approach (Gadamer; Ricoeur). In this particular study narrative inquiry is used.

Narratives may be seen as a cognitive process to create meaning of scattered events and experiences in our everyday life. It binds together events and circumstances into a causal chain of happenings. Different events and happenings will thus be tied together by the researchers to provide meaningful explanations of the choices and actions made by the community of teachers involved in the study. Analysis is based on the works of Bruner and Mattingly, and applied to study change as manifested in teachers thinking and acting over time.

What you have established thus far

Analysis is on-going and based on data generated through several observations, one group interview and the teachers' written reflections.

What is still unknown/unresolved

Based on the assumption that narrative inquiry is relatively unfamiliar within health professions research, the main issue is how to frame the findings and what debate to relate to.

This research brings several options for communication, such as; 1) assessment of professional competency (micro-level related to teaching-learning), but also 2) how to foster communities of practice around teaching-learning (meso-level related to faculty development). Furthermore it can be of interest to attend to 3) how policies related to prevailing discourses in higher education in general and in health professions education in particular, are translated into teachers' daily practice (interaction between macro-level and micro-level). This could be exemplified by globalisation, standardisation, quality, outcome- and competency-based education, and the biomedical paradigm and objectivity.

Specific topics you wish to discuss

I wish to gain questions and critique related to methodology and suggestions of how these results can be framed for publication and communication.

Session 10.3: Friday 23 August 15.30 - 16.00. **Room:** Amstel

Title: Rater idiosyncrasy: A problem to be fixed or a solution waiting to be discovered?

Presenter: Andrea Gingerich

Topic and context

Rater idiosyncrasy: A problem to be fixed or a solution waiting to be discovered?

Aim or research question

What is rater idiosyncrasy?

Theoretical background

We have often assumed rater idiosyncrasy is an unwanted by-product of using untrained, unstandardized, unmotivated and biased raters as measurement instruments. When using psychometrics to analyse our assessment ratings, reliability is a critical metric and rater disagreement threatens the robustness of our assessment decisions. But what if rater idiosyncrasy reflected legitimate differences of opinion based on differing expert interpretations? How useful would it be to continue treating this variance as disposable error? What are some assessment implications of treating rater idiosyncrasy as an untapped source of meaningful information?

What you have established thus far

Raters are idiosyncratic. Consistently idiosyncratic. Persistently idiosyncratic. When multiple raters assess the same videotaped performance there is typically a 5 point spread of ratings on a 9 point scale. It is not as simple as some raters consistently giving arbitrarily high ratings and some giving unnecessarily low ratings. There is rating idiosyncrasy both within raters and between raters, but unexpectedly, specific rating patterns and comments can be replicated across different studies.

What is still unknown/unresolved

Where does the idiosyncrasy come from? How much idiosyncrasy can be attributed to the raters' cognitive processes, the assessment task, the context and/or the trainee? What can be explained about rating idiosyncrasy if we were to look at it from the perspective of the rater?

Specific topics you wish to discuss

I plan to share brief, illustrative examples of rater idiosyncrasy from a recent study to stimulate discussion about its possible sources and implications for rater-based assessments. I would like to gather novel interpretations of rater idiosyncrasy from the audience along with their reactions and insights to proposed explanations.

Session 11 abstracts

Session 11.1: Friday 23 August 14.30 - 15.00. **Room:** Volga

Title: Changing to assessment-for-learning: Understanding clinicians discourse about assessment as a means of understanding change in assessment practice

Presenter: Julie Ash

Topic and context

Changing to assessment-for-learning: Understanding clinicians discourse about assessment as a means of understanding change in assessment practice

This project uses discourse analysis to examine clinicians' discourse about assessment in order to understand their current thinking about assessment practice and what a change to assessment-for-learning might mean.

Aim or research question

How do we bring about and implement a fundamental change in the understanding and practice of assessment, specifically towards assessment-for-learning, when the majority of assessors are clinicians, not trained educators, who share a discourse about assessment that potentially operates against practice of assessment-for-learning?

Theoretical background

Educational change theory defines three objective realities of educational namely the beliefs, materials and approaches (or methods) of educational practice. Staff development tends to focus on communicating about these facets of any educational innovation to be implemented. Fullan's meaning hypothesis states that educational change depends on what teacher think and do - it's as simple and as complex as that (Fullan, 1982). This means that in any context understanding what teachers (or in this case clinicians) think and do about assessment practice in the context of their existing realities as practitioners is essential for effective staff development and in achieving educational change. Clinicians tend to practice and learn within a community of practice. Within this community a discourse develops about reasonable practice, including the practice of assessment. This informs the beliefs, materials and approaches they utilise in their daily practice. Discourse analysis provides a method for examining this discourse to understand current beliefs and practice and what a new practice of assessment-for-learning might mean.

What you have established thus far

This project is developmental linked to a project grant application to establish the materials and practices for assessment-for-learning in a health professional education context. Its theoretical base comes from PhD which examined change in clinical education utilising case study method. Discourse analysis was suggested at the last Rogano Workshop as a method for more systemic investigation of clinicians' beliefs and practice in context.

What is still unknown/unresolved

There have been many studies of teachers thinking about of assessment but no study that specifically examines clinical educator's discourse about assessment using discourse analysis to inform understanding of the meaning of change in assessment practice.

Specific topics you wish to discuss

- 1) Do other perceive the problem?
- 2) What does the Rogano group think of using discourse analysis to examine the discourse about assessment amongst clinicians and to gain insight into the meaning of a change in assessment practice?

Session 11.2: Friday 23 August 15.00 - 15.30. **Room:** Volga

Title: Innovations in specialty training/postgraduate medical education (PGME)

Presenter: Joanne Fokkema

I am interested in innovations in specialty training/postgraduate medical education (PGME). In two out of three studies so far, we used one specific type of innovation in PGME as a case to study innovations. We worked with a constructivist phenomenological stance.

