



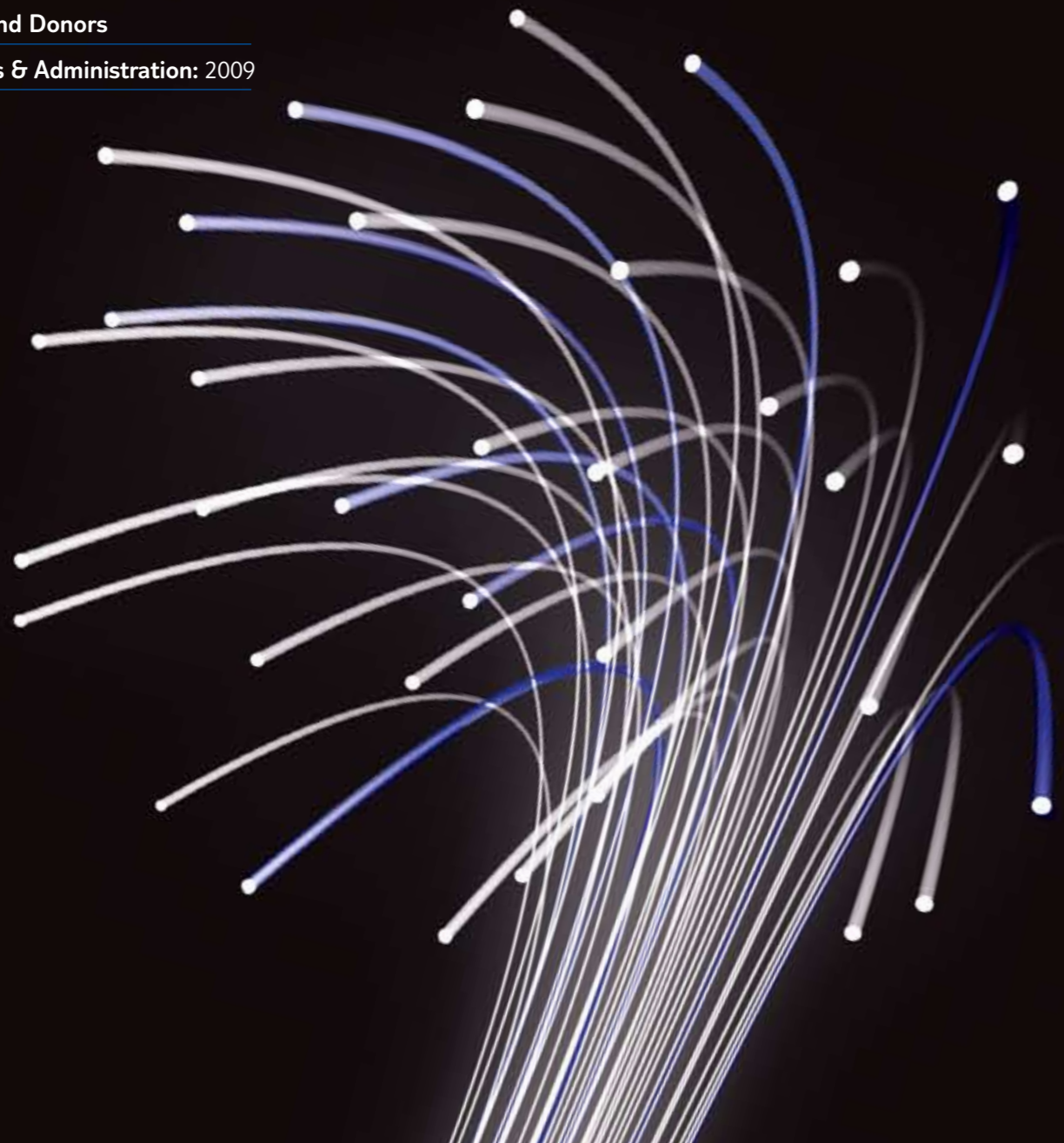
The Daphne Jackson Trust

Annual Report **2009**

Welcome to the... Daphne Jackson Trust Annual Report 2009

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Chair's Introduction

Farewell from... Professor Christopher Snowden...



Although the economic downturn has affected all sectors across science, engineering and technology, the Daphne Jackson Trust has consistently worked through the challenges presented during 2009.

The need for highly qualified and skilled returners has not diminished and so the Trust continues to increase the number of Fellowships awarded.

It has also been a year for change and I am pleased to hand over the reins to a new Chair who I am sure will be dedicated to ensuring the growth and success of the Trust. I have thoroughly enjoyed my time as Chair of the Daphne Jackson Trust and would like to thank the Trustees and staff for their hard work and dedication during 2009.

Professor Christopher Snowden FRS FREng FIEE FIEEE FCGI
Chair of the Daphne Jackson Trust

Welcome from... Professor Glynis Breakwell



It is with great pleasure that I take over as Chair of the Daphne Jackson Trust. Like most charities we faced great challenges in 2009 to retain the existing levels of sponsorship whilst seeking out new sponsors to take the Trust forward.

It is my intention to strengthen and expand the Trust to enable it to achieve the standing and status that it so richly deserves, enabling us to help more and more scientists, engineers and technologists.

