A suite of MSc programmes in Genetics

Background

The MSc programme “Quantitative Genetics and Genome Analysis” has been running in its current form for 12 years. The primary aim of the programme is to train students to an advanced level in quantitative aspects of genetics which will prepare them for entry into the wide array of PhD studies that are offered in Edinburgh by the contributing institutions, SBS in CSE, IGMM and the Roslin Institute in CMVM, and SAC.

The structure of the taught segment comprises a series of compulsory courses in fundamental aspects of the field in Semester 1 (covering Population Genetics, Quantitative Genetics and Statistics), followed in Semester 2 by more specialised courses in quantitative genomics, analysis of sequence and SNP data and finally 3) optional courses reflecting the students ultimate specialisation in human genetics, evolutionary genetics or animal improvement. Students then carry out a research project reflecting their area of specialisation, but all graduate with the same degree.

It has been pointed out by the external advisors to the QGGA programme that the name of the programme does not reflect the fact that it provides such a qualification in its component subjects. In addition, web searches for Masters degrees in Human Genetics or Evolutionary Genetics in the UK at MSc level do not find our programme. In the light of increasing pressure from several directions, including the cessation of all BBSRC Research Council Masters studentship support from 2013-14, it has been felt that recruitment would be aided by the establishment of a group of MSc programmes which would allow the advertisement of programmes in the component subjects. College has recognised similar “suites” of MSc programmes in other Schools. An example in is the School of Mathematics is the general degree of MSc in Operational Research and 4 specialisations: for example of “Operational Research with Risk”, available according to course choice.

I am requesting approval of 3 new MSc programmes in Human Complex Trait Genetics, Evolutionary Genetics and Animal Breeding and Genetics. These programmes will follow the curricula taken by students currently specialising in those areas, so no additional teaching is involved although there will be a small amount of additional administration. It is important to note that the existing Programme will be retained, recognising its value as a brand and as the umbrella programme.

Degree Programme Specifications for each programme approved by the Board of Studies in Biological Subjects at its meeting on Friday 12th August 2011 are attached.

Resource implications

There are minor implications for administration in connection with confirming eligibility (at the Interim Exam Board) and enrolment to different courses, but none with respect to teaching.

Prof Andrew J Leigh Brown
Programme Director, MSc in Quantitative Genetics and Genome Analysis
17/08/2011