Welcome to the first edition of the Doctoral Times, the newsletter for doctoral and higher research degree students at the University of Sheffield. The Doctoral Times replaces PG R Link and is the result of a project where three doctoral students were commissioned by the University to find out what you wanted. The students, Carrie Birch, Jane Hughes and Yashar Shokouhi conducted surveys and interviews and you said you wanted a newsletter with career profiles of successful doctorates, content related to employability and transferable skills, and information about events for doctoral students. I hope you enjoy this issue of the Doctoral Times which illustrates the vibrant community that you are a part of. If you enjoy reading the articles and would like to contribute your own experiences and ideas for inclusion in future issues, email me at: developmentsection@sheffield.ac.uk

Anne Beresford
Doctoral Development Assistant & Doctoral Times Commissioning Editor

NEW! Doctoral.com on uSpace

As well as our new look newsletter we have created a uSpace specifically for doctoral students. The space will contain details of events; news; trips; upcoming seminars; conferences; Union events and everything else to help make your research and time at the University more enjoyable. You can contribute to the space, by starting discussions, blogs, adding articles and comments.

http://uspace.shef.ac.uk/community/doctoral

Building the future
Doctoral and postgraduate research education at Sheffield

These are uncertain times for higher education and for research in the UK – we don’t yet know how a difficult financial climate will affect us. One thing that we are quite certain about, though, is the continuing importance of postgraduate research education. This is true for the University of Sheffield, as an international research university where postgraduate research students make major intellectual contributions. But it’s also true for the nation and world more widely: the challenges of securing sustainable economic growth and dealing with global problems will only be overcome with the help of people with the most advanced skills and knowledge. So we need the skills postgraduate research students acquire in their studies more than ever.

The importance of postgraduate education was made clear in a recent government review ‘One Step Beyond: Making the most of postgraduate education’, published in March this year. The review was led by Professor Adrian Smith, who as Director General, Science and Research, in the Department of Business, Innovation and Skills, is responsible for the UK government’s research budget, and involved our own Vice-Chancellor, Professor Keith Burnett. The review concluded that “postgraduate education in the UK is a great asset – it is world leading in many areas – and it is our intention that the University of Sheffield maintains a leading position in postgraduate education in the UK.

A good postgraduate research education should give students valuable specific skills, in the words of the Smith review “the advanced knowledge and capability of postgraduates are highly prized by business and the public sector. The skills of postgraduates, especially researchers, are critical for tackling major business challenges and driving innovation and growth.” But the benefits should be broader than this, the report goes on to say: “by encouraging people to question established knowledge, postgraduate education promotes a culture of open and intelligent debate which stimulates innovation and new approaches to tackling difficult challenges.”

It is a given that, at Sheffield, we aim to give postgraduate research students an outstanding environment to carry out their original research, as well as the taught training they need to make the most of their research opportunities. But for many years we’ve been equally concerned to make sure the experience of our postgraduate research students goes further than this, helping them with the transferable skills they need to be successful in the wide range of professional careers that research students go on to pursue, as well as giving them the opportunity to take part in the diverse intellectual culture of the University. Beginning in 2010/11, we are introducing a new Doctoral Development Programme, which will provide a structured and personalised environment in which postgraduate research students can get the best training for their individual needs.

Postgraduate research students make a huge contribution to the University, and it’s important that their experience here at Sheffield is as rewarding and enriching as possible.

Professor Richard Jones,
Pro Vice Chancellor,
Research and Innovation

We aim to give postgraduate research students an outstanding environment to carry out their original research as well as the taught training they need to make the most of their research opportunities.

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The aim of the DDP is to provide you with a range of skills and competency-based training opportunities orientated both towards your specific study and towards future employment. The DDP Equipps you with transferable skills that will make you a not only a successful researcher, but also to easily assimulate skills that have wider utility, thus extending your employability to a range of career destinations.