Employers in both academia and industry can no longer afford to ignore the fact that scientists, engineers and technologists who take a break often do not return to their careers. This leads to a very low return on initial investment and higher recruitment and training costs which affect the competitiveness and productivity of the UK. Investing in returners, either as an employer or sponsor, places a well qualified professional, with the skills that top class employers are looking for, back in the workplace. The business case for increasing the numbers of returning scientists, engineers and technologists is stronger now than ever before.

We hope for significant progress in the coming year and intend to emerge strengthened from the financial crisis facing the country.

Professor Glynis Breakwell PhD DSc LLD(Hon) CPsychol FBPoS FRSA AcSS
Chair of the Daphne Jackson Trust

Chief Executive's Summary

This year's review, as always, demonstrates the essential nature of the work of the Trust in returning highly qualified and skilled scientists, engineers and technologists to their careers. Once back in the workplace nearly all of our Fellows go on to enjoy a very successful career for many years.

This was highlighted in the Trust report *"Real Returners - the stories behind the success"*, which was launched at the British Science Festival in September 2009 by Lord Drayson, Minister for Science and Innovation.

The report has case studies from the inception of the pilot scheme in the mid 1980's up to Fellows who have finished relatively recently. It is clear from all the Fellows featured what tremendous benefits a Daphne Jackson Fellowship can offer a returner. The Trust is very proud that the statistics show a 96% success rate of returning Daphne Jackson Fellows to a SET based career after successfully completing a Fellowship.

There has been a concentration of effort during 2009 in ensuring that we have enough sponsors and donors to continue increasing the number of Fellowships offered each year. The Trust relies on its sponsors and donors and despite the economy, funding has continued to be achieved. During the coming year, though, there will be a concerted effort to engage more universities in sponsoring Fellowships.

In 2009, 14 Fellows commenced their Fellowships, 22 were ongoing during the year, and 8 completed their Fellowships, giving a total of 44 Fellows in post during the year.

We would like to extend a heartfelt thank you to Professor Christopher Snowden who stepped down as Chair of Trustees. He guided the Trust superbly well and was a pleasure to work with. During the year we also said farewell to Trustees Helen Stone, Lynne Graham and Teresa Schofield. We were delighted that Professor Glynis Breakwell, Vice Chancellor at the University of Bath, agreed to join us as the new Chair of Trustees.

There were also changes in the Trust Office during the year; we welcomed Vanessa Fairall, Elaine Hunt and Brian Stevens while we had to say farewell to Carrie Anderson, Vittoria Colbourne and Lena Tostevin. Katie Perry changed from Press and PR Manager to Trust Manager.

We look forward to a very successful year in 2010.

"This Fellowship has been an incredible experience. I have proven to myself and also my colleagues that research can easily be done on a part time basis"

Dr Pia Ostergaard
Past Daphne Jackson Fellow

"The Fellowship has restored my confidence and given me new research skills"

Dr Sami Kafala
Past Daphne Jackson Fellow



Katie Perry, Lynne Frostick and Jenny Woolley

Overview of the Trust: 2009

Support for the Trust

Many bodies support the Trust and despite the current economic conditions there is much interest in sponsoring and hosting Fellowships within universities and research laboratories in the UK.

The Trust has the support and interest of many, not just because of its uniqueness but its ability to fill a large gap in the market. The Trust's professionalism belies its size and it continues to meet as many of the diversity challenges as it can, and to support equal opportunities for all scientists returning to their careers after a break.

The effort to secure sponsorship of individual Fellowships and the general work of the Trust is an ongoing task. With the recent increases in the number of active candidates, the need to secure support is even greater. Sponsors are invited to participate in any stage of the application process. Although sponsors may not influence a project, they may wish to see the project proposal at every stage of the application process.

Support for Fellows

The key objective of the Fellowship is that it should help re-establish professional expertise as well as personal confidence, within an appropriately supportive environment, with significantly improved job prospects upon completion.

For many Fellows the support that they are given throughout the application process and the Fellowship is the key to why they are so successful in re-establishing themselves into flourishing careers. The 96% success rate that Daphne Jackson Fellows enjoy is quite remarkable and is testament to the benefits offered by this unique scheme. Each Fellowship is tailored to the individual, with their research proposal and retraining programme being scrutinised by the Trust co-ordinators, and ultimately the Awards Committee, to ensure the maximum chance of success.

As part of the Fellows training programme, they will attend four Daphne Jackson Trust training courses on presentation skills, work/life balance, media skills and professional skills.

Helen Roome has been giving courses on work /life balance and presentation skills for the Trust for a number of years and the Fellows always find her courses excellent. Helen had great feedback from the work/life balance course held in September 2009 at the University of Surrey, Guildford.

This was followed in November 2009 by a media skills course run by award winning journalists and broadcasters, Sue Nelson and Richard Hollingham. Sue and Richard always win universal praise from Fellows for the course which aimed to demystify the journalism process, explain what journalists want from scientists for print and broadcast media as well as how to give a good radio interview and provide print quotes. The training focused on presentation, communication skills and content, with an informal style so as to encourage confident and effective communication with journalists in the future.

