

The National Undergraduate Neuroanatomy Competition: a platform for promoting interest and engagement in neuroscience among undergraduate UK medical students

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Aims

The National Undergraduate Neuroanatomy Competition (NUNC) is a student-led annual event, which is composed of two examinations – a specimen-based gross neuroanatomical spotter exam and a clinically-orientated multiple choice paper – and has attracted almost 400 medical students over the past 5 years. It brings together like-minded students from all stages of training for a day of talks, examinations and career advice.

The aim of the NUNC was to promote an interest in neurosciences among undergraduate UK medical students, while simultaneously providing a unique opportunity to gather perception and performance data on national neuroanatomy education.

Methods

All students completed both examinations which were equally weighted. Candidates were also asked to complete questionnaires which focus on their perceptions of neuroanatomy teaching at their home institution and more broadly.

Results

Between 2013 and 2017, 387 students attended the NUNC, of which 382 had a complete data set (response rate 98.7%). These students represented 31 of 33 UK medical schools. Ninety-eight percent of competitors said they would recommend the NUNC to their peers.

Male students significantly outperformed female students ($p < 0.0001$) and clinical students outperformed preclinical students ($p < 0.05$). Best answered questions were on the spine (average score 53.9%), and the most poorly answered questions were on the vasculature (average score 44.7%). Students felt that the neuroanatomy teaching, time spent on neuroanatomy and dissection/prosection resources were all reasonable (6–7/10) at their home institution. E-learning resources were rated less well (5.4/10).

Conclusion

As a result of an innovative collaboration between staff and students, we have been able to host a successful event inspiring medical students to consider neurology and neurosurgery careers, despite its intimidating reputation. Modern day application processes reward evidence of scholarly and academic achievement. Therefore, the NUNC has become a prestigious competition that can enable students to demonstrate the motivation and commitment required in specialist training applications. In the process, we have had the unique opportunity to look at national performance in undergraduate neuroanatomy over a 5-year period, and highlight areas where medical schools may need to provide additional educational support (eg vasculature). Our hope is that continued use of the staff–student collaboration model will firstly, lead to further engagement in neuroanatomy across the country, and secondly, offer suggestions for enhancing undergraduate neuroanatomy education in the longer term, to improve the competency of tomorrow's doctors in dealing with neurological presentations. ■

Conflict of interest statement

The authors declare no conflict of interest.

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