

Daphne
Jackson
Trust



ANNUAL
REVIEW
2015

Welcome

2015 has been my first full year as Chair of Trustees of the Daphne Jackson Trust. Not surprisingly, it has proved to be fast moving, but above all, immensely enjoyable and satisfying.



The Daphne Jackson Trust changes, enables, and empowers the lives of returners to STEM, reinvigorating the UK research base through reintroducing talent, knowledge, and skills back into the workplace. In today's ever-changing, complex, and competitive world, we look to our scientists and engineers to address the great challenges of our time. The Trust is critical in nurturing a diversity of talent that would otherwise be lost to UK science and the wider scientific world. During the last year, the Trust passed the milestone of its 300th awarded Fellowship and the number of new Fellowships awarded hit a record high of 26.

One of the pleasures of being Chair of Trustees is the opportunity to thank all those people who make the Trust's work such a success. We have welcomed new sponsors and host organisations, as well as a number of new Trustees. The Trust benefits from robust and effective governance and focused strategic direction from our Board. New Trustees who joined us during the last year are Sue Angulatta, Director of Research and Innovation Support, University of Surrey; Margaret Jack, former senior manager within higher education; Hilary Lappin-Scott, Pro Vice Chancellor, Research & Innovation, Swansea University; Rebecca Lingwood, Vice Principal, Queen Mary University of London; Stephen Newstead, Emeritus Professor, Plymouth University; Edith Sim, former Dean of Faculty of Science, Engineering and Computing,

Kingston University and Emeritus Professor, University of Oxford; Christopher Whitehead, former Head of School of Chemistry, The University of Manchester; and Lesley Yellowlees, Vice-Principal and Head of College of Science and Engineering, The University of Edinburgh.

I would also like to put on record my thanks to those Trustees who retired from the Trust in 2015 – Philip Greenish, Chief Executive of the Royal Academy of Engineering, who stepped down after serving as a Trustee for over ten years; Nigel Mason, Professor of Molecular Physics, The Open University; and Karen Hassell, Senior Associate Dean of Academic Affairs, California North State University.

I had the pleasure of attending my first Daphne Jackson Trust Research Conference in October and was delighted to meet so many of our current and former Fellows, along with supervisors and sponsors. The day was a huge success and I would encourage you to attend the next conference, which will take place in 2017. Last but not least, I thank Katie and the team for their commitment, energy, resourcefulness and sheer hard work.

Teresa Anderson

Professor Teresa Anderson, MBE,
Chair of Trustees, Daphne Jackson Trust.
Director of the Jodrell Bank Discovery Centre,
The University of Manchester

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AWARENESS AND NEED

The Daphne Jackson Trust in 2015

It gives me great pleasure to introduce the Daphne Jackson Trust's 2015 Annual Review. 2015 was an exciting and packed year for the Daphne Jackson Trust. I will give you a flavour of what we achieved during the year in this introduction but do read on through to understand what a tremendous difference we make to the lives of the researchers we support.

The third Daphne Jackson Trust Research Conference was held at the Wellcome Collection, London, in October and over 140 delegates attended. The Conference was an opportunity to showcase the work of the Trust, with more than 60 current and former Daphne Jackson Fellows attending the event, and 41 presenting either a poster or oral presentation. The conference gave sponsors, and those interested in sponsoring, a chance to interact with our Fellows, chat to staff and Trustees, and get a real feel for the benefits of working with us – there is nothing like meeting a Fellow in person to gain a sense of the difference the Trust makes and the high standards of research we support.

Leading the Way for Returners, the report of the survey of former Daphne Jackson Fellows undertaken during 2015, was launched at the conference. The survey provided a wealth of quantitative and qualitative data on post-Fellowship career pathways, progression, and the contribution of the Trust to the wider UK research base. It underlined the overwhelming success and impact that Daphne Jackson Fellowships have had on researchers who are returning to the workplace following a career break taken for family, caring, or health reasons.

The survey highlighted that over 90% of Daphne Jackson Fellows continue working in STEM for the majority of their



career post-Fellowship, with over 70% remaining in research-based roles for two years post-Fellowship, and 57% for up to five years post-Fellowship. In addition to the survey report, we produced a one page infographic, which gives the key statistics in a very accessible way. We were delighted with the overwhelmingly positive results about how the Daphne Jackson Fellowship restarted and improved Fellows' careers.

I would like to take this opportunity to thank Professor Teresa Anderson MBE, Chair of our Trustees, our other Trustees, all of our sponsors and partners, and the team in the office.