First we qualitatively explored the approach to educational change of consultants responsible for specialty training, by individual interviews and thematic analysis. Part of our findings was that they use strategies to do so, and also that their awareness of this strategy use is highly variable. (*MedEduc* 2012: 46: 390–398)

We conducted a second interview study (with consultants and trainees) to explore which kinds of effects can be brought about by innovations in specialty training. To that end, we chose to focus on a recognisable and recent case of innovation: workplace-based assessment (WBA). In thematic analysis we identified six domains of effects that can be brought about: sentiments (affinity with the innovation and emotions), dealing with the innovation, specialty training, teaching and learning, workload and tasks, and patient care. (*MedEduc* 2013: 47: 271–281)

Since user-perceived effects of innovations in PGME seemed to be both broader than intended and variable, we now wanted to acquire more specific knowledge of what can be expected of innovations in PGME, and under which circumstances. This kind of knowledge could guide optimal design and custom made implementation of innovations.

Therefore, we are currently conducting a study among consultants and trainees to investigate the different perceptions of effects of innovations in PGME and to understand what might influence the variable development of these perceived effects. Again, we use WBA as a case of a recognisable recent innovation.

We perform this study using Q methodology, which provides a method to systematically investigate people's viewpoints on and experiences with a certain topic. We are currently analysing the data, which will be completed at the time of Rogano 2013.

I would like to discuss the prospects of our findings using WBA as a case of an innovation in PGME. What would be appropriate additional steps (after these three studies) to give the findings of these qualitative studies of WBA relevance for other innovations (in medical education), apart from discussing similarities and differences with findings from other fields in the articles in *Medical Education*? How and where should I communicate these findings to achieve such "transferability"?

Session 11.3: Friday 23 August 15.30 - 16.00. **Room:** Volga

Title: How does leading educational change in an undergraduate medical education organisation manifest itself through power and resistance?

Presenter: Kristina Sundberg

Topic and context

Leaders on different levels within undergraduate medical education (medical schools) are occupied with initiating, implementing and evaluating educational interventions and development. (Cooke et al, 2010). Faculty development targeting undergraduate medical education leaders is one way of strengthening this group in their important mission (Lieff et al, 2012). Even though Master level programs for medical education leaders are growing quickly in numbers worldwide (Tekian et al, 2010) it has been shown that there is little empirical evidence on specific leadership practices to help inform the design of educational programs for medical education leaders (Lieff et al, 2010). Both our knowledge about actual undergraduate educational leadership experiences as well as theoretical perspectives on them are today limited.

Aim or research question

How does leading educational change in an undergraduate medical education organisation manifest itself through power and resistance?

Theoretical background

In this phenomenological study, the experiences of undergraduate medical education leaders will be explored and highlighted. By applying sociological theoretical perspectives on power and resistance to the experiences of undergraduate medical education leaders, additional theoretical perspectives on their important work could be presented.

What you have established thus far

The body of research in undergraduate medical education leadership research is quite limited. It also applies a limited number of leadership perspectives when trying to analyze and conceptualize its results. Additional theoretical perspectives on medical education leadership are needed for the future; it is the prerequisite for developing high quality faculty development programs for leaders in undergraduate medical education.

What is still unknown/unresolved

Are the experiences of undergraduate medical education leaders leading educational change the same as the experiences of other undergraduate health professions leaders, as for example in nursing? And what are the experiences of health professions educational leaders when trying to develop interprofessional educational activities across educational health professions programs?

Specific topics you wish to discuss

Sociological theories can operate on macro, meso and micro levels: in what way can the choice of applying theories from different theoretical levels help us when creating future high quality faculty development programs for health professions education leaders?

Session 12 abstracts

Session 12.1: Friday 23 August 14.30 - 15.00. **Room:** Douro + Oder

Title: Simulation-based education (SBE) in health in the context of manikin-based simulation in team-based training.

Presenter: Kristian Krogh

Topic and context

The topic of my research/PhD is simulation-based education (SBE) in health in the context of manikin-based simulation in team-based training. The PhD is a mixed method study with two RCT intervention studies (quantitative + qualitative analysis of questionnaire) and a interview study (qualitative).

Aim or research question

The overarching aim of my PhD is to improve SBE through the encounter of two central aspects of SBE; realism/fidelity and debriefing/feedback.

Study 1: How does simulation with timely realism differ in respect to the skills learned compared to simulation using compressed time?

Study 2: How does participant lead feedback compared to instructor lead feedback affect the learning and the learning experience for novice learners?

Study 3: What are the debriefing practices of experts in debriefing in full-scale immersive simulations? What are the dominant features of debriefing by experts?

Theoretical background

Kolb's view on experiential learning contributes in the understanding of SBE.

Ericsson's descriptions of Deliberate Practice in many ways resonate with practice and maintaining practice described in study 3. Also Lave and Wenger concept of Legitimate Peripheral Participation helps understand how some participants have evolved their debriefing.

What you have established thus far

Study 1: Data analysis is not yet completed, but preliminary results shows an overwhelming benefit in using real time in SBE with $P < 0.001$ when looking at the ability to keep track of time during resuscitation in simulation.

Study 2: Preliminary results shows little or no differences in test results when testing the participant lead feedback group compared to instructor lead feedback group. The novices participants expressed through the questionnaires a general dislike of participant lead feedback. Where the facilitator only outlined the debriefing process and the participants largely debrief themselves. – The participant lead feedback group felt unsure and less capable compared to the instructor lead feedback group.

Study 3: The analysis indicates that dominant practice features include: the debriefing models used; video assisted debriefing; briefing; and continued professional development. Most participants used a blended approach to debriefing combining different models to suit the needs of the learners and other contextual elements. Key factors for successful debriefing identified by several participants were: the importance of showing genuine interest, being honest and continuing to strive for improved performance.

What is still unknown/unresolved

How to use these data most constructive in order to contribute to the continuing improvement of SBE!

Specific topics you wish to discuss

How to turn the angle on study 1 and 2 to an instructor/teacher perspective in order to create a "red line" through the different studies outlining a PhD thesis?

Session 12.2: Friday 23 August 15.00 - 15.30. **Room:** Douro + Oder

Title: Feedback about feedback: Challenges in presentation, delivery and reception of social-comparative feedback in medical trainees

Presenter: Kinga Laura Eliaz

Theoretical background

Social cognitive theory suggests that the feedback one receives about his/her performance is a powerful technique in developing self-efficacy (Bandura, 1986, 1997). One specific type of feedback that has been shown to influence self-efficacy beliefs and learning is social-comparative feedback. This particular feedback is provided to make the learner believe that he/she is performing better or worse than the group average, regardless of his/her actual performance and thereby influencing the learner's mindset (Eliaz, Wishart, & Lee, 2012). Research has also demonstrated that providing social-comparative feedback can influence different types of learners during motor skill acquisition (Avila, Chiviakowsky, Wulf, & Lewthwaite, 2012; Eliaz et al., 2012; Wulf, Chiviakowsky, & Lewthwaite, 2012).