"I must confess that the media skills course took me by surprise! It was much more than I expected and very interesting. I am sure that the skills learnt will be helpful in more than just the media environment."

Reyna Al-Ashaab Past Daphne Jackson Fellow



Sarah Gooding being interviewed by Richard Hollingham
INSET Left to right: Sarah Gooding, Karin Regnström, Frances Pearl, Judit Molnar, Reyna Al-Ashaab, Miriam Watson, Anjana Halder and Kate O'Neill.

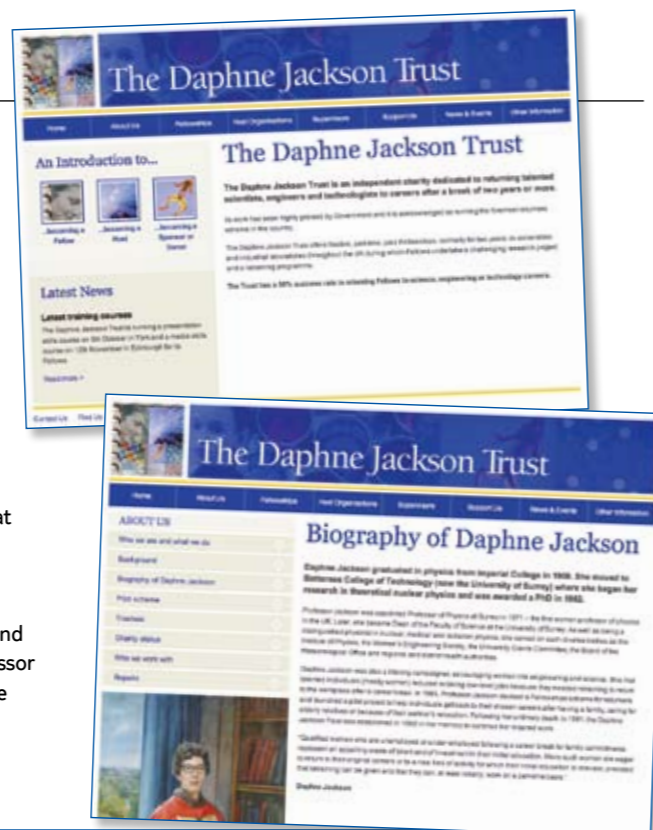


Raising Awareness

The Trust constantly reviews its promotional strategy and has an annual press and public relations programme with activities directed towards stimulating enquiries and encouraging sponsorship as well as raising the profile of the Trust.

During 2009 the website was redesigned and increasing involvement with social media, such as Facebook and Twitter is planned in 2010. To view the website visit: www.daphnejackson.org

The Trust now has four patrons who we hope will be a great asset to raising awareness of the Trust and what we do. Professor Christopher Snowden, having stepped down as Chair agreed to become a Patron. Joining him are Vivienne Parry and Maggie Philbin, who are both very experienced and well known science journalists and broadcasters, and Professor Athene Donald from the University of Cambridge. Vivienne introduced the Trust sponsored event at the Cheltenham Science Festival this year and is always hugely enthusiastic when speaking about the Trust.



The British Science Festival

In September 2009 the British Science Festival took place at the University of Surrey at Guildford. The Trust took the opportunity to put on an event attended by past and present Vice Chancellors of the University, who are also past and present Chairmen of Trustees for the Daphne Jackson Trust.

Professor Patrick Dowling, now Chair of the British Science Association and Professor Christopher Snowden joined forces to support the Trust at an event which saw some



inspirational presentations from past Daphne Jackson Fellows. It was a very welcome sight to see both Professor Dowling and Professor Snowden welcome Lord Drayson, Science Minister to the event to give a keynote address and launch the report "Real Returners - the stories behind the success".

Past Daphne Jackson Fellows who gave presentations were Dr Danielle Strickland, an engineer who has worked part time at Rolls-Royce since her Fellowship and Mrs Janet Acheson, who has enjoyed a successful career post Fellowship with Ericsson. Nancy Irwin, a current Fellow, spoke of how she is enjoying her Fellowship at the University of York.

The Trust was delighted to work with the Royal Academy of Engineering on the production of the report, and also acknowledges the support of the following organisations for the event and reception: the Institute of Physics, the Royal Society of Chemistry, SEEDA and the University of Surrey.



Top photo Left to right: Professor Patrick Dowling, Mrs Jenny Woolley, Lord Drayson and Professor Christopher Snowden.

Bottom photo Left to right: Janet Acheson, Danielle Strickland and Nancy Irwin

The Cheltenham Science Festival

The Cheltenham Science Festival, held in early June each year, is always a terrifically popular event for families and SET professionals alike. One of the keys to its success is the fantastic selection of eminent scientists, all leading experts in their field, covering a huge range of topics. The festival draws a huge audience of the general public, family groups and other SET professionals.

Attendance at the Festival offers the Trust the opportunity to raise awareness of our Fellowships to potential Fellows as well as potential sponsors and donors. The chance to network with other SET professionals in a relaxed environment has generated many interesting leads for sponsorship opportunities as well as articles in journals and magazines.