The Trust's achievements are a sterling example of the power of teamwork and collaboration – we would not be the success we are without the contributions of all of our Trustees, partners, supporters, and staff.

We awarded 26 new Fellowships in 2015, the highest number since Professor Daphne Jackson awarded the first Fellowship in 1986. Going forward into next year, 2016 is the 30th anniversary of Fellowships being awarded and we will be celebrating this milestone with a number of events and initiatives. These are likely to include celebratory events and a series of podcasts by Fellows.

2016 promises to be another great year for the Daphne Jackson Trust and I look forward to working with current and future sponsors, supporters, and Fellows as we continue to build on the successes of 2015.

Katie Perry

Dr Katie Perry,
Chief Executive, Daphne Jackson Trust

Tailoring support for individuals

The aim of Daphne Jackson Fellowships is to support researchers within STEM (science, technology, engineering, and maths) and related disciplines to return to research following a career break taken for family, health, or caring reasons.

There is undoubtedly a need for the Fellowships we offer, as evidenced by the fact that the numbers awarded are steadily increasing. We are working very hard to increase awareness of the Trust and the Fellowships and the tremendous benefits offered to returners who choose to engage with the Daphne Jackson Trust.

The researchers who apply to us are unique, and as such their career breaks are individual – the reasons, duration, and circumstances. From the very beginning of the application process, we tailor our approach to the individual needs of these researchers who are seeking to return to fulfilling careers. By using a supportive, yet realistic, approach, researchers can continue applying the skills they developed over a number of years and their training is put to good use.

To highlight how we support our Fellows, we have used case studies of some of those we have worked with in 2015. From the first contact with the Trust, we explore the circumstances around an individual's break and their career goals to personalise how we can support them during the application process and Fellowship.

The diversity of our Fellows is reflected in the diversity of the research they carry out. In this annual review, you can read about research into urban and rural honey bees, protection of marine areas by modelling ocean currents, as well as harnessing nature for healing, and using optical fibres and nanomaterials for detecting hazardous gases. This diversity of research topics is what leads to the exciting and energetic atmosphere at our research conference.

The post-Fellowship evaluation survey conducted during 2015 was designed to collect information from former Fellows to show their career pathways after completing their Fellowship. We were delighted that the survey results highlighted an exceptionally good success rate that we feel is due to the tailored support offered to Fellows in the application process. We are also delighted that so many of our former Fellows are happy to remain in contact with us and offer support to new Fellows coming through the pipeline.



The Fellowship application process

The Daphne Jackson Fellowship application process is unique. Both rigorous and developmental, it supports individuals from the point of enquiry all the way through to the award of the Fellowship.

A dedicated Fellowship Advisor provides ongoing tailored advice on the programme of work and retraining, taking into account the individual's personal circumstances, break(s) from research and career aspirations. The Fellowship Advisor works with the applicant to rebuild self-confidence, preparing them for a successful Fellowship and return to research.

Dr Elizabeth Dickinson (ED), who recently completed the application process for a Daphne Jackson Fellowship at the University of York (co-sponsored by the Royal Society of Chemistry and BBSRC), and her Fellowship Advisor, Dr Katherine Rooke (KR), describe their experiences of the application process.

FINDING OUT ABOUT THE TRUST

ED I completed my PhD and a fixed-term post-doctoral research post at the University of Leeds. My husband and I were keen to start a family, so at the end of my contract I left research and became a stay at home mum giving birth to two sons (in 2010 and 2012). I had always hoped to return and one day I met my PhD supervisor for coffee and she told me about the Trust. I went online that night and couldn't believe my luck when I saw an advertisement for half sponsored Fellowships funded by the Royal Society of Chemistry. This was too good an opportunity to miss. I contacted Dr Julie Wilson at the University of York and after a welcoming and encouraging meeting with her, submitted my application forms to the Trust in May 2015. At that point I had been away from research for six years.

KR I was assigned to be Elizabeth's Fellowship Advisor, so contacted her to arrange a time for a phone interview. In addition to confirming that she met our eligibility criteria, the interview was a chance to discuss her past achievements, goals and future plans; starting her on the process of getting reacquainted with research culture and the current UK research environment.