Aim or research question

Since self-efficacy and motivation are considered to be related in terms of their affective influence on learning (Bandura, 1997; Schunk, 1990, 1991), the goal for my doctoral studies are to examine the role of social-comparative feedback on highly motivated learners' (i.e., medical trainees) mindsets.

What you have established thus far

Our task typically requires trainees to perform several stereotyped surgical techniques and we manipulate the nature of social-comparative feedback that is provided to them during acquisition – regardless of actual performance. Essentially trainees receiving positive or negative social-comparative feedback are shown performance summaries indicating that they are performing better or worse than their peers, respectively. Contrary to previous findings, the results of my first doctoral study suggests that there is a significant relationship between negative social-comparative feedback and mindset that modifies behavioural and psychological factors in medical trainees acquiring basic procedural skills.

What is still unknown/unresolved

This is the first study that empirically demonstrates the detrimental learning effects of negative socially-relevant feedback in a sample of highly-motivated individuals. Based on my training and the minimal research that has been done using this type of feedback in the field of motor learning, my challenge lies in exploring these elements in an applied setting that elicits more critical consequences.

Specific topics you wish to discuss

I will discuss ideas to further explore various elements of this type of feedback including how specific it has to be to influence behaviour, how it is delivered, who delivers it and how it is received by highly-motivated learners (medical trainees) compared to other types of learners. It is my hope that these questions will generate an interesting subsequent discussion that will ultimately provide feedback and suggestions to some of these challenges, which would strengthen my research program. Additionally since this topic crosses disciplines this session could also potentially help foster future collaborations to answer some of these research questions.

Session 12.3: Friday 23 August 15.30 - 16.00. **Room:** Douro + Oder

Title: The dual role towards patient care and learning assumed by medical trainees and their clinical supervisors during clinical activities

Presenter: Dominique Piquette

Topic and context

As a critical care clinician, I am interested in the issue of learning in acute care environments. Many changes have recently redefined the learning conditions experienced by postgraduate trainees. Decreased clinical exposure due to trainee duty-hour limitations and increased bedside supervision to ensure optimal patient care are among the changes that could impact on trainee learning.

Aim or research question

My PhD focuses on the dual role towards patient care and learning assumed by medical trainees and their clinical supervisors during clinical activities. We explored how these two roles impact on each other and can be practically reconciled in acute care environments.

Theoretical background

My theoretical background clearly evolved throughout the PhD. Initially more familiar with the positivist paradigm, I focused on the medical education literature on clinical supervision and on cognitive theories to plan a first study. My interest in the interactional and contextual aspects of learning then led me to consider a constructivist paradigm and socio-cultural theories of learning.

What you have established thus far

We designed a step-wise research program including two studies using mixed methods. The first study was a simulation-based project including quantitative and qualitative data. The objective was to determine the effects of the level of clinical supervision on patient care, resident participation, and resident learning. Furthermore, we explored how the interactions among clinical environment, trainees, and supervisors were affected by the level of supervision. We concluded that the educational challenges encountered by our participants during direct bedside supervision could be, in certain circumstances, counterbalanced by other types of learning opportunities. In a second study, we further explored these learning opportunities, the conditions affecting their nature and occurrence, and practical ways by which supervisors managed to balance patient care and teaching during routine and critical clinical situations. This study was completed in real clinical settings using a constructivist grounded theory methodology.

What is still unknown/unresolved

In my opinion, this mixed-methods approach represented a pragmatic strategy to tackle a complex research question using different viewpoints. However, through the data collection and analysis process, I have realized that using approaches based on different paradigms and borrowing concepts from different theories pose many challenges.

Specific topics you wish to discuss

I would like to briefly present my main findings and to discuss the theoretical and methodological challenges encountered so far. I hope to gather multiple perspectives on acceptable ways to address multi-dimensional educational research questions and on the potential caveats of using multiple paradigms, methodologies, and methods. Furthermore, I would be interested in gathering ideas on subsequent studies that could build on my results and speak to a mixed audience of clinicians-educators and medical education researchers.

Session 13 abstracts

Session 13.1: Saturday 24 August 08.30 - 09.00. **Room:** Danube

Title: What speech pathology student characteristics are associated with successful competency development?

Presenter: Sue McAllister

Topic and context

Speech pathology students engage in supervised placements in the health, education, disability or rehabilitation sector. Graduates must be sufficiently clinically competent so that they can undertake competent semi-autonomous practice. This research is situated in a suite of research questions aiming to evaluate untested assumptions about the nature of and influences on students' development of competence in a bid to make decisions regarding university and practicum curriculum design that are based on evidence rather than assumptions. These assumptions are based on tradition and received wisdom but may be more myth than reality e.g. assumptions about at risk students, influences of context, time and types of experiences, role of self evaluation and so on. The research draws upon a pool of longitudinal data collected over three years 2010-2013 across three universities and 5 speech pathology programs (3 undergraduate and 2 post graduate) in Australia. It is anticipated that approximately 1000 students will have consented for their data to be included in the study. Students consented for data routinely collected as part of their university studies to be collated, this includes

- Workplace performance of 2 cohorts across all clinical placements (4 -8 depending on program) using a validated competency measure, half the clinical placements for a 3rd cohort.
- Data describing the placement experience e.g. client type, age group, service delivery model, placement intensity
- Curriculum for each university
- Student characteristics e.g. age, parental educational achievement, cultural and linguistic diversity, school performance, performance during the course (e.g. grades and grade averages, identified at risk/remediation)

Aim or research question

The aim is to test assumptions made regarding combinations of student characteristics that influence their performance on practicum and in turn influence decisions about university and practicum curricula, and selection of strategies to effectively support student learning and performance.

Question: What speech pathology student characteristics are associated with successful competency development?