We always encourage Fellows, past Fellows and future candidates to visit Cheltenham, bring their families along and see what an exciting venue this is. It is an opportunity for children and parents alike to take part in the hands on activities, which are always greatly enjoyed by all ages, and to sample the many interesting events taking place on almost every scientific discipline imaginable.

In 2009 the Trust sponsored the Blue Peter 1 event where space scientist Dr Maggie Aderin-Pocock explored how the Blue Peter satellite was launched and followed its journey. This event was introduced by Vivienne Parry, a patron of the Trust and was very well attended and enjoyed by all ages. The audience were given a goody bag with freebies and information about the Trust.



Alice Roberts and her team paint the 'insides on the outside'



The main hall



Families enjoying the festival

As well as the scheduled events, many other fascinating things happen at the Festival, such as Dr Alice Roberts and her team painting the 'insides on the outside' of a volunteer - a great way for children to learn about anatomy. Many people have to queue for the events and even then they are entertained by scientists, sometimes very tall ones!

The Cheltenham Science Festival captures the essence of science being fun and interesting as well as being a great career choice, which resonates well with our Fellows, many of whom are returning to a career in science because it is something they are passionate about.

Our Fellows: 2009

During 2009 a total of 44 Fellows were in place during the year. Of these 14 commenced Fellowships, 22 were ongoing during the year and 8 successfully completed their Fellowships.

Each and every one of them are highly talented and dedicated researchers who are delighted to have the opportunity to return to a scientific career. Over the next few pages we have highlighted a few of our Fellows to indicate how unique both they, and their Fellowships, are and what a difference Daphne Jackson Fellowships make.

Isabelle Durance

2009 was the final year of a most life changing experience. With the enthusiastic support of the Trust and funding from NERC, 2009 saw me back in the research world with my confidence returned and a full-time research position offer.

Time at work after four years at home with the children has been such an expanding experience. This year, I had the opportunity to develop a solid and stimulating research network. Participation in the scientific community, whether by giving demonstrations to primary school children during Science Week, or joining professional societies gave me a real sense of engagement. Strategically, my Fellowship has given me the opportunity to develop an increasing recognition in the field of climate-change ecology through the dissemination of several papers in leading journals and invitations to conferences.

Of course, the most crucial aspect of the Fellowship, was that it did for me what it was set up to do: set me back into research. I was awarded a Leverhulme Trust early career Fellowship starting on the day my Daphne Jackson Fellowship ended! This new, full-time Fellowship follows directly on the expertise and thematic built during the DJ Fellowship, and as such demonstrates how the skills and experience acquired during my Fellowship have been instrumental in setting me back on a research career. Moreover, I believe that my DJ Fellowship award was key in convincing the Leverhulme Trust that an early career Fellowship was appropriate for me even though I was clearly above the 35 years age limit.

I now feel back on track with the prospect of a thrilling new career in climate-change ecology AND a happy family. I couldn't have done it without the Trust and I am convinced that the work of charities like the Daphne Jackson Trust are key to give women a chance to demonstrate their skills and contribute to our work society.

Morag Prach

I have had a most thrilling year since being appointed as a Daphne Jackson Fellow. I took the decision to leave academia after my daughter was born. We planned for more children and I wanted to be at home full time to look after them.

As my children became increasingly independent I felt a strong desire to "use my brain again". Whilst doing a job search on the web one evening I uploaded my CV in response to an advert that appeared to be written with me in mind. This was my introduction to the Daphne Jackson Trust and their wonderful work to take people like me and get their careers back on track.

The most exciting part was that it didn't matter how long you had been away from active research, the Fellowship scheme allows you to bring your skills up-to-date, whilst working and you do this part-time to fit in with your family life. I thought I had struck gold. This was exactly what I wanted. Unlike Fellows who had gone before me the Daphne Jackson Trust were offering a sponsor and host, namely Edinburgh Napier University. I had the opportunity to write the proposal with my sponsor. I was awarded the Fellowship and began the lab based research in May 2009. My previous experience was in different aspects of immunology, addressing the role of monocytes in various disease settings. My current project similarly addresses the role of monocytes but this time looking at their interaction with manufactured nanoparticles. This is cutting edge research and I am privileged to be training in a world renowned lab.

Juliane Struve

The highlight of 2009 was for me the very stimulating annual meeting of the Ecological Society of America in Albuquerque, New Mexico, which I could attend with support from the Trust, and at which I presented research on the geographic movements and habitat use of coastal fish in Florida.

I analyse and model the spatial behaviour of fish, a very dynamic area of fisheries science that due to the explosive development of spatial analysis tools and the introduction of spatial fisheries management is currently experiencing much general interest. The spatial ecology of many recreational species is still poorly understood and, with many of them being too small for direct satellite tracking, and quantitative surveys being nearly impossible, insights into the spatial behaviour of coastal fish often rely on indirect methods, especially passive acoustic telemetry. Acoustic telemetry records the presence of a tagged individual near a receiver, and may be compared to sparse CCTV recordings of a suspect, whose destination and



Juliane Struve



Caroline Graham

"I'm looking forward to the challenges and opportunities the Fellowship will bring"

Caroline Graham
Daphne Jackson Fellow



Raffaella Tate Zaccharini

true path are not known. The interpretation of such data is notoriously difficult and despite the method's popularity, not many published studies have made extensive use of it.