Dr Elizabeth Dickinson
DAPHNE JACKSON FELLOW



Dr Katherine Rooke
FELLOWSHIP ADVISOR

DAPHNE JACKSON FELLOWSHIP APPLICATION PROCESS

Initial enquiry
Complete CV and details forms from website

Eligibility check
Phone interview to learn more about applicant and initiate planning

Draft proposal
Develop and revise draft research and retraining proposal

Secure funding
The Daphne Jackson Trust secures sponsorship

Interview in person
Meeting Trust staff, explaining the proposed work plan, and receiving feedback

Peer review of proposal

Awards Assessment Panel review

Fellowship awarded

"I had always hoped to return to research after having my children, but didn't know how to go about it and was nervous about whether I even could do it." **Dr Elizabeth Dickinson**

ED I was so nervous about my phone interview – I had so much riding on this being successful – but Katherine put me at ease and made me feel comfortable in openly discussing my hopes and concerns. I was ecstatic when I got the invitation to enter the application process and develop a proposal – but, as I was in a doctor's waiting room, I had to restrict myself to sitting grinning rather than screaming aloud and jumping for joy!

DEVELOPING THE PROPOSAL

ED I met again with Dr Wilson, who had agreed to supervise my Fellowship, we discussed ideas and she gave me lots of information to read. I then had a stab at writing my research proposal. This was really challenging - after a six-year break I did find writing an academic piece of work difficult, but I was relieved that, over time, it did come back to me. Dr Wilson and colleagues at the University of York gave feedback on the research details at this draft stage and Katherine gave helpful constructive criticism that helped me think about the way I was explaining things and the bigger picture.

KR This drafting stage is really important to the returner - doing a review of literature, setting aims, identifying training needs, establishing a plan of work for the duration of the Fellowship and deciding on future employment plans. We place an emphasis at this stage on taking the time to be really specific and realistic about what can be achieved in the time frame of the Fellowship, and what future employment opportunities that opens up. The focus on identifying the individual's needs for refreshing or learning new skills, and their future employment is quite different to research proposals for other organisations. I worked with Elizabeth through a couple of drafts of her proposal before I felt it was at the point where we could progress to the next stage.

ATTENDING AN INTERVIEW AT THE TRUST

KR In October 2015, Elizabeth had a face-to-face interview with the Trust's team of three Fellowship Advisors. Although it was already good, we gave feedback on how to strengthen the proposal even further in preparation for it being sent for peer review and then to the Awards Assessment Panel.

ED Despite my initial fears about attending an 'interview', I quickly realised that it was more of a 'discussion'. Hearing positive comments on my proposal was hugely reassuring and I could see how the suggested changes would improve my proposal (and therefore, ultimately, my Fellowship). For me, the interview really reinforced how desperately I wanted a Fellowship.

FINALISING THE APPLICATION

KR Elizabeth worked with her supervisor to make the final tweaks to the proposal. I then sent it out to two peer reviewers for their comments on the novelty and feasibility of the project taking account of the time available for the project and the applicant's experience. Elizabeth then had the opportunity to respond and answer questions.

ED I was happy to receive overwhelmingly positive comments from the reviewers and then from my supervisor on the response that I had written. By now I was really proud of the application that I had put together and couldn't wait to get started - if only the Awards Assessment Panel made the award!

"Every Fellow has different circumstances around their career break and need to return, but it is always interesting seeing their journey and how the application process empowers them to take ownership of their project. Throughout Elizabeth's Fellowship, I will continue as her advisor to offer support where required." **Dr Katherine Rooke**

RECEIVING THE AWARD

KR Research academics across the STEM subjects sit on our Awards Assessment Panel. They use the research proposal, peer review and response, as well as the applicant's CV and references to make a decision about which projects to award. In 2015, they called approximately one third of applicants for a second interview before a decision was made - this happens if the panel has remaining questions not answered in the papers we send them.

ED Waiting for the outcome, I was so tense. Katherine phoned to personally tell me that I had been awarded a Fellowship in advance of the formal paperwork. I was elated and very emotional. After the call I cried with relief and happiness for a while, before sharing the good news with my family and friends. I feel grateful, a bit shocked, but confident about myself that I CAN still do this. I can't wait to get started on my Fellowship and am feeling ambitious about where it will take me.

Focusing on Fellows

Daphne Jackson Fellowships support individuals to return to research in all areas of science, technology, engineering, and maths. This section focuses on just a few of the many achievements of our Fellows during the year.

Honeybee health linked to diet

Dr Latha Vellaniparambil began her Daphne Jackson Fellowship at The University of Manchester in November 2015, co-sponsored by the BBSRC and NERC.

Latha worked as a botanist in India analysing the genetics of wild species of rice. Her husband had to frequently relocate for his job, including to and within the UK, so Latha took a break from her career to concentrate on their children. Latha's dedication to research persisted, and through enquiries about voluntary work to rebuild her scientific skills, she learned about Daphne Jackson Fellowships.