Theoretical background

There is no previous research in speech pathology on this question (Attrill, Lincoln & McAllister, 2012). Preliminary research on the assumptions made by clinical education coordinators regarding competency development of Australian domestic compared to international speech pathology students suggests that domestic students are perceived as having less difficulty in developing competence during their placements (Attrill et al, 2012). Research in other disciplines has found a variety of influencing factors and combinations including ethnicity, performance in particular years of the academic program, age, gender, GPA and entrance scores (White, Dey and Fantone, 2009; Blackman & Darmawan, 2004; Blackman, Hall & Darmawan, 2007). However, outcome measures were either not been validated or not derived from actual workplace performance.

What is still unknown/unresolved

Is the research question answerable given the complex combinations of intrinsic and extrinsic influences on students' clinical performance and the data available?

If, so what would be the most appropriate analysis methodology e.g. path analysis, cluster analysis, structural equation modelling or something else?

Session 13.2: Saturday 24 August 09.00 - 09.30.

Room: Danube

Title: Cognitive Appraisal as a Predictor of Stress and Performance During Team Simulation: Reconciling Self-Appraisal and Self-Assessment

Presenter: Carilynne Yarascavitch

Title

Cognitive Appraisal as a Predictor of Stress and Performance During Team Simulation: Reconciling Self-Appraisal and Self-Assessment

Topic and context

Patient crises require health care teams to process high volumes of information, make appropriate decisions, and carry out multiple procedures under time constraints. These acute circumstances can evoke stress responses, which are known to impair attention, memory, and decision-making abilities. This has implications for patient safety.

Aim or research question

To describe the relationship between cognitive appraisal, stress responses, and performance in the context of dental teams managing simulated medical emergencies.

Theoretical background

Proposed explanations for individual responses to stress can be guided by the theory of Cognitive Appraisal. According to this theory, situations where perceived resources fail to meet perceived demands result in an appraisal of threat rather than challenge. Threat appraisals have been shown to be associated with increased subjective and physiological stress responses. However, its relationship with team performance is unknown.

What you have established thus far

In our study, 22 teams of one general practice dentist and one dental assistant participated in four different simulated medical emergencies of equal difficulty. All participants completed a knowledge pre-test and demographics questionnaire. Participant cognitive appraisal was assessed as a ratio of perceived demands to resources with scores ≤ 1 = challenge appraisal and > 1 = threat appraisal. Measures of stress were captured using self-reported anxiety (STAI-Y1) and salivary cortisol. Performance during scenarios was video recorded and independently scored by four trained raters: Patient management was assessed by checklists (Ck) previously developed through a Delphi Method and a global rating scale (pGRS); teamwork was assessed using the Global Assessment of Obstetric Team Performance modified to the dental context (GATP) and a global rating scale (tGRS). In our analysis, cognitive appraisal emerged as a consistent predictor of both stress response and performance: threat was associated with higher stress response (cortisol $r = .30$, $p = .00$; anxiety $r = .50$, $p = .01$) but lower performance (Ck, $r = -.23$, $p = .03$; pGRS, $r = -.22$, $p = .04$ GATP, $r = -.24$, $p = .03$; tGRS, $r = -.25$, $p = .02$).

What is still unknown/unresolved

Our pattern of findings suggests that the theory of cognitive appraisal can predict how teams respond to crises. This implies that individual self-assessment of threat is an important predictor of performance. However, self-assessment literature indicates that individuals are poor self-assessors. How then can the appraisals of resources and demands of self and teammates strongly predict performance?

Specific topics you wish to discuss

My presentation will report on findings from this study and raise questions of how to merge theories of self-assessment with theories of cognitive appraisal. If health professionals are to benefit from simulated training experiences that address cognitive appraisal, the role of appraisal of self and teammates must be better understood.

Session 13.3: Saturday 24 August 09.30 - 10.00.

Room: Danube

Title: How do female surgeons self-narrate their identities? A Figured Worlds approach.

Presenter: Elspeth Hill

Topic and context

More than half of all medical students in the UK are female. This has translated into proportional rises in the numbers of applicants, trainees and consultants (attendings) in many specialties, with the notable exception of surgery. The UK set a 2009 target for a 20% female surgical-consultant workforce – in 2012, it remains at 8%. Past research has attributed this difference to the nature of a career in surgery and lower career motivation among females.

Aim or research question

The research question is “how do female surgeons self-narrate their identities?” I aim to contribute to understanding the under-representation of women in surgery in the UK, which can be used to promote gender equality and equity of opportunity. The study comprises 12 individual interviews with women throughout surgical careers, from medical students to retired attending surgeons. I am currently in the analysis and writing phase.

Theoretical background

This study was developed using Figured Worlds, a sociocultural anthropological theory built on the traditions of Bahktin, Vygotsky and Bourdieu. Integral to this stance are the notions of identification, imagination and relationships. Importantly, identification is a process, and people narrate their identification by the stories they choose to tell, and the way they position themselves in society through this.

What you have established thus far

The narratives of the interviews provide a rich tapestry of experiences of the women over their careers, giving an insight into their motivations, career decisions, and important moments of belonging and not belonging.

Expectations of others about what makes a ‘good surgeon’ and a ‘good mother’ were often in conflict. Though men often outnumbered women in the surgical profession, more important was the surgical culture being inherently masculine, meaning there was little discursive space to be a successful female surgeon. This led/necessitated women to be innovative and create new ways of being in order to succeed in surgery (world-making in Figured Worlds), though this at times proved a difficult and lonely path.

What is still unknown/unresolved

It is hard to know how this account of identity construction in female surgeons adds to the field and can be operationalised to change things.

Specific topics you wish to discuss

I will present a short introduction to my study, and outline the Figured Worlds approach. I will then present my preliminary results of this study, with a view to gaining advice and opinions on the findings. I hope that discussion of my work at Rogano will help me develop a publication plan for this study, and inform how best to communicate my chosen methodology of Figured Worlds to the medical education community.

Round table/meet-the-experts abstracts

Round table 1: Friday 23 August 12.00 - 13.30. **Room:** Danube

Title: The difficulties of observational studies generally and case-control studies specifically
Presenter: Lotte D. O'Neill

Type of contribution

Round table: first a short presentation of the research project described below, and then a round table discussion on the difficulties of observational studies generally and case-control studies specifically. We intend to stimulate a discussion on methodological topics.