The DDP is student-specific, designed to complement your individual research project and is carried out in agreement between you and your supervisory team. The training plan reflects four particular areas, enabling you to demonstrate the following:

- generic skills to become a high-level professional
- subject-specific advanced training;
- subject-specific craft skills
- broad scholarship and wider engagement within the full community of scholars (e.g., networking, dissemination of knowledge, conferences, demonstrating impact and public value of research).

You take ownership of your development through various tools including the Training Needs Analysis (TNA), the development plan and the student e-Portfolio, which will record evidence of your achievements and can be shown to prospective employers.

Inherent in the DDP is an understanding that different students will have different background and different needs: a student who has just completed a first degree is likely to have a more limited skill set than, for example, one who has spent time working in industry before starting their research degree. Your development plan is reviewed annually so that as your skill level changes and your research develops, you can tailor your future training accordingly. Existing researchers will continue on their own dedicated Research Training Programme (RTP) until completion.

A full walk through of the DDP process and existing RTP can be found here: http://www.shef.ac.uk/ris/development/development_team/ddt.html

The most helpful piece of advice I can give is to keep a good work life balance. It is important to take time out to recharge your batteries. In my case this means meeting friends, going to the cinema, some sporting activity and plenty of sleep. Oh, and good food! Absolutely crucial is also a supervisor who understands the need to juggle different tasks. Someone you trust and who can help you with the trickier parts of the thesis.

Could you summarise your PhD ‘learning journey’?

Exciting, scary, funny, exhausting. You do change and develop as a person. A PhD is always a collaborative project, as it would not be possible without the moral support of family and friends.

What has helped you through the highs and lows of studying?

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Develop your communication skills through interactive media
by Jane Hughes & Yashar Shokouhi

Flat, 2D presentations are over – the future is interactive! So says Nobel Prize winner Sir Harold Kroto speaking at the University of Sheffield recently about GEOSET, the Global Educational Outreach programme he has set up to provide a high quality internet-based science and engineering teaching resource. Visitors to the website www.geokri.org can access a range of visual presentations by experts in their fields and use these resources in their teaching.

The Kroto Institute at the University of Sheffield is one of only two locations world-wide with a dedicated recording studio and the Institute is keen to encourage postgraduate students to have a go at recording a presentation themselves. It could be an area of research you are passionate about and will provide a great opportunity to develop your presentation and communication skills. Jenna Stevens-Smith, who completed her PhD at the University of Sheffield, already has her presentation featured on the website and is enthusiastic about the benefits for other students.

'’It’s an amazing opportunity to really hone your communication skills,” she comments. Jenna recently won the '2010 Kroto Family Science Education Prize’ for her strong range of science outreach activities. Several presenters on the site have already used their film clips as a very effective addition to their academic and teaching CVs when applying for scholarships and employment. Dr James Kingsley has also recorded a piece for GEOSET outlining his renewable energy research. Dr Kingsley believes that GEOSET presents a great opportunity for enhancing methods of learning and teaching as well as providing feedback from others interested in a subject area through the interactive comments section.

Drop-in sessions are available at the Institute so students can practise and self-edit, using hand-held camcorders until they are confident enough to be filmed. Advice and support is on hand to help you ensure that your piece is appropriate for whatever age and ability level you would like to present to. Candidates can also opt to record themselves working on their projects in their own laboratories or offices. Additionally, features such as editing tools for videos and also the capability of pausing the recording and zooming in on a specific part of an experiment are available.

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“Science Brainwaves is a collection of people, covering all fields and levels of science, medicine, maths, engineering, and even the arts with the aim of getting science out to the masses! We think this is important, if only to give people of all ages and background the opportunity to better understand the world they live in. We started out as a group of four PhD students and post-docs wanting to put on a Christmas Lecture on the often misunderstood subject of vaccines. It was a great success and snowballed in to the still-developing entity that is Science Brainwaves. Now officially a ‘twig’ of the South Yorkshire branch of the British Science Association, we’ve put on, and are planning, many more events, to push the boundaries of how science is communicated to the public.