Plant pollination is important for survival of life on the planet. Bees are an important pollinator of plants, however bee populations have declined recently. In response to this decline, urban beekeeping is increasing and may help improve population size. Urban areas are also interesting because the diversity of plants in urban gardens might benefit bees' health.

During her Fellowship with Dr Jennifer Rowntree and Professor Richard Preziosi, Latha will analyse and compare honey samples and bees from urban and rural beehives to identify which plants bees visited and determine bees' health status. This will reveal links between diet and the health of the bees.

Latha has forged links with the Manchester District Beekeepers Association to arrange collection of honey and bees from 75 different beehives. Beekeepers have shown great interest in her work to learn more about their bees' health.

As Latha settles into her Fellowship, her supervisors and other lab members have been very supportive. Working part-time helps her to balance family commitments and, after a 10-year break, ease back into research culture.



"The Fellowship is the best thing that has happened to me. When I started looking for jobs to return to research, I fell into the awkward gap of not having recent research experience, yet at the same time I was over-qualified for more junior positions."

Dr Latha Vellaniparambil

Trustees, Committee Members and Staff

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(from April 2015, incoming Chair)
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(from April 2015)
Professor Rob Eason
Mr Philip Greenish
(until April 2015)
Ms Wendy Harle
Professor Karen Hassell
(until April 2015)
Mrs Margaret Jack
(from April 2015)
Professor Hilary Lappin-Scott
(from April 2015)
Professor Rebecca Lingwood
(from April 2015)

Professor Nigel Mason
(until November 2015)
Professor Stephen Newstead
(from April 2015)
Dr Mary Phillips
Mrs Janet Purnell
Professor Sibel Roller
(from April 2015)
Professor Ted Smith
Dr Carole Thomas
Professor Christopher Whitehead
(from April 2015)
Professor John Wood
Professor Lesley Yellowlees
(from April 2015)

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Dr Katie Perry
Dr Katherine Rooke
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Dr Carole Thomas
Professor Christopher Whitehead
Professor Nicola Woodrooffe

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Dr Clare Buckee
Dr Sophie Dupont
Professor Rob Eason (Chair)
Dr Liz Elvidge
Professor Gillian Gehring
Professor Lu-Yun Lian
Professor Rebecca Lingwood
Professor Nigel Mason
Professor Stephen Newstead
Dr Pia Ostergaard
Dr Suman Rice
Professor Sibel Roller
Professor Edith Sim
Professor Ted Smith
Dr Carole Thomas
Professor Christopher Whitehead
Professor Nicola Woodrooffe

The Daphne Jackson Trust Research Conference 2015

Maximising potential

The air buzzed with excited conversation at our third research conference on 15th October 2015. Inspiring discussions and the launch of our former Fellows' survey results, accompanied oral and poster presentations showing the range and talent of our Fellows.

The panel discussion that opened the conference – “Returning to STEM – How do we maximise potential?” set the tone for the day – one of positivity and action. Professor Julie Williams, CBE, Chief Scientific Advisor for Wales, joined the Daphne Jackson Trust's Professor Teresa Anderson, MBE, and Dr Katie Perry for the discussion, chaired by our patron Vivienne Parry, OBE.

The conference is a powerful experience for those attending; it makes our mission – to realise the potential of scientists and engineers returning to research following a career break – real for delegates.

Our Trustees and supporters gain an opportunity to see the difference the Trust makes to people's lives and that our Fellows' research is of an inspiringly high standard, despite the challenges connected with a career break.

Fellows presented their work as talks or on posters, and prizes were awarded for the highest quality presentations. Many thanks to our prize judges, who confessed that it was a difficult task choosing who to

award as the quality of the research and presentations was of a very high standard. Thanks also to our patron Maggie Philbin, who presented the prizes.

ORAL PRESENTATIONS

Eight Fellows delivered oral presentations covering a range of topics including developmental dyslexia, applying Google data search algorithms to understand ecosystems, and analysis of the human genome. Judges awarded three prizes for oral presentations:

Overall prize for oral presentations:

Dr Deborah Mitcheson (at the University of Leicester, co-sponsored by the University of Leicester and the BBSRC) for her work on developing a tool to disrupt developmental processes in the malaria parasite in the fight against malaria.

Highly commended: Dr Margaret O'Hara's work (at the University of Birmingham, co-sponsored by the University of Birmingham and EPSRC) on developing more accurate techniques to diagnose liver disease.



