Reward and recognition for teaching – an international project between the UK and Australia

This exciting project is a Higher Education Authority (HEA), funded collaboration between the Universities of Leicester and Newcastle in the UK and Wollongong and Tasmania in Australia.

Internationally across HEAs, more often than not, subject specific research is rewarded. However, academic endeavours encompass much more than this. Teaching and learning, despite being one of the key focuses of Higher Education (HE), are usually given less importance when it comes to recognition and promotion. This work builds on earlier research carried out by Professor Cashmore and the HEA in 2009, which examined the policies and their implementation within 133 HE institutions in the UK. The current project compares practises in each partner institution, to be used as a basis to provide information that can be given to all institutions to facilitate the development of realistic processes to reward and recognise teaching and learning. Vice-Chancellors around the UK have commented on the difficulty of measuring good teaching and learning practices, and how often this means they don’t get done. These observations highlight the need to implement criteria and ways to measure them effectively.

As part of this project Professor Cashmore and Dr Chris Cane recently visited Australia to take part in a working group session in Tasmania. The meeting was particularly useful as not only did it allow the monitoring of progress to date, but it also proved to be an excellent forum for setting up criteria and defining how outputs could be disseminated.

In addition, Professor Cashmore visited Wollongong to speak about another important project which examines the way in which student and staff partnerships can be used. She did manage to get some time to relax and commented on how lovely the weather was and how combined with some fantastic food, it facilitated some excellent discussions.

Further meetings are planned, with representatives from the Australian universities coming to the UK and also follow up visits to Australia by Professor Cashmore and we will keep you up to date with these as they happen.
Promoting all-round health for a healthy body and healthy mind

As part of GENIE’s Health Education Reaching Out (HERO) project, we are interested in knowing whether teenagers perceive mental health as part of overall health and wellbeing.

Dr Joanne Singletary and Dr Nicola Suter-Giorgini are working on the project in collaboration with Professor Nisha Dogra and Professor Panos Vostanis from the University’s Child and Adolescent Mental Health team at the Greenwood Institute of Child Health.

5 schools in the region had the chance to discover more about all-round healthy living through the ‘Healthy Body, Healthy Mind’ event. The schools took part in a range of fun, hands-on activities that helped them to think about their own physical activity and eating habits. To complete the picture the Mental Health team’s workshop helped students explore what mental health is (not just mental illness!) and steps they can take to stay mentally healthy.

For more information about the event or HERO contact Dr Joanne Singletary, HERO Research Assistant (jhs10@le.ac.uk) and look out for more details about our findings in future issues.

International Society for the Scholarship of Teaching & Learning (ISSOTL) meeting

The 9th annual International Society for the Scholarship of Teaching and Learning Conference was held in Hamilton, Ontario, Canada in October of this year.

The theme of the meeting was ‘Research on Teaching & Learning: Integrating Practices’. GENIE’s Dr Suzanne Lavelle and Craig Bartle presented two papers at the meeting. Suzanne’s paper, ‘Researching the use of virtual environments in order to overcome limitations in laboratory teaching’, showcased her work on the SWIFT project, a 3 year collaborative project between GENIE and the Beyond Distance Research Alliance. Craig presented the outcome from his project ‘A student-staff research partnership approach to embedding employability skills in the curriculum’, which examined staff and student perceptions of employability skills and where they can be found in the student experience. Both papers were really well received and feedback from delegates suggested they would be undertaking similar collaborative research within their institution.

Genetics in the community project

Genetics in the community is an exciting project which reaches out to Leicester’s ethnic communities.

As part of the project, some of GENIE’s excellent resources for disseminating information to the community are being translated into Urdu and Gujarati. The project is being co-ordinated by Dr Aneela Majid, with the help of Sunita Joshi, who works part-time with HOPE Against Cancer, and has strengthened the existing links between GENIE and HOPE. The two have been giving talks about the work done by GENIE to local communities and the feedback has been very encouraging. As a result of the initial visits, a number of outreach events have been organised to engage the communities further. In addition, the GENIE ‘Genetics in everyday life’ video has been dubbed in Urdu and is now available to listen to online along with the translated transcript on our VGEc website (www.le.ac.uk/departments/genetics/vgec/geneticsall).

Aneela has also been speaking to local schools of the importance of charities, such as HOPE, in helping to fund scientific research at the University. She commented that it has presented quite a challenge to make the presentations both interesting and accessible to younger children, but that it was also a great opportunity to inspire children to think about the diversity of careers that a science-based degree can offer.
Developing the career plans of undergraduates

It is no secret that the current job market for graduates is a tough one, and with this year’s intake of students paying higher tuition fees, it is more important than ever to engage students with career planning from the start of their degree programmes.