In 2009 I have started to develop a Bayesian statistical framework to estimate the movement behaviours of coastal fish from acoustic relocations. The framework uses prior information on the spatial behaviour and actual observations at fixed receivers to update the parameters of a geographic movement model. It allows me to test beliefs about habitat preferences and movement algorithms, and can be used to systematically investigate designs of telemetry studies. Presenting this research at the 2009 ESA meeting was a great opportunity to meet other scientists. The conference also included a highly specialised modelling workshop that helped me to develop my own research, and I will seek to participate in ESA activities in the future.

Caroline Graham

My project is to investigate the non-linear elasto-plastic behaviour of solder material and soldered joints. I am using Abaqus the Finite Element (FE) package to model this behaviour. The work has applications in all areas of microelectronic component design from high street consumables to industrial control systems.

The thorough Daphne Jackson Trust application process ensured my project plan was well set out and I was very familiar with my project, this enabled me to commence my research without delay and make full use of the time given.

My host, Heriot-Watt University has given me the opportunity to attend internal lectures, seminars and short courses. In addition to giving me technical support, my career development will be supported by inclusion in the internal Performance Development Review process and other resources in line with the Concordat. (The Concordat is an agreement between the Research Funders and Employers in the UK to support the career development of researchers.)

To prepare for the Fellowship, during my application, I worked two days per week within the department on work placement*. During this time I was able to access specific re-training to prepare for the Fellowship. This also meant that good childcare etc was already in place. Shortly after starting the Fellowship I was able to attend the Trust work life balance course. I found this very helpful in reinforcing my own work-life balance planning. Many SET employers are hesitant of flexible working within a technical environment. Through the Daphne Jackson

Fellowship I have the opportunity to demonstrate how I can achieve and contribute through flexible working.

I am enjoying being back in engineering research and looking forward to the challenges and opportunities the Fellowship will bring.

*The work placement was enabled by support from Heriot Watt University, the UKRC for Women in SET and the Institute of Mechanical Engineers.

Raffaella Tate Zaccharini

I returned to work in January 2008 after a break of three years during which I looked after my son Joseph. I have now finished my Fellowship working as a Daphne Jackson Fellow at the Institute of Ophthalmology UCL.

I am very grateful for the Daphne Jackson scheme to have allowed me to return to science with part-time flexibility. This flexibility and the constant help received from my coordinator has helped me and encouraged me to reflect in my last year on my future career. After much reflection and thought, I have now decided not to pursue a career in science based on working in a laboratory.

When I started my Fellowship I felt very happy to be given the possibility of combining both motherhood and career and that I would later be able, as my son's needs would be less, to continue my scientific career full-time. I realised how precious all those moments with my family are and how crucial they are for my well being and happiness. However, without this Fellowship, structured to give someone in my situation the time to take everything into consideration before reaching a decision, I know I might have been forced into a decision that could have been the wrong one for me and my family. The amazing support I received from my coordinator Dr. Bernadette Egan has amazed me; she has been an excellent coordinator in listening to me each time I needed it and helped me reach my final decision for which I thank her immensely.

I finally decided to find a career in the charity sector trying to support the work of a charity dealing with health issues with my scientific and medical knowledge. In this view, the Fellowship was able to support me in attending a course on charity careers. The course has been immensely useful in giving me a good insight of charity work and as a result of it I was able to obtain a volunteer internship at the CLIC Sargent charity.

I am extremely excited for this new career which will combine the necessity for a part time job, the amazingly rewarding feeling of helping people and the possibility of still applying my scientific knowledge.



Isabelle Durance



Morag Prach

Our Fellows: 2009



Sarah Gooding

Sarah Gooding

I started my Fellowship in April 2009 at the Institute of Life Science at Swansea University after an 18 year career break (I had worked in the pharmaceutical industry in the area of novel antibiotics). My project involves the disease aspergillosis caused primarily by the fungus *Aspergillus fumigatus*.

Until recent years the disease was confined to a small group of people, mainly farmers, who inhale large doses of spores but was not fatal. However, with the rapidly increasing numbers of immune suppressed individuals the disease has risen in importance to cause a fatal condition 'Invasive Aspergillosis'. My first challenge was to prepare a poster for post-graduate research day in June concerning the aims of the project and preliminary bioinformatic results. Amazingly my poster was short listed for a prize which was a complete surprise and a great encouragement! It has been a privilege to have a Daphne Jackson Trust Fellowship and the training I have received both in the laboratory and through transferable skills courses has increased my confidence and made me feel valued. In 2010 I will be attending the 4th Conference for Advances Against Aspergillosis in Rome, this will broaden my understanding in both medical and research aspects of the disease. There are stressful aspects to returning to work and the continual challenge of balancing work and family life; however, overall it is fun and enjoyable to be back in a research environment, something which would have been unobtainable without the support of the Daphne Jackson Trust. Thank you all so much!

Alma Lopez Tolman

After having been away from work in science for 18 years, a Fellowship from the Daphne Jackson Trust enabled me to retrain and reclaim my original vocation of working in science.

