

**Summary of results:** 'Potcasts' combine the use of historical specimens with technology that is part of popular student culture. Preparation of the MP3 files was quick and easy both to produce and deliver. Students were surveyed and the findings of the feedback will be discussed.

**Conclusions:** We are encouraged to produce a library of 'potcasts' to facilitate flexible independent learning. By bringing the potted specimens to the attention of students, we can now use the dissections as additional resources in assessment.

**Take-home messages:** Potcasting provides a satisfying link between traditional anatomical resources and student centred learning. Potcasting is an effective learning resource that greatly appeals to today's undergraduate medical students.

## 8D RESEARCH PAPERS: Professionalism

### 8D1 Exploring the relationship between professionalism and conscientiousness

John McLachlan\*, Gabrielle Finn, Marina Sawdon, Jane Macnaughton, Laura Clipsham, Sarah Douglass (Durham University, Queen's Campus, Stockton on Tees TS17 6BH, United Kingdom)

**Introduction:** Concerns about undergraduate student performance are a risk factor for disciplinary referral in later clinical practice (1). However, these concerns are difficult to quantify objectively. A theme which emerges in undergraduate and post-graduation adverse reports is that of conscientiousness. We have therefore (2) gathered objective quantitative data on student conscientiousness consistently throughout three academic years. An index was constructed in which students were awarded points for each occasion on which they demonstrated conscientiousness. Occasions included compulsory submission of data (such as immune status or Criminal Records Bureau information), attendance at clinical and patient oriented sessions, compliance with assessment requirements, and attending appropriate staff consultations. The information was routinely collected by support staff. Data collection costs are therefore low. Advance ethical approval was obtained. The research questions were: 1. Does the Conscientiousness Index (CI) show concurrent validity with professionalism as estimated by expert staff and by peers? 2. Does the CI show reliability?

**Methods:** With regard to validity, staff familiar with the students on a day to day basis were asked to rate them for their approach to professionalism. These staff were blind to the CI score. In addition, fellow students were asked to rate their peers for their approach to professionalism.

**Results:** The Conscientiousness Index (CI) shows good scalar properties, acting as a clear discriminator between students, and showing stable patterns over the three years. Its validity as a component of the construct of professionalism was explored by two means. Statistically significant relationships were observed between staff concerns about professionalism and low CI scores, and between peer concerns about professionalism and CI scores, as measured by chi squared tests ( $p < 0.05$ ). Significant correlations were observed in split year and year on year tests. Correlations were explored between CI scores and assessments of knowledge, skills and behaviours. Interestingly, the strongest correlations were observed with knowledge.

**Discussion and conclusion:** The low cost and objective nature of the CI suggest that it is a practicable assessment tool, and there is evidence of both validity and reliability, as one of the 'Big 5' psychological traits. We are considering formative and summative uses of the CI. It may well be a useful tool for identifying students requiring remediation, and in comparing CI scores with future performance.

#### References:

1. Papadakis MA et al Academic Medicine. 2004; 79:244-9; 2. McLachlan JC, Finn G, Macnaughton J (2008) In press in Academic Medicine (May 2009).