We love trying out new ideas, like debates in pubs on how science is portrayed in the media, flashmobs, art-science installations and even going to music festivals, such as Green Man in Wales to show families how to get DNA out of strawberries for example. We’ve also jointly been involved in developing a DDP/RTP module for doctoral students called the Postgraduate cafe forum which will provide an opportunity to develop presentation and communication skills. Basically, we do anything to inspire people to think about science. We also host a website that contains blogs covering all sorts of fields, a forum for the public to have their questions answered, info on our events, reports and a buzzing news section.

So as a doctoral researcher, how can you get involved? Well that’s easy. As a researcher you’ll be working on new and original things that are interesting for people to hear about, so why not write something for the website, or get involved in an event? This will not only help educate and inform the general public, but will benefit you in gaining valuable experience in communicating to non-specialists. We’re always looking for motivated and enthusiastic people to help us out in a number of different ways. Check out our website www.sciencebrainwaves.com for more info on what we’ve been up to, and also to get involved. There’s plenty of opportunity to get involved as much, or as little, as you like.

Martin Turner, Final year doctoral student and Brainwaves committee member, feels involvement has been a valuable experience. “Science Brainwaves has filled in the gaps of experience that my PhD hasn’t been able to cover such as meetings with senior managers, team leadership, accounting, dealing with journalists and writing for general publications. These are skills that you need in business but you don’t necessarily gain in a research environment. I’ve also had to become a lot more organised to deal with the quantity and variety of tasks that I do. I’d say it’s been the next best thing to actual work experience.” Michaela Livingstone is a Bio PhD student and co-founder of Science Brainwaves.

For more information see the website: www.sciencebrainwaves.com

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Green Man festival with stall showing festival goers how to do a variety of scientific experiments using things commonly found in the kitchen.
For many years the UK Research Councils have recommended that their doctoral students attend a GRAD School in their second or third year to help them gain an insight into their personal effectiveness and help them develop interpersonal skills for the world of work. As GRAD schools used to be offered nationally by training providers, there always used to be more students than places and some people missed out.

The University was concerned that international, self-funded and others with difficult circumstances also may not be getting the benefit of such a course.

During 2010 the University Careers Service and Research and Innovation Services worked together to design a brand new, up-to-the-minute GRAD School that would be available to all the University’s postgraduate research students. During May and July, two Sheffield University GRAD Schools (SUGS) events were held, catering for around 90 doctoral students. These were opened by the Vice Chancellor and the Academic Secretary respectively. Already, 120 have registered for the two SUGS events planned for 2011.

The focus of SUGS is employability skills and personal effectiveness. It provides an opportunity to work in a safe and supportive environment while at the same time enhancing personal skills such as teamwork, communicating with others and developing self-awareness.

Doctoral students prepared themselves for a challenging yet fun few days with a huge variety of tasks. These included having to be a council of an imaginary town and manage a budget, make regeneration bids and negotiate which services to deliver and which to cut. Time deadlines were strict with financial penalties imposed on those teams who failed to organise themselves. ‘Protesters’ arrived unannounced during the sessions to stage demonstrations and attempt to distract the teams. Doctoral students had to call on a whole range of strategies to complete the task including teamwork, facilitation, persuasion and negotiation, planning and time-management as well as staying calm under pressure. Teams also had to present their final budget and answer some pretty tough questions from the panel.

Doctoral students attending the event represented a wide range of disciplines. James Clarke, 3rd year PhD in mechanical engineering said, “I am nearing the end of my studies and am thinking about my career and the future. This will help me develop skills like how to explain and present my work.” Adam Smith, also in his 3rd year commented, “This helps me test all the skills you can’t develop in the lab – and I can have a go and make mistakes here without worrying”.

