

Adventures across many borders

Newly appointed HSRC Senior Research Associate, Dr Mike Galsworthy, reflects on the path to his new role.



Dr Mike Galsworthy

HSRC Senior Research Associate

In June 2012, I finally returned to my hometown of London – taking up a research post jointly at the NIAA Health Services Research Centre and UCL, in what I hope will prove an exciting fusion of scientific research and involvement with clinical projects. Since finishing my PhD in 2003, I have worked in Switzerland, Slovenia and even in the woods of Western Russia at a remote field station with no running water and a wind turbine for power.

My topics of research have been similarly varied. After my degree in Natural Sciences, I began a PhD in behaviour genetics at the Institute of Psychiatry. I was fascinated by the research which combined my two loves of genetics and psychology. Geneticists remain the most competent people I have seen at blending programming, statistical innovation and scientific research. My early research focused on childhood cognitive development, and thanks to a massive epidemiological database I could quickly get involved in

large data management, analysis and paper writing.

Bizarrely, this led me into animal behaviour research. My supervisor wanted to link his human cognition and genetics research with mouse models of learning. Scanning the literature, we saw only neuroscientists using case-control designs with simple crude tasks. This is nothing like how we build variance-based models of multi-task cognitive structure in humans. So my supervisor decided we should have a lab to establish models of mouse intelligence – and he wanted me to set it up from scratch.

Intelligence in mice became the subject of my thesis, and my associated paper won the Fulker award for the best article in the journal *Behaviour Genetics*. I followed this with a postdoc in Zurich, where an innovative Swiss team were using high-tech devices to study naturalistic animal behaviour. If you ever have a pigeon land in your back garden sporting electronic headgear and a mini-GPS backpack; worry not – it's just scientists researching the neuroscience of avian navigation. This was the team that took me to the Russian field station, where we tracked wild rodents using subcutaneous mini-transponders.

My time in animal behaviour ended when I followed a girl to Slovenia. I received a grant to work in Ljubljana University Medical Faculty, where I developed my online interface to PubMed. That interface (called MEDSUM: www.medsum.info) produces academic literature summary

statistics and has seen more than 10,000 users worldwide, including use for various academic papers. I then transferred to Slovenia's National Institute of Public Health (NIPH) where I analysed the EU's €6 billion spent on health related research from the previous nine years. My paper on the academic output from that funding has just come out in *The Lancet*.

At the NIPH, we began another EU multinational project (ECHO: www.echo-health.eu) which had the very ambitious aim of bringing together the entire hospital patient record databases of several European countries. Amazingly, we managed to get these out of their respective countries and into a standardised format for comparative analysis. The project will now build an online tool for third-party analyses of those data. This is clearly a key future direction in the field.

Which brings me back to London and my new appointment at the HSRC with the role of building scientific research capacity in HSR and anaesthesia. My position straddles two homes; the NIAA HSRC and the Department of Applied Health Research (DAHR) at UCL – an internationally recognised centre of excellence in health services research. I'm very much looking forward to this exciting new venture and hope that I can make a substantial contribution to the future of the HSRC.