It was not easy to go back to the lab after such a long gap; I was very insecure. I knew however that I had once been efficient and confident in the lab, and could do it again. To start with, my gels were awful! I was very slow. In 2009 I started to feel much more confident, my gels became an example to others in the lab. I had to talk about my results and present a paper at lab meetings, as well as to the larger section journal meetings. I did not like having to do it, but it was all learning and it all worked out well. I felt elated after every small success.

I attended a BBSRC meeting in Birmingham and took a poster with me, another new experience. There I met a couple of other Daphne Jackson Fellows, as well as some David Phillips,



Alma Lopez Tolman



Alma Lopez Tolman
Daphne Jackson Fellow

Enterprise and Royal Society Fellows. It was a privilege to listen to all these outstanding scientists, and inspiring. I also attended a workshop on media skills organised by the Trust. Although I felt that I would never be in such a position, and did not want to volunteer, I found myself thrust in front of the microphone, talking about my work. I know that my area of work is important; with the bigger picture being trying to find a new generation of vaccines against a potentially lethal pathogen that, if not completely eradicated, could produce an epidemic, and could also be used in terrorism. But I had not appreciated that the media would be so enthralled by this. I learned that it is not that easy to talk to the media, nor to write news items, but it certainly gave me an insight. The people who ran the workshop are experienced journalists, very helpful and great fun! So I am beginning to feel much more confident now in reclaiming my vocation. There is still much work to do, finding a permanent position is not going to be easy in the present climate, but I certainly feel much better equipped.

Barbara Keating

My Daphne Jackson Fellowship commenced in January 2009 and the time has passed very quickly. I have very much enjoyed being back at work. The staff of the Centre for Timber Engineering (CTE) here at Edinburgh Napier University helped me to quickly find my feet and have been very supportive of me as I have regained my confidence.

Returning to research after a nine year career break has been challenging, but my research is progressing well. I have gained confidence in the laboratory and am now at the stage of producing and testing novel, sustainable, nanocomposite materials. My background as a mechanical engineer is now being applied to materials science. We are using cellulose nanocrystals to develop the materials of the future. I will be submitting papers for publication in due course. I recently attended the COST E53 conference, the future of quality control for wood and wood products, which was hosted in Edinburgh by CTE, and it also provided a good networking opportunity. Retraining has been an important aspect of my return to work and I have made the most of an Open University course, self study of relevant MSc modules and other opportunities such as internal staff development courses to fulfil this requirement.

The part time nature of my Fellowship and its flexibility has been inherently suited to my family position. The Fellowship has provided me with the challenging opportunity to return to academic research that I anticipated and I am extremely grateful for the opportunity I have been given.



Barbara Keating

Rebecca Carter

I have now completed the first year of my Fellowship at the Gray Institute for Radiation Oncology and Biology. My research has been part of a concerted effort to improve radiotherapy by finding agents that specifically sensitise cancer cells to radiation.

To date I have established a system for measuring radiation sensitisation using inhibitors of DNA methylation. I will now split my work between investigating the mechanism involved in this sensitisation and screening other compounds for potential use as radiosensitising agents. I am fortunate to be part of the University of Oxford where there are many different courses available to all staff. So far I have undertaken courses in aspects of computing, statistics, project management and presentation skills, all of these have been helpful in my return to scientific work. With the extraordinary expenses fund available from the Trust, I am hoping to attend two research meetings this year.

Undertaking the Fellowship has been good for me as a person. I actually feel more confident now than I did before I took my career break and part of this comes from the whole process involved in the Fellowship; from application to completion. My family have been quite proud of my returning to work and have generally undertaken (a few) more responsibilities to help things run smoothly. Initially I did become a little over-stretched as I was basically trying to fit a full time job into the part-time hours I was working. As this did cause me some health problems I have now tried to relax and enjoy the Fellowship and the opportunities it presents. I have really appreciated the chance to combine research and study while working in a part-time and flexible manner. This has enabled me to fulfil my work commitments, while still making time to attend school events and fulfil other personal obligations.

Dr. Stefanie Freitag-Pohl

When I started my Daphne Jackson Fellowship I resumed my work as a scientist in June 2009 at the University of Durham. I originally trained as a chemist and learned crystallography during my studies.

In the following postdoctoral years of my career I chose to get a deeper insight into the three-dimensional structures of proteins but I always wanted to extend my skills and experience in molecular biology. In my current project I am working on the GST protein family and cover the full width of expressing the protein in different expression systems, purification,

biophysical characterisation (isothermal calorimetry) and crystallographic analyses. At the same time I am working with new developments in the crystallographic world, since there were major changes and improvements in this field during the years I stayed at home with my family.

The first months of my Fellowship I overexpressed and purified my target protein AtGSTF12, a glutathione transferase from the model plant *Arabidopsis thaliana*. It is involved in flavonoid transport and my goal is to unravel the structure and mechanism of this protein/flavonoid interaction.