Throughout the course Doctoral students heard from a range of experts including Dr Esther Wilkinson from the Economic and Social Research Council. She emphasized the importance of acquiring and developing a range of skills from leadership through to negotiation and presentation, time and project management. “These are all valuable and necessary for successful completion of a PhD but are also generic and transferable skills when considering career or further academic life”, she commented.

Undertaking the course gives Doctoral students the opportunity to evaluate for example, what their role is within a group. Are they a natural leader, facilitator, negotiator and are they able to communicate ideas and opinions effectively? Commenting on the group activities, Xiolin Yang, 3rd year PhD said, “I can assess what skills others have and then work out which areas I need to develop in my own practice”.

Reflections from Edgar Tembo
Doctoral Student studying Politics

Edgar had heard positive things about the GRAD school and felt that as he was approaching the end of his PhD he needed to start considering employment and career-related skills. “I really enjoyed the course – it was definitely worthwhile for me. I really like the way in which the exercises got us to think about how our PhD skills translate into transferable skills for employment. Every day was different – it was tiring but fun. I would really recommend it to other PhD students”. 
Holiday support for International Students

A collaboration between the University of Sheffield and Sheffield Hallam University will see the launch of a range of events focusing on supporting international students who may have to spend the festive season away from family and friends. The aim of the project is to encourage and foster a sense of community over the winter holiday period. As well as producing a comprehensive guide filled with events, opening times and information for students, there are also plans to launch a website and a Facebook group.

Asha Rogers, project co-ordinator, is enthusiastic about what the collaboration will be able to offer. “We have had the opportunity to really plan ahead and come up with a good mix of opportunities for students to build up links and contacts before the festive season starts.” As well as planning events to included students with families and children in Sheffield, there will be links with volunteering organisations and a host of other activities. Look out for a launch event in December.

For more details check the SSID website.
http://www.shef.ac.uk/ssid/

Find out more visit the website:
http://www.internationalwomensclub.group.shef.ac.uk/index.html

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Find out more visit the website:
http://www.shef.ac.uk/ssid/

Social Activities

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Career Profile

Introducing Dr Neil Lowrie

Dr Neil Lowrie, Doctoral Training Centre Manager, E-Futures, University of Sheffield

What was your career aspiration before you did a PhD?
As an undergraduate (Mechanical & Materials Engineering), I wanted to have some involvement with science or engineering, but had no firm ideas about location or the type of industry. I decided soon after my first job to be more involved with R&D, so I thought a PhD in a relevant area would be a good move.

What was your PhD about and when did you get it?
I did my PhD in Loughborough University, investigating precipitation in high temperature power plant steels. I spent some of my time working in E.ON's (then Powergen) laboratories in Ratcliffe-on-Soar. I completed my PhD in 2003.

Tell us the best thing about your job and why you love it
This is my third job after finishing my PhD (my last role was also at the University of Sheffield) and the best thing about it is the diversity of issues I have to deal with- liaising with industry to raise money and to formulate research project ideas; putting together timetables and lectures for the course, organising site visits and conferences; dealing with postgraduate students; and spending grant money! There's certainly no time to be bored! I'm fortunate to work with colleagues from across campus who have diverse research interests, so I learn something new every day.

How does the PhD help you in your job?
In this particular job, having an awareness of what research is about, the opportunities, limitations and timescales. In a previous job where I provided metallurgical advice to companies, I wouldn't have had the technical skills to do the job at all without the PhD.

Which were the most useful transferable skills you acquired doing your PhD and how have you used them?
The PhD taught me to become quite organised. It also gave me the ability to pick up key points about a new subject before communicating relevant information in an appropriate way. I probably learned just as much about being able to write in a concise and precise manner as I did about the technical subject I was pursuing.

Is there anything you would do differently?
This isn't to promote the Doctoral Training Centre PhD model, but I'd have opted for a 4 year rather than a 3 year PhD given the option. Otherwise, I don't think I'd change anything.

Find out more visit the website:
http://e-futures.group.shef.ac.uk/page/staff/profile/neil-lowrie/