This project, which is funded by the Higher Education Academy, focuses on supporting and developing the career intentions of first-year undergraduates in the School of Biological Sciences. The aim is to provide them with the appropriate advice and support at the right time, throughout the course of their degrees. The project team includes Dr Mark Goodwin and Maxine Bodicoat in GENIE, Professor Jon Scott and Dr Chris Willmott from elsewhere in the School of Biological Sciences, and Richard Wilcock and Andrew Jackson from the Careers Service at the University of Leicester.

A survey of the career intentions of first-year undergraduates was used to develop an employability event in June 2012, which provided participants with information about the careers available, the requirements for a successful application, and the steps that they could take – alongside their undergraduate studies – to ensure a successful transition to employment or further study. The event also provided feedback about what additional assistance and information students required, and we are now working closely with colleagues in the School of Biological Sciences and Careers Service to provide this support over the coming academic year.

Another outcome of the project will be a Careers in Biosciences website, which will be tailored specifically to the interests of undergraduates in the biological sciences. The site will offer specific advice about the careers available as well as advice about how best to prepare a successful application.

Finally, the project is already providing us with a fascinating look at students’ career intentions on first entering university, as well as an invaluable insight into why students choose to study the biosciences at the University of Leicester. An improved understanding of the long-term ambitions of undergraduates will allow us to improve the support we provide and help them to achieve their goals.

GENIE public engagement lecture

We launched the Public Engagement lectures in October 2010 to make cutting edge research more accessible to the public.

Last October saw our 5th Public Engagement lecture take place. Speaking about their research were Professor Rhona Borts and Dr Flav Giorgini. The event was attended by over 100 members of the public, of whom, 85% said they would definitely attend the next set of lectures and 15% said they would be likely to attend. The evening sparked lots of lively discussion and one of the attendees described the talks as ‘incredibly interesting and informative.’

Here is an excerpt from an independent review:

‘... the University of Leicester deserves kudos for setting an example to other institutions that it is possible to engage the public with science and do it well too!’
‘R marks the spot’
As you will no doubt be aware, the University of Leicester recently announced that the remains found under a council car park were those of King Richard III. Dr Turi King, Lecturer in the Department of Genetics, has been doing the DNA analysis on the skeletal remains. As a female line descendant was already known, Turi used mitochondrial DNA (mtDNA) which is essentially maternally inherited, to establish if the DNA extracted from the bones matched that of Michael Ibsen and a second maternal lineage who was discovered by Professor Kevin Schurer during the course of the work. The quality and age of the DNA could have caused problems, but luckily mtDNA is present in high copy numbers, making sequencing less of a problem. We are pleased to announce that Turi has agreed to talk at our next public engagement lecture to give a more in depth description of the process that led to this amazing discovery.

‘Celebrating Women in Science’ day
In January, GENIE helped organise a Genome Sciences/Athena SWAN research day for young investigators entitled ‘Celebrating Women in Science: Genomics approaches to Biological questions’. The event was also used as a platform to discuss gender imbalance issues in academia.

Chris Sharp, the equalities advisor for the University of Leicester, started the event by giving an overview of some of the available data on gender imbalance in academia. He pointed out that Athena SWAN and gender equality isn’t just about women, but about achieving better practice which would result in better representation across STEM (Science, Technology, Engineering and Maths) careers. The event was brought to a close with a group discussion involving the speakers and audience and their personal experiences and Chris agreed raise some of the points made at the next national Athena SWAN meeting. We would also like to thank the Biochemical Society, who kindly sponsored the catering for the event.

UPCOMING EVENTS: The next Public Engagement Lecture will take place on the 8th October 2013 and Dr Turi King will be talking about the discovery of Richard III’s remains.

Research in Focus
Sex, Genomes and History!
Dr Daniel Zadik
(Department of Genetics)

Today’s human populations have their roots in an amazingly complicated series of historical and prehistoric events. Most of these were unrecorded, or so slow as to be unobserved at the time. Others are mentioned in written histories, and inform people’s cultural identities, but rarely with any mention of how many people were involved. Sure, Anglo-Saxons came to Britain, but did they provide the majority of the ancestry of the modern English, or just a small injection into the ancient British population? However, there is another record of these events, and that is found in our DNA.

The first DNA sequencing methods were developed decades ago, but with the emergence of “Next Generation Sequencing” (NGS) technologies over the past few years, the price has dropped dramatically. Suddenly, projects such as ours, in which large chunks of the genomes of hundreds of individuals are sequenced, became affordable, and population histories are starting to open up like never before.

We are studying human and ape DNA sequences to explore several areas of our evolution and history: How sequences on the X and Y (sex) chromosomes evolve differently from other regions of the genome; how Y chromosomes from around the world are related; and how the expansion and movement of ancient near-eastern populations after their adoption of farming contributed to the ancestry of modern Europe.

NGS data, however, comes with its own set of problems. It is prone to errors, which may look like real variation, and it is split into many short segments that need to be re-assembled. Amongst my jobs, as the project’s bioinformatician, is to write a programme using a string of existing tools to assemble these sequences and separate true genetic variation from error.

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