In addition, I have determined the first crystal structure of another member of the GST protein family. *Alopecurus myosuroides* GSTF1 (AmGSTF1) was synthesized by a colleague scientist in the research group of Robert Edwards, School of Biological and Biomedical Sciences University Durham. This cooperation allowed me to become well established in the Durham crystallographic system from crystallisation to data collection, structure solution and refinement. I have successfully used the crystal structure determination pipeline in the Durham protein crystallography laboratory including an Innovadyne Screenmaker crystallisation robot, the X-ray data collection system (Bruker MicroStar H rotating anode equipped with a Proteum 135 CCD detector) and data processing software including the CCP4 package and the COOT visualisation program.

Over the last year I have very much enjoyed rejoining the academic community, the scientific seminars and helpful discussions with colleagues and look forward optimistically to continuing my Fellowship successfully in 2010.

Erica Bithell

This year marked the final phase of my time as a Daphne Jackson Research Fellow. By the beginning of the year I had completed the laboratory and techniques-based parts of my retraining program and, although challenging, my project was yielding publishable results.

In particular, I had been able to demonstrate that, with appropriate care, an initial crystal structure determination could be performed for organic-bearing materials from electron (rather than x-ray) diffraction data, using as an example a hybrid inorganic-organic framework. These compounds are structures in which metal ions act as nodes and linkage is either by inorganic bridges (e.g. metal – oxide – metal) or via organic ligands: they exhibit a wide

Rebecca Carter



Dr. Stefanie Freitag-Pohl



Erica Bithell



"I set myself a goal: to recover the sense of purpose and achievement which I knew should be a feature of a successful scientific career"

Erica Bithell Daphne Jackson Fellow

Our Fellows: 2009



Kimberley Moravec

range of properties from multiferroic behaviour, to selective catalysis and gas adsorption, and have exceptional potential for technological exploitation. I was pleased to have the opportunity to complete my Fellowship by giving an oral presentation of this work at the Institute of Physics Electron Microscopy and Analysis Group Meeting in September.

A major focus of the year was the need to determine my direction once my Fellowship had finished. In common with many Fellows, I had to give serious consideration to whether I wanted to work full-time or part-time, but in the event the issue settled itself when I was offered a 50% part-time contract to concentrate on further development of transmission electron microscopy as a characterisation tool for hybrid frameworks. I was also delighted to be offered a College Fellowship at Murray Edwards College, Cambridge (formerly New Hall) in exchange for a commitment to support their undergraduate teaching in Materials Science.

This gives me a flexible addition to my basic research contract which fits in well with my family commitments, given that the workload is concentrated during term time, and provides a valuable connection to the full range of University activities.

Three years ago I set myself a goal: to recover the sense of purpose and achievement which I knew should be a feature of a successful scientific career. I remain grateful to the sponsors, trustees and staff of the Daphne Jackson Trust for granting me the opportunity to do so.

Kimberley Moravec

I began my Fellowship in June 2009. I expected the Fellowship to take place three miles from my home, but when my Fellowship was approved, the research group had moved to UCL London.

With the support of my extended family, I commute two days per week to London and work from home the remaining time. Although the commute is long, being immersed in UCL's environment has been a fantastically interesting experience.

Most of 2009 was spent becoming familiar with the current research landscape, and rebuilding my programming skills (essential for computer science research). I did this while building data structures for approximate nearest neighbour search, which I am now using in my research.

I have been able to achieve a level of java programming that I have not had before, and become familiar with developer tools available now which make the task of programming much easier.



Kimberley Moravec
Daphne Jackson Fellow

Many advancements have occurred in my field during my maternity break, some methods have fallen out of favour and new problems have been identified, so it has taken a fair bit of work to locate myself back on the 'cutting edge'. I have had to reassess my expectations of what I can achieve part-time and am now concentrating on producing publishable results in one specific area. The Fellowship has been both immensely interesting and very challenging, and I am very grateful for the opportunity to rebuild my skills and re-enter the field of computer science.

Zsuzsanna Bodi

I started my Fellowship in September 2008. After a slightly nervous start the project started to become more and more exciting and promising. In 2009 my work helped us to gain a deeper insight into how higher organisms respond to environmental stress such as lack of nutrients.

Using the model organism bakers yeast, we showed that nearly every second messenger RNA molecule has a methyl group put on one of its adenine molecules in response to starvation. We believe that in downstream processes this molecule behaves as a flag. We think that only those messenger molecules that carry the methyl flag will be used to make proteins. The way in which yeast responds to environmental stress is very similar to that of other higher organisms such as animals and plants or even human. I presented this work at the big international meeting on yeast molecular biology and genetics in July, and submitted a paper that is going to be published in Nucleic Acids Research in 2010. Going to the yeast conference, using the generous extraordinary expenses fund from the Daphne Jackson Trust, was very energising. I met colleagues whom I had not seen for 13 years.

I am very pleased with 2009. I have gained some self-confidence during this year. This was very much needed as at the start of my Fellowship, after a 13 year long career break my self-esteem was very low.