Content of your contribution

Background: Unprofessional behaviour in medical students (incl. decreased capacity for self-improvement) has been shown to be associated with increased risks of subsequent disciplinary actions for unprofessional behaviour in large US cohorts.¹⁻⁵ As far as we know comparable studies have not been done in a Danish context. However, a smaller group of Danish doctors struggle to complete their specialist training within the scheduled time-frame due to a lack of timely development of required competences. Currently we do not know if such problems are mainly new, i.e. mainly related to the learning environments the struggling doctors in specialist training are experiencing, or whether there are identifiable risk factors in pre-graduate education, which seem to predispose to struggling during specialist training. Aim: to examine if sub-optimal pre-graduate medical education is associated with sub-optimal specialist training experiences for graduates from Aarhus University (AU) medical school.

Method: A cumulative-incidence case-control design is proposed. Inclusion criteria for cases: all strugglers identified by the regional council for post-graduate training during the data collection period. Struggling trainees or their supervisors contact the council on a voluntary basis. The inclusion criteria for being a relevant case are: de-celeration, transferral to a new learning environment due to experienced problems, attrition, and graduation from AU medical school. Controls will be randomly selected amongst all other graduates from AU medical school matched on: admission year and gender. A ratio of 1 case to 2-3 controls is proposed. Potential predictors of post-graduate struggling examined will be: incomplete program application forms, program priority on the application form, number of dispensations to progress sought in total and during year 1, causes given for seeking dispensations to progress, age, pre-university GPA, pre-university exam type, average grades in medical school, total number of resits, number of resits in year 1, program completion time, total number of enrolments at AU and at AU medical school. Data on pre-graduate predictor variables will be collected from three different sources at AU: students admission files, student dispensation files, and the study administrative data-bases (Delfi/STADS). Data from the files will be categorized into themes based on a qualitative analysis. Cases and controls will be described with descriptive statistics on all predictors and sub-categories. Associations will be examined with univariate and multivariate logistic regression analysis. Permission to link the data will be sought at the Danish Data Protection Agency. This type of project (educational data base research or quality assurance research) does not require permission from the regional ethics committee.

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5. Teherani A, O'Sullivan PS, Lovett M, Hauer KE. Categorization of unprofessional behaviours identified during administration of and remediation after a comprehensive clinical performance examination using a validated professionalism framework. *Med Teach* 2009;31:1007-12.

Who should attend

Doctoral students and senior academics with interests, expertise or experience in discussing the difficulties of observational studies generally and case-control studies specifically are very welcome. We hope that methodological topics will be the main focus of discussions.

Short rationale as to why this is specific for Rogano

This is work in progress for which discussions are welcomed. Data extraction will probably begin around the time of Rogano, which means that important changes to the protocol induced by discussions at Rogano may hopefully still be incorporated to improve the proposed research.

Round table 2: Friday 23 August 12.00 - 13.30. **Room:** Amstel

Title: Job Resources, Job Demands and Personal Resources that may increase work-engagement and academic performance.

Presenter: Debbie Jaarsma

Content of your contribution:

I personally made a fast career as a medical educationalist and researcher. Fast careers can have positive sides from which others may learn and there are potential negative sides with many possible pitfalls.

Using a theoretical framework of work-engagement from the domain of organisational and work psychology, I will discuss and explore with participants potential Job Resources (such as autonomy, social support, career opportunities), Job Demands (e.g. work-home interference and role ambiguity) and Personal Resources (e.g. resilience, self-efficacy, pro-active behaviour) that may increase work-engagement and academic performance.

I will talk frankly about what helped me over the years and what didn't. And how I have tried to increase my own Job and Personal Resources and decrease where possible Job Demands.

Who should attend: all participants are welcome, although I think PhD students and postdocs/assistant professors may benefit most.

Short rationale as to why this is specific for Rogano: Rogano's aim is to help forward the domain of medical education through the best possible research. Therefore Rogano 'invests' in its researchers, in their engagement, their performance and their careers. This session aims to help increase the 'human capital' of our domain.

Preparatory advice for attendees: The two papers of Bakker et al. are to introduce the theoretical construct of work-engagement and performance and should ideally be read before attending the session. Furthermore it would help if attendees thought for themselves what Job and Personal Resources increase their motivational processes and what Job Demands inhibit these processes so to share these with the other attendees and with me.

Bakker, A.B., Demerouti, E., Verbeke, W., 'Using the Job Demands – Resources model to predict burnout and performance' in *Human Resource Management*, 43,83-104, 2004

Bakker, A.B., Demerouti, E., 'Towards a model of work engagement' in *Career Development International*, 13, p. 209-223, 2008

Round table 3: Friday 23 August 12.00 - 13.30. **Room:** Volga

Title: Issues in Medical Education through the Theoretical Lens of a Multiliteracies Educator

Presenter: Kathy Hibbert

Type of contribution: I would like to offer a roundtable session, (using narrative as the form of inquiry), in which the theoretical perspectives of a multiliteracies educator are offered as a lens to consider issues in medical education and a prompt for dialogue with the group.

Content of your contribution:

There is growing appreciation of the need to prepare physicians for diversified institutional and community settings. The approach to education required to meet these changes, demands pedagogies that assume complexity as their starting point. Literacy educators have worked through a similar experience in Education that may offer new ways to think about issues in medical education.

For example, ‘Autonomous models’ of literacy, founded on the premise that literacy is the *acquisition* and *use* of a set of technical skills, have historically dominated educational practice. Problems are understood in ‘deficit’ terms, leading to increased training and assessment of skills as solutions. In contrast, ‘ideological models’ focus on social contexts; *solutions* attend to how practices are embedded within the broader social milieu and bound to other structures and institutions.

In this roundtable session we will discuss what was learned when this theoretical lens was applied to a sampling of pedagogical discussions in medical education: problem-based learning, evidence-based medicine, communication skills and ‘point-of-care’ informatics. We will identify theoretical tensions and discourses surrounding desired goals and accountability systems that often privilege particular approaches to pedagogy or accountability that can undermine the educational contexts they aim to create. Attendees can apply this lens to a broader set of questions that meet their own medical education needs and interests.

