Bob Moran
Ph.D. Biomechanical Engineering, 2002

Who is your current employer and what do they do?

Office for Low Emission Vehicles (OLEV)

OLEV is a cross Government, industry endorsed, team combining policy and funding streams to simplify policy development and delivery. Based in the Department for Transport, OLEV currently comprises civil servants and funding from the UK's Department for Transport, Department for Business, Innovation and Skills, and Department of Energy and Climate Change, working closely with all three sets of Ministers. Its core purpose is to support the early market for electric and other ultra low emission vehicles (ULEVs). [**http://www.dft.gov.uk/olev**]

What is your job title and what does the job entail?

Head of Low Carbon Vehicle Regulation, R&D and Procurement

This means I have responsibility for CO2 emissions regulations and targets for road vehicles and transport in the UK, which involves a lot of EU negotiations. I'm also responsible for making sure we invest our R&D resources wisely in the UK (around £80m over the lifetime of this Parliament) to support and build on our existing strengths, e.g. in innovative technologies, so that we maximise the potential and opportunities for low carbon economic growth in UK.

How did you achieve your current position?

It was only when I'd finished the lectures and exams and started work on my final year Honours project that I became really interested in the prospect of doing a Ph.D. I'd always fancied the academic challenge, but had never really thought of a topic that I thought I'd want to study so intensely. But once I started the project, I knew there were lots of places I could take it and I liked the style of work, so with help from my tutor we applied for EPSRC funding and got it. It was a tense summer though, as I was temping and had no back-up plan.

During the Ph.D. itself I really enjoyed working with undergraduates in the laboratory and tutorials and also participated in a scheme where I went into a couple of local schools to talk about Science and Engineering and its relevance in the real world. It provided a good break from the intense Ph.D. study and a reminder of a world outside of academia.

Towards the end of my Ph.D. I knew I wanted a change from University life and so didn't really search out any research positions at other Universities – there was an opportunity to carry on my work at Edinburgh, but I felt I needed a fresh challenge. I wanted to get more involved in putting engineering research into action. My Ph.D. had been in the area of human biomechanics and injury and at that time this was an area that was receiving greater focus by car manufacturers and also Government regulators. So, after sending off around 100 speculative letters and CVs to prospective employers I was offered a week to week contract as a Biomechanics and Vehicle Crash Safety Researcher at the Transport Research Laboratory (TRL) on not much more money than I'd been on as a student. It wasn't quite the job I'd dreamt of, but an important first step on my career ladder nonetheless. Three weeks later though I exercised the benefits of a week-to-week contract and started a new job at Ford Motor Company who offered me a far more exciting and challenging role, working with their engineers across the globe to turn vehicle safety legislation into internal design targets and checking whether or not they were meeting them.

I loved working at Ford in Essex, especially seeing the decisions that I made in the crash laboratory or in video conferences with colleagues in North America make their way onto new vehicles in the UK and knowing that those vehicles were ready to offer the best possible protection to their occupants should the unthinkable happen. But after two hugely enjoyable years I became poacher turned gamekeeper and joined the Department for Transport as a vehicle standards engineer. This involved negotiating international standards for the UK around the world, lots of travel around Europe and North America and lots of interested parties to talk to and reflect in the development of UK negotiating positions. Since then, I've worked my way up a few rungs of the Civil Service career ladder, working to improve the safety of cars, vans, lorries, buses and coaches driving on UK and European roads today and briefed more Secretaries of State and Ministers than I can recall. Eight years on and I'm now a senior manager, working with an important policy which is going to help us tackle the global issue of climate change, but do so by encouraging innovative engineering solutions and provide plenty of business opportunities for UK plc.

How do you feel you have used the skills and/or knowledge developed during your research degree in your career to date?

The ability to analyse and use different types of evidence is something that I did most days during my Ph.D. and do just as frequently now. Whilst I probably needed to make decisions quicker when cars were coming off the production line at Ford every minute or so, I've never been more challenged than by a succession of Secretaries of State, so it's really important to have the confidence to take time and make sure you're working from a firm foundation. Another key skill is communicating and being able to get your message across. Whether it's through a research paper or seminar, presentation to senior managers or the strap line in a TV advert if you can't tell different audiences what your ideas are, you'll never fulfil your potential. Being able to talk concisely in plain English is one of the most valuable skills you can have and the more senior you become, the more highly it is valued and this is something you simply have to do if you're deep in the detail of a research degree.

Other qualifications

B.Eng. (Hons) Mechanical Engineering, 1997, University of Edinburgh