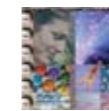
Zsuzsanna Bodi

Trust Summary: 2009

| Fellowships Commenced in 2009 | | | | |
|-------------------------------|------------|----------|-------------------------------------|------------------------------|
| NAME | START DATE | END DATE | HOST | SPONSOR |
| Dr Fiona Grennan Jones | 05/01/09 | 04/01/11 | University of Cardiff | University of Cardiff |
| Dr Barbara Keating | 05/01/09 | 04/01/11 | Edinburgh Napier University | Edinburgh Napier University |
| Dr Farah Siddiqi | 01/03/09 | 28/02/11 | University of Cambridge | MRC |
| Dr Rebecca Carter | 01/04/09 | 31/03/11 | University of Oxford | MRC |
| Mrs Sarah Gooding | 06/04/09 | 05/04/11 | University of Wales Swansea | BBSRC |
| Dr Morag Prach | 04/05/09 | 03/05/11 | Edinburgh Napier University | Edinburgh Napier University |
| Dr Stefanie Freitag-Pohl | 01/06/09 | 31/05/11 | University of Durham | BBSRC/University of Durham |
| Dr Kimberley Moravec | 09/06/09 | 08/06/11 | University College London | Royal Academy of Engineering |
| Dr Pritilata Chivers | 01/08/09 | 31/07/11 | University of Surrey | MRC |
| Dr Judith Slaa | 01/08/09 | 31/07/11 | University of Leeds | NERC |
| Dr Xiaoju Shi | 01/08/09 | 31/07/11 | University of Kent | University of Kent |
| Dr Anne Savage | 01/09/09 | 31/08/11 | University of Abertay (Dundee) | EPSRC |
| Dr Janice Lees | 07/09/09 | 06/09/11 | Wessex Regional Genetics Laboratory | MRC |
| Mrs Caroline Graham | 01/12/09 | 30/11/11 | Heriot-Watt University | Royal Academy of Engineering |

| Ongoing Fellowships in 2009 | | | | |
|------------------------------|----------|----------|---------------------------|------------------------------|
| Ms Nancy Irwin | 05/02/08 | 15/09/10 | University of York | NERC |
| Dr Nerissa Marziano | 05/02/08 | 04/02/10 | University of Kent | BBSRC |
| Dr Medha Pandit | 07/01/08 | 06/03/10 | University of Surrey | EPSRC |
| Dr Harith Saleh | 07/01/08 | 06/01/10 | University College London | University College London |
| Dr Ruth Le Sueur | 09/01/08 | 08/01/10 | University of Durham | Rolls-Royce |
| Mrs Raffaella Tate-Zaccarini | 21/01/08 | 30/03/10 | University College London | University College London |
| Dr Maria del Carmen Alvarez | 01/03/08 | 28/02/11 | University of Hull | NERC |
| Dr Nayna Vyas-Patel | 01/05/08 | 30/04/10 | Imperial College London | Imperial College London |
| Mrs Alma Lopez-Tolman | 28/04/08 | 27/04/10 | University of Reading | BBSRC |
| Dr Svetlana Tishkovskaya | 01/05/08 | 31/04/10 | University of Sheffield | NERC |
| Dr Juliane Struve | 15/06/08 | 14/06/10 | Imperial College London | Imperial College London |
| Dr Kenneth Hamilton | 01/07/08 | 31/06/10 | University of East Anglia | EPSRC |
| Dr Anjana Halder | 14/07/08 | 13/07/10 | University of Southampton | BBSRC |
| Dr Zsuzsanna Bodi | 01/09/08 | 31/08/10 | University of Nottingham | BBSRC |
| Dr Vanessa Cheel | 01/09/08 | 31/08/10 | University of Oxford | EPSRC |
| Dr Judit Molnar | 01/09/08 | 28/02/11 | Pfizer Limited | Pfizer Limited |
| Dr Karin Rengström | 01/09/08 | 31/08/10 | Pfizer Limited | Pfizer limited |
| Dr Changqing Shang | 01/09/08 | 31/08/10 | Aberystwyth University | Royal Academy of Engineering |
| Dr Miriam Watson | 08/09/08 | 07/09/10 | University of Birmingham | STFC |
| Dr Liliana Greger | 01/10/08 | 31/03/11 | University of Cambridge | MRC |
| Dr Joanne Mathias | 01/10/08 | 30/09/10 | University of Kent | University of Kent |
| Dr Christine Rogers | 01/10/08 | 31/09/10 | University of Leeds | NERC |

| Fellowships Finished in 2009 | | | | |
|------------------------------|----------|----------|--------------------------|------------------------------------------------------|
| Dr Erica Bithell | 01/09/07 | 31/08/09 | University of Cambridge | Lucy Cavendish College/ Thriplow Charitable Trust |
| Dr Bindi Brook | 15/10/07 | 14/10/09 | University of Nottingham | MRC |
| Dr Jessica Jenson | 01/05/07 | 30/04/09 | University of Surrey | MRC |
| Dr Sharon Strawbridge | 01/02/07 | 31/01/09 | University of Exeter | The Leverhulme Trust |
| Dr Rupij Vij | 06/09/06 | 30/11/09 | Liverpool University | BBSRC |
| Dr Uliana Bashtanova | 01/01/08 | 30/06/10 | University of Sussex | The Leverhulme Trust |
| Dr Isabelle Durance | 01/01/08 | 31/12/09 | University of Cardiff | NERC |
| Dr Yael Harel | 01/01/08 | 31/07/09 | University of Leeds | BBSRC |



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*This Annual Report has been produced with the
generous support of the Motorola Foundation.*



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