Who should attend: I expect that the discussion would be of interest to faculty and graduate students interested in thinking about their educational practices in new ways.

Short rationale as to why this is specific for Rogano: My understanding of Rogano is that its mission is dedicated to engaging discussions about theory and practice in ways that generate new and important questions, and theorize solutions drawn from a range of disciplinary fields. That is the intent of this presentation.

Preparatory advice for attendees:

Come prepared to talk about educational initiatives and research conducted in your contexts and to consider together how those initiatives are conceptualized, theorized and assessed. We will be thinking about whether ‘fit for purpose’ is achieved in each context.

Round table 4: Friday 23 August 12.00 - 13.30.

Room: Douro + Oder

Title: Making the most of a visit to another Centre

Presenters: Joanna Bates and Gary Poole

Type of contribution

We propose a round table discussion (perhaps over breakfast), or a fireside chat (perhaps before dinner) or a workshop facilitated by the two of us. Once we know which other academics are attending Rogano, we may invite other participation.

Maximum number of participants = 20

Content of your contribution

Title: Making the most of a visit to another Centre

What factors, from the intellectual to the pragmatic, help make a visit to another centre worthwhile? How do you prepare both yourself and the Centre so that you maximize the outcomes? How do you facilitate the visits of others to your Centre?

Based on the experience at CHES of multiple visits last year of young clinicians, masters and PhD students from other centres, and academics with a track record of health professions education research, we intend to focus on:

1. Defining your goals and objectives
2. Setting up the visit
3. Making the most of your time
4. Following up

Who should attend

Rogano participants who are planning to visit another centre, or host a visiting scholar.

Short rationale as to why this is specific for Rogano

Rogano was formed to enable visits and collaboration for graduate students and scholars across a network of centers. How can we enhance the opportunities this presents for each graduate student?

Preparatory advice for attendees

Come prepared to put forward for reflection the Good, the Bad, and the Ugly of your experiences with visits and visitors. Bring an upcoming visit or visitor to create a concrete plan.

Round table 5: Saturday 24 August 08.30 - 10.00. **Room:** Amstel

Title: Sociocultural learning theory, from Vygotsky to the present day

Presenter: Tim Dornan

Type of contribution

Round table

Content of your contribution

The work of Vygotsky in post-revolutionary Russia, contemporaries like Bakhtin, and successors like Leontiev are strongly influencing medical education research and practice today. The best known example is Communities of Practice theory, but Activity Theory and Figured Worlds are inspiring increasing amounts of medical education research. Sociocultural theory is “social”, not just in its Marxist origins, but in the way it widens the boundaries of learning beyond individuals to social systems. The true nature of this theory, and its fundamental departure from psychological theories of learning, is ill appreciated, even by many people who quote sociocultural theory as the conceptual orientation of their work. This contribution will help participants explore some core sociocultural concepts like “speech”, “mind”, “emotions” and “identity” in order to make sociocultural assumptions more familiar and accessible. It will provide examples of how those assumptions have been used to theorise (qualitative) research and help people grapple with something many early career medical education researchers find difficult – adopting a set of assumptions to theorise their work.

Who should attend

Open-minded people who find anything in the above description interesting and/or applicable to their work.

Short rationale as to why this is specific for Rogano

I see this as a good topic for Rogano because the format of the meeting makes it possible to get down to prior assumptions, which can be tacit and otherwise hard to put into words, and explore new ones, which could open up new ways of thinking about the world to participants.

Preparatory advice for attendees

Just come prepared to join a co-exploration of thoughts and ideas.

Round table 6: Saturday 24 August 08.30 - 10.00. **Room:** Volga

Title: Translating across genres: Strategies for effectively writing up your dissertation for publication in the health professions education literature.

Presenter: Lorelei Lingard

Type of contribution

I'd like this to be a roundtable; which format will depend on the extent to which participants bring their own writing challenges and solutions (roundtable) or wish to work on generic writing challenges/solutions that I will have proactively selected (workshop).

Content of your contribution

The doctoral dissertation genre is commonly characterized by theoretical sophistication, methodological refinement, and nuanced conceptual exploration of the meaning of results. The published manuscript genre in health professions education, by contrast, is commonly characterized by theoretical abbreviation, minimal methodological description, and fairly succinct articulations of the results' practical relevance. These differences are due not only to differing word limits, but also to the distinct purposes of these two genres. The dissertation is a performance of individual scholarly competence; the publication is a contribution to a collective scholarly conversation.

In this roundtable session, we will discuss the tensions that can arise for writers when they are translating between the genres of dissertation and publication. We will aim to explicitly identify recurrent translation challenges and to share strategies for addressing them. Among the questions to be considered are: How do you abbreviate your theoretical framework for readability/accessibility without doing it a disservice? What strategies can you use to summarize your methodology while providing sufficient detail to demonstrate rigor and refinement? How can conceptual and practical implications be integrated into introduction and discussion sections? Why is a 'hook' so important, and how do you create one without reducing your research to a sound byte?

Who should attend

Ideally, attendees should be at the stage in their graduate work where they are grappling with the challenges of writing for publication. Faculty with an interest in this area would also be most welcome.

Short rationale as to why this is specific for Rogano

Writing is often a solitary act, but much can be gained by collectively discussing recurring challenges and sharing strategies. I anticipate that this is an appropriate session for Rogano because the meeting encourages new and experienced scholars to discuss research practices with the goal of fostering a scholarly community. Furthermore, I believe the session may help less experienced writers move past the notion that there are 'good' and 'bad' writers, to recognize that writing challenges – and their solutions – are often a matter of figuring out the genre.

Preparatory advice for attendees

Come prepared to talk reflectively and critically about your current efforts to write up your dissertation (perhaps especially any manuscripts which have received journal reviews which you are now working to incorporate in revision).

