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Letter to Editor

A New Core Gross Anatomy Syllabus for Medicine

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To the Editors, *Anatomical Sciences Education*:

We wish to inform the readership of *Anatomical Sciences Education* about recent important developments in the Anatomical Society's core syllabus in gross anatomy for medicine. The questions of what students studying medicine need to know and when they need to know it are important for curriculum planners, anatomy educators and their students. They have been considered many times (Bergman et al., 2014, Drake, 2014, Pawlina and Drake, 2014), as our ever-expanding knowledge about health and disease and the need to accommodate changes of emphasis in medical treatment, such as the increased focus on prevention and care delivered in primary settings, the emergence of newer disciplines and a greater understanding of how students learn (Smith and Mathias, 2010; Smith et al., 2014), all influence students' needs.

In debates about anatomy's position and role within the broader medical curriculum, it has often been the basic science content of medical courses that has been subjected to the most intense scrutiny in order to create space for clinical and communication skills and a wider range of disciplines. Yet applying an appropriate level of anatomical knowledge is the foundation of safe and effective clinical practice, not least because of concerns over the possibility of malpractice (Ellis, 2002; Older, 2004).

In medicine, the manner in which the content of a course will be delivered (the curriculum) can vary widely between institutions, ranging from a traditional, didactic approach through to problem-based learning (Findlater et al., 2012). Despite this wide

variation in curricular structure, it is the case that the syllabus, the content of that curriculum, remains more consistent between institutions and between countries. However, this tacit knowledge of course content is seldom made explicit. This is particularly true for anatomy.

In 2007 the Education Committee of the Anatomical Society of Great Britain and Ireland (known since 2010 as the Anatomical Society), published a core syllabus in gross anatomy for medicine (McHanwell et al., 2007). Subsequently, work has been undertaken to further define syllabi for specific anatomical regions and systems e.g., the head and neck (Tubbs et al., 2014). The Anatomical Society core syllabus was originally developed through a relatively informal consensus process. However, given the time since its first publication and the changing needs of medicine and healthcare education, it was felt that the syllabus would benefit from a robust analysis and re-review, employing a more rigorous research process which would capture views from a wider group of medical practitioners and anatomy educators.

The method chosen was a Delphi process (a form of consensus survey) as the means to access the tacit, collegial knowledge about what anatomy a medical doctor should know upon first graduation (Keeney et al., 2011, Moxham et al., 2014). The authors are pleased to write to Anatomical Sciences Education to inform them that the results of that Delphi analysis have recently been published (Smith et al., 2016a, b). A three-stage Delphi process was performed on the 2007 core syllabus (McHanwell et al., 2007). An expert panel of 51 participants were asked in two stages to 'accept', 'reject' or for the

first stage only, 'modify' each of the original 163 learning outcomes in the gross anatomy components of the 2007 syllabus. The third stage involved refinement of the style, but not the content, of learning outcomes by research. The new syllabus that is presented now (Smith et al., 2016a) contains 156 learning outcomes grouped by body region. In the process 133 of those 156 learning outcomes were modified to a greater or lesser extent, representing a significant refinement of the 2007 document. The remaining 23 learning outcomes in the revised 2016 syllabus were unchanged - further details can be found in Smith et al., 2016b.

This new syllabus (Smith et al., 2016a) is intended to be useful to a wide range of groups and individuals including curriculum planners, teachers and students. We emphasize that a syllabus is essential in establishing the coherence of teaching to support student learning and can be implemented in the best way appropriate for whatever form the curriculum takes within a given institution. We would also hope that despite the syllabus being devised for medical students, it could also inform the teaching of anatomy in paramedical courses.

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