

# Subspecialty – Ophthalmic Education



## Prof Karl Golnik (USA)

### • Simultaneous Teaching and Assessing: Building Good Rubrics

Prof Golnik is Professor, Departments of Ophthalmology, Neurology, Neurosurgery, University of Cincinnati and the Cincinnati Eye Institute, and Professor, Department of Ophthalmology, University of Louisville.

“As ophthalmic educators our goal is to produce competent ophthalmologists. To achieve this goal we must not only teach to the best of our abilities but methods must be available to assure that the students have actually learned what is expected,” says Prof Golnik.

“Assessment methods should be authentic (mimic real-life tasks), valid, and reliable. Scoring rubrics are one method used to try and achieve these goals. A rubric should include different levels of performance – each clearly outlined with behavioral descriptors.”

“For instance, if one is evaluating a portion of a surgical procedure such as draping the patient, there may be possible ratings of one-to-four with four being the best. Each rating category should have a description as to what that level means. Thus level one for draping might read: “Unable to start draping without help” and level two might read: “Drapes with minimal verbal instruction. Incomplete lash coverage.” This decreases the subjectivity of the assessment and allows the learner to know exactly what is expected to achieve different levels of performance.”

Prof Golnik’s lecture will discuss the importance and methods of building good rubrics that allow for simultaneous teaching and assessing.



## Dr Heather Mack (Australia)

### • Metacognition in Ophthalmic Education: Theory and Implementation

Dr Mack is Head of the Visual Electrodiagnostics Unit at Eye Surgery Associates in Melbourne, Australia. She is Director of Continuing Professional Development for The Royal Australian and New Zealand College of Ophthalmologists, and is a member of the International Task Force on Continuing Medical Education of the International Council of

Ophthalmology.

Dr Mack’s presentation during APAO will focus on ‘metacognition’ in ophthalmic education.

“Metacognition is the competency of regulating underlying knowledge and cognitive activity. It is not intuitive, but is a learnt skill,” says Dr Mack.

“Metacognition is necessary for medical practitioners to become medical experts during medical school and to continue lifelong learning after graduation – particularly learning through experience with patient care (ACGME practice-based learning and improvement). Metacognition has been shown to have an impact on patient outcomes.”

Dr Mack will describe metacognition, and how to promote its development using ‘metacognitive scaffolds’, with particular emphasis on its development and use in continuing medical education.



## Dr Eduardo Mayorga (Argentina)

### • Reflection on Action in the Clinic and Operating Room

Dr Mayorga is the Head of the Eye Department of the Hospital Italiano de Buenos Aires and the Director of E-learning of the International Council of Ophthalmology. His talk at APAO will focus on 'reflection in action' and its role in medical education.

"Reflective narrations serve many purposes in residents' education," says Dr Mayorga. "By reflecting on what has been learned and how this learning is being applied to practice, residents and their tutors can identify knowledge gaps and other learning needs, and develop a learning plan that could help meet those needs."

"Self-reflection and critical-incident reports enable residents to realise how these events are influencing their present and future practice. Also, by reading residents' narrations, teachers are able to better understand the residents' thinking process, and how he/she arrived to a conclusion or made a mistake."

Dr Mayorga will discuss the concept of daily reflection on action, and how residents report and teachers control. "Reflection on action can be one of the most effective teaching and learning tools," he adds.



## Dr Gabriela Palis (Argentina)

### • Using Conceptual Maps as an Evaluation Tool for Eye Care Personnel: The Why and How

Dr Gabriela Palis is Residency Program Coordinator at the Hospital Italiano de Buenos Aires, and Editor of the ICO World Ophthalmology Residency Development website (WORD). During APAO Dr Palis will present the topic of 'conceptual maps' and their use as an evaluation tool.

"Concept maps are graphical tools for organising and representing knowledge. There is a growing body of literature about their use in medical education, indicating that concept maps:

- 1) Promote meaningful learning, critical thinking, problem solving and reflection
- 2) Provide a resource for learning, where students can demonstrate their mastery of the concepts associated with a particular body of knowledge, and facilitating students' understanding of the organisation and integration of important concepts
- 3) Can be used to provide feedback and identify students' misunderstandings and errors
- 4) May be used as an assessment tool to understand students' thinking (how they organise and use knowledge)."

Concept maps can be created with different software, and Dr Palis will present the use of two of them: Cmap Tools and VUE. By the end of Dr Palis' lecture, participants will be able to explain the foundations and rationale of the use of concept maps in medical education, and have a picture of how to create a concept map with software.

---

**Note:** All effort has been made to check facts with each presenter. The writer accepts responsibility for any inadvertent errors in transcript.