Workshops abstracts

Workshop 1: Friday 23 August 16.30 - 18.00. **Room:** Danube

Title: From Rags to Riches: The medical humanities in medical education

Presenter: Alan Bleakley

Context

Peninsula Medical School, UK was the first medical school internationally to develop a core, integrated medical humanities curriculum provision. While a number of medical schools provide medical humanities (or ‘health humanities’) programmes, these are usually isolated courses, electives, or add-on provision peripheral to the core curricula of basic and applied science, clinical placement, and communication/ professionalism. Peninsula’s curriculum innovation goes beyond such provision where it is not compensatory for other elements of the curriculum (particularly basic and applied science) but acts as a critical counterweight to potentially reductive science, ‘empathy decline’ and ‘soft’ arts and humanities (provided as diversion or entertainment).

Evidence suggests that after thirty years’ of focus on developing communication skills training in medical schools, this is not producing more empathic and humane doctors. We believe that our approach to a core and integrated medical humanities provision offers a more powerful curriculum input than conventional ‘professionalism’ and ‘communication skills’ training, where it does not reduce these interpersonal aspects of a future doctor’s work to instrumental and functional categories. Our approach to the ‘medical humanities’ can be radical – we have emphasised students’ engagement with the avant-garde in the arts and humanities rather than with ‘safe’ or ‘soft’ humanities that can merely be treated as pleasant diversion or entertainment. Rather, our view is that the arts and humanities can educate for dealing with paradox, ambiguity and uncertainty; and can develop critical intellectual thinking and practice. We then call our approach a ‘critical medical humanities’. Our aim in educating for tolerance of ambiguity and uncertainty is to creatively address a central value in practising both technical and humane medicine. Further, we wish to encourage an aesthetic medicine that has sensibility (close noticing for effective clinical judgement) and sensitivity (contextually ethical practice) at its core. After over ten years’ experience of embedding this curriculum innovation, we can articulate and evidence why we think this is a rich and powerful innovation that ultimately benefits patient care and patient safety, the wellbeing of future doctors, and may shape a more tender-minded rather than tough-minded culture of medicine fit for the 21st century.

The timing of the presentation is also appropriate, reflecting a major shift in intellectual debate and empirical research within the medical humanities in medical education culture, reflected in two upcoming publications, both due in September 2103:

Jones T, Friedman L, Wear D. (eds.) (2013). *Health and Humanities Reader*. New York: Rutgers University Press.

Bates V, Bleakley A, Goodman S. (eds.) (2013). *Medicine, Health and the Arts: Approaches to the Medical Humanities*. London: Routledge.

Who should attend

This workshop may be of interest to all Rogano participants – the curriculum innovation described will be just as challenging - and hopefully exciting - for medical education experts as it is for PhD students.

Short rationale as to why this is specific for Rogano

As a founder member of Rogano, I have enjoyed the depth and quality of approaches to medical education that have been offered over the meetings thus far. However, the medical humanities in medical education as core and integrated curriculum provision have not been discussed critically. Rogano acts as a forum for innovation in medical education and I think that extending this to a better understanding of the potential of the medical humanities will be of great interest to participants.

Further, the topic remains controversial, and Rogano thrives on controversy and critical debate in a genuinely supportive and collegiate environment.

Preparatory advice for attendees

Potential participants might like to pre-read articles by Alan Bleakley on medical humanities topics – please scan Entrez PubMed – for example, entries 2,3, 4, 6, 12, 15, 16.

Workshop 2: Friday 23 August 16.30 - 18.00. **Room:** Amstel

Title: Development of independence in doctoral studies

Presenter: Charlotte Silén

Type of contribution

Workshop – The theme will be introduced, the participants will work sandwiched small groups and the big group. Learning outcomes of the WS will be followed up and related to research in the big group.

Content of your contribution

Theme: Development of independence in doctoral studies. The WS will be based on my research concerning independence and autonomy in learning i.e my thesis: “Between chaos and cosmos- independence and responsibility in learning” and my experiences from running WS on this theme for doctoral supervisors.

The participants will be asked to identify and describe a situation in which they experienced independence and a situation when they experienced dependence in the doctoral studies. Both PhD students and supervisors will be asked to describe these kinds of situations. In small groups and in the big group we will reflect on characteristics of independence and dependence. Based on the results from the group work and research concerning independence and learning theories behind self-directed learning the groups will be asked to formulate advice to supervisors and PhD students how to support development of independence in PhD studies.

Who should attend

A mix of PhD students and supervisors would benefit the discussion.

Short rationale as to why this is specific for Rogano

Rogano is meant to be an open space, a safe and challenging place, for PhD students to engage in questions concerning their own research, to become aware of different discourses concerning research as well as their “life” as PhD students. To reach some extent of independence in research is a common goal for all doctoral studies. My experience is that the meaning of independence is very often taken for granted and not made explicit either for the PhD students or the supervisors which often means that the PhD students are assessed based on unclear criteria. Hopefully this WS will contribute to some clarity and also a basis for discussion for both students and supervisors.

Preparatory advice for attendees

No special preparation is needed.

Workshop 3: Friday 23 August 16.30 - 18.00. **Room:** Volga

Title: The use of theory in various research paradigms

Presenter: Vicki Leblanc, Ayelet Kuper and Cynthia Whitehead

Content of your contribution:

This workshop will focus on the use of theory in various research paradigms, with the goal of encouraging participants to gain a greater understanding of the ways in which theories guide their research practices. The application of theory is a hallmark of rigorous research programs, as it shapes the way that researchers ask questions, undertake research projects, and draw interpretations from their findings. However, how theory is defined and integrated into a research project or program of research differs across research paradigms. The workshop facilitators will begin the workshop with a brief overview of the role of theory in different research programs, with contrasting examples from the experimental sciences and the social sciences/humanities. Through the use of small and large group discussions, participants in the workshop will be encouraged to reflect on the use of theory in their research endeavours, as well as on the ways that their theoretical stances both facilitate and constrain their research activities.

Who should attend

Students and researchers at all levels of experience

Short rationale as to why this is specific for Rogano

One of the central aspects of the discussions at the Rogano meetings has been a focus on the use of theory in research. However, what we mean by theory and how we use it differs greatly across the spectrum of research approaches. By making these differences explicit, we intend to facilitate a common understanding of the various manifestations of theory and of how it shapes our research endeavours. By doing so we hope not only to contribute to individual's research practices but, more importantly, to improve the abilities of members of our research community to the goal is for this community of researchers to be better able to speak to each other across the research paradigms.

