

## Letter to the Editor

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### Teaching the teachers: A program to educate tutors in anatomy

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#### Corresponding Author:

Goran Štrkalj

Faculty of Science, Macquarie University, Sydney, Australia

Email: [goran.strkalj@mq.edu.au](mailto:goran.strkalj@mq.edu.au)

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Dear Editor,

Anatomy is one of the key pre-clinical subjects in curricula of all medical disciplines.<sup>1</sup> This subject is also known as one of the most complex to deliver as it requires considerable teaching resources, including the human tissue. However, even with the most up-to-date resources, anatomy cannot be efficiently delivered without competent teachers with clinical backgrounds. Indeed, recent research indicates that students see clinically qualified teachers as one of the most valuable “assets” in their anatomy education.<sup>2</sup>

In this letter we outline a strategy devised at Macquarie University (MU), Sydney to ensure that the anatomy program has well prepared teachers. The strategy uses a stepwise approach aimed at educating and preparing anatomy demonstrators and tutors to maintain consistency and quality in the teaching delivery.

Anatomy units (modules) at MU are taken by diverse groups of students, belonging mainly to biomedical and medical fields. The anatomy program is structured following the recently published international recommendations on anatomy education.<sup>3,4</sup> It starts with a compulsory introductory anatomy unit presenting the basic concepts in embryology, histology and gross anatomy. This is followed by three more in-depth units of regional anatomy. While all students doing anatomy have to take the introductory unit, how many of the subsequent units students take is determined by their program of study or interests.

MU offers some of the most modern teaching facilities, a wealth of resources including some of the latest technologies<sup>5</sup> and a satisfactory number of prosected cadavers. However, similar to many other institutions, the recruitment of adequate teaching staff historically

presented a considerable challenge.<sup>1</sup> The challenge particularly applied to the sessional (casual part-time) staff that are employed to teach in the anatomy laboratories. With the nature of the discipline, laboratory work is probably the most important aspect of the anatomy curriculum and requires experienced teaching staff that has an in-depth knowledge of anatomy. A large number of sessional academics (more than 20) have been engaged at MU during each semester. Most of these anatomy teachers have passed through a locally devised training program which involves recruitment and progressive training of students from the cohorts taking anatomy at MU.

Early in the program, students achieving high marks who show interest and enthusiasm for anatomy are offered a chance to become part of the anatomy teaching team. Most of the candidates are studying towards health/medical degrees and would soon gain clinical competencies. In the first phase of the process, as these students finish their anatomy units, they are recruited and given tuition by an accredited instructor, to become Peer Assisted Learning (PAL) session leaders.

Those who excel as PAL leaders qualify to apply for a position of a demonstrator in anatomy. If accepted, these demonstrators are first given instruction (provided by MU) on general duties and responsibilities of a university teacher, including the work health and safety procedures. They are also required to further increase their knowledge in the theory of education (by attending MU workshops and lectures offered by the Learning and Teaching Centre) and anatomy (such as participating in research projects and carrying out dissections). Some of the student demonstrators, in their own study program, are required to complete a research project and are advised, if they want to further their teaching engagement to a higher level (e.g., become tutors) to complete an anatomy based/related project.

Anatomy demonstrators work only as members of a teaching team where they are always supported by their more experienced co-workers. Tutors are allowed to teach on their own, deliver lectures and are entrusted with the supervision of their less experienced colleagues (demonstrators). The work of both the demonstrators and

tutors is constantly evaluated (and feedback provided) by both students and their academic supervisors.

A “natural” progression would therefore lead a high achieving student to become a PAL leader, then a demonstrator and once the higher level of knowledge and teaching skills have been acquired and demonstrated (usually upon graduation) to a position of an anatomy tutor. Since this program was implemented five years ago more than forty students have progressed through it. Many of them are still tutoring anatomy at MU, some have moved toward full time medical or science careers, while some have progressed to become permanent academics at MU or other universities.

The program outlined above provides an efficient and cost effective way to educate anatomy teachers. In addition, it enables these anatomy teachers to gain a valuable skill progression, work experience and the opportunity to pave their way to academic careers.

Sincerely,

Goran Štrkalj<sup>1</sup>, Anneliese McGown<sup>1</sup>, Mirjana Štrkalj<sup>2</sup>

<sup>1</sup>Faculty of Science and Engineering, Macquarie University, Sydney, Australia

<sup>2</sup>Faculty of Medicine and Health Sciences, Macquarie University, Sydney, Australia

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