Preparatory advice for attendees

Workshop 4: Friday 23 August 16.30 - 18.00. **Room:** Douro + Oder

Title: Sociological theory and concepts in medical education research

Presenter: Mette Krogh Christensen

Type of contribution

Workshop: A short presentation will introduce the theme (sociological theory and concepts in medical education research) and put focus on two research papers on student dropout: both papers are based on the exact same empirical method (prospective cohort study), but one paper is without sociological theory or concepts whereas the other paper include the sociological model of dropout in higher education (Tinto, 1975) in the interpretation and discussion of data. The following discussion in the workshop will invite PhD-students and other scholars to share their reflections and experiences with applying sociological theory in studies on medical education. The attendees may be stimulated by questions such as:

- At which time in the research process do we include sociological concepts?
- In which ways does sociological theory guide our research?
- Is it true that we choose sociological theories that match our presumptions (or theories-in-use) about the topic we study?

Preferably, two or three (or more) PhD-students will prepare a 3-5 minutes oral presentation (no power-point) on their reflections on the three questions based on their own research.

Content of your contribution

This workshop is about applying sociological theory in research on medical education in general and in research on student dropout in particular. Medical education is often a matter of interactions between the learner and the educational culture in which the learner develops. In order to better understand and explain these interactions, researchers may apply sociological theory in the interpretation of empirical data. Two cases may serve as examples. Example 1: problem residents and trainees in difficulty is a medical education phenomenon considered both an individual and a cultural and organizational matter, and consequently sociological concepts such as symbolic capital (Bourdieu, 1986) and position (Harré, Moghaddam, Cairnie, Rothbart, & Sabat, 2009) may seem appropriate theoretical points of departure in understanding and explaining problem residents and trainees in difficulty as agents striving for symbolic capital or as positioned and positioning agents. Example 2: student dropout is a medical education phenomenon considered both an individual and an educational environmental matter, and consequently the 'person-environment fit theory' and the sociological model of dropout in higher education (Tinto, 1975) may seem an appropriate theoretical point of departure in understanding and explaining dropout among medical students as a result of the interconnections between student commitments, social system and academic system. However, despite the potential benefit of including sociological theory and concepts in our understanding of medical education, sociological theory and concepts are still infrequent guests in research on medical education. The purpose of this workshop is to discuss reasons why and ways in which we may apply sociological concepts to understand empirical data on medical education in general and in research on student dropout in particular.

Who should attend?

PhD students and senior academics interested in applying sociological theory in their research projects on medical education, especially the social relationship between the individual learner and the educational culture.

Short rationale as to why this is specific for Rogano

The opportunities for PhD students and senior academics to discuss theoretical matters (including methodological questions such as those mentioned above) are often limited in ordinary conferences. Rogano is a unique setting that invites participants to engage in open-minded dialogues on these important questions.

Preparatory advice for attendees

Preferably, attendees will receive and read the two abovementioned papers on student dropout before attending the workshop. It may enrich the discussion if the attendees are familiar with one or more sociological theories or are planning to include sociological concepts in their research.

Reference List

- Bourdieu, P. (1986). The Forms of Capital. In J.G.Richardson (Ed.), Handbook of theory and research for the sociology of education (pp. 241-258). Westport, Connecticut: Greenwood Press.
- Harré, R., Moghaddam, F. M., Cairnie, T. P., Rothbart, D., & Sabat, S. R. (2009). Recent Advances in Positioning Theory. *Theory & Psychology*, 19, 5-31.
- Tinto, V. (1975). Dropout from Higher Education: A Theoretical Synthesis of Recent Research. *Review of Educational Research*, 45, 89-125.

Workshop 5: Saturday 24 August 08.30 - 10.00. **Room:** Douro + Oder

Title: The good, the bad and the sloppy: how to prevent sloppy science?

Presenter: Erik Driessen

In 2011 there were two cases of scientific fraud that attracted a lot of public attention:

- in Germany, minister Karl-Theodor zu Guttenberg had to resign, after the news that he had copied substantial parts of his PhD thesis;
- in Holland Diederik Stapel, a “media star” professor in social psychology appeared to have used his fantasy instead of respondents of flesh and blood to collect the data for his studies. Some of these studies were published in high impact factor journals like Science. Of course as a scientist we do not associate ourselves with scientific fraud. However, from the aftermath of the Diederik Stapel case it became clear that there is sometimes a very thin line between correct and not correct scientific behavior. What if you use an another statistical test than originally planned for the analyses of your data, and this test gives better results? How much must a person contribute to a study to justify co-authorship? In a member check procedure one of the respondents disagrees with several of the main results of your study; what to do?

In this workshop we will discuss the dilemmas related to correct scientific behavior every researcher will face sometimes during his career and think how to prevent “sloppiness” in your research.

Who should attend

Everybody with an interest in research

Short rationale as to why this is specific for Rogano

Especially research in medicine and social science are regarded as prone for sloppiness. As a researcher in medical education you should therefore be aware of the principles of good scientific conduct and be alert for sloppy science.

Preparatory advice for attendees

Think from your own experience about examples of (almost) sloppy science.

Contact details of delegates.

Participating research centres/groups

Australia

Flinders Innovation in Clinical Education (FICE), Flinders University, Adelaide, Australia

Canada

Centre for Health Education Scholarship (CHES), University of British Columbia, Canada
Centre for Education Research & Innovation (CERI), University of Western Ontario, Canada
The Wilson Centre at University of Toronto, Toronto, Canada

Denmark

Center for Klinisk Uddannelse (CEKU), Copenhagen, Denmark
Center for Medical Education (MEDU), Aarhus, Denmark

Netherlands

School of Health Professions Education (SHE), Maastricht University, the Netherlands
Academic Medical Centre (AMC), Amsterdam, the Netherlands
Sint Lucas Andreas Ziekenhuis/ Vrije Universiteit, Amsterdam, the Netherlands

Sweden

Centre for Medical Education, (CME) Karolinska Institutet, , Stockholm, Sweden
Medical Case Centre (MCC) Karolinska Institutet, Stockholm, Sweden

United Kingdom

Peninsula Medical School, University of Plymouth, Plymouth, UK

List of delegates

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Mette Madsen	CEKU Copenhagen (Juliane Marie Centre, Department of Obstetrics.)	Not provided	8
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