Special merit: Dr Anita Dawes (at The Open University, co-sponsored by The Open University and STFC) who spoke about the chemistry of ice and dust particles in space that hold clues to star formation.



@JenIOPDiversity: @PhysicsNews @DaphneJacksonTr Delighted that IOP is sponsoring this year's Daphne Jackson conference - there's a real buzz here #DJTRC15



@GmiG: Talking about impact? Presentations are all about tackling real societal problems. Fantastic Daphne Jackson Fellows, well done! #DJTRC15



@DrAndreaBanham: Really proud of the support @RoySocChem gives to returners #DJTRC15 #diversityinSTEM @DaphneJacksonTr



@GmiG: #DJTRC15 Please don't forget male champions - plenty of us passionately promoting women in science/engineering very loudly

See more on Twitter using #DJTRC15

POSTER PRESENTATIONS

Thirty-three Fellows presented posters.

Overall prize for poster presentations:

Dr Gretel Finch (hosted and sponsored by University of Bristol) was the overall winner through her clear and interesting poster on the factors that affect maternal eating behaviour.

Highly Commended:

Dr Brendan Garrett (at the University of York, co-sponsored by University of York and the Royal Society of Chemistry) “Novel nanogel-based MRI Contrast Agents”

Dr Amanda Noble (at the University of York, sponsored by Prostate Cancer UK) “Phospholipase D - a New Target for the Treatment of Prostate Cancer?”

Dr Emma Pilgrim (at the University of Exeter, sponsored by BBSRC) “Food for thought: The Forest Garden”



“I am delighted to have been able to be at the conference today and it has been excellent to meet Fellows. As a new Trustee I had learnt lots about the Trust but actually meeting the Fellows has been like putting the final piece of the jigsaw in place and I can fully appreciate the benefit of the Fellowships.”

Professor Christopher Whitehead, Trustee

The conference offers an excellent opportunity for networking as we bring together current, future, and former Daphne Jackson Fellows, representatives from universities, learned societies, and sponsoring organisation and feedback from delegates was highly positive.

The event was held at the Wellcome Collection and generously sponsored by the Wellcome Trust, Institute of Physics, Biotechnology Biological Sciences Research Council, Engineering and Physical Sciences Research Council, Medical Research Council, Natural Environment Research Council and Science and Technology Facilities Council.

- 1 Daphne Jackson Fellows 2015.
- 2 Maggie Philbin presenting Dr Debbie Mitcheson an award for best talk.
- 3 Dr Margaret O'Hara fielding questions after her talk on using breath analysis to assess liver health before and after transplant.
- 4 Maggie Philbin presenting Dr Gretel Finch an award for best poster.
- 5 Maggie Philbin presenting to Dr Brendan Garrett for his highly commended poster.
- 6 Panel discussion (L to R): Vivienne Parry, Professor Julie Williams, Professor Teresa Anderson, Dr Katie Perry.
- 7 Enthusiastic discussions over Dr Palat Ushashree's poster.



Protecting marine areas by modelling ocean currents and coral reef connections



Dr Alan Fox began his Daphne Jackson Fellowship in October 2014 after a 12-year break, sponsored and hosted by Heriot-Watt University.

Alan had 10 years' experience of oceanography research studying circulation and currents in the ocean and carrying out numerical modelling of ocean data. When his son began experiencing problems with his health at the age of two, Alan decided to be the stay at home parent while his wife continued working.

During voluntary work for the Scottish Ornithologists' Club, Alan had the opportunity to remain engaged with the issues that impact marine protected

areas. When, at the age of 14, his son's health was well-managed and stabilised, Alan decided to return to research.

Alan has been enjoying his Fellowship research – a project that uses computer modelling of how the larvae of cold water corals disperse on ocean currents. The cold water coral reefs in the North Sea are a habitat for many species and are essential to biodiversity. Analysis of how different reefs are connected allows development of a map of which marine areas to protect.

This research also contributes to understanding how climate change and weather conditions can affect our oceans.

Following his Fellowship, Alan will continue working at Heriot-Watt University with his Fellowship supervisor on a collaborative, EU-funded project to extend the work and study other aspects of deep-sea ecosystems of the North Atlantic. Alan plans to continue working part-time, but increase his work hours.



“Being a stay-at-home dad can be quite an awkward situation, with sometimes little understanding from others, which can hit your self-confidence. However, the rewards of extra involvement with my son as he has grown up were enormously valuable to both of us. Returning to challenging, interesting work which uses my skills and qualifications has boosted my self-esteem.”

Dr Alan Fox



Cold water corals of the North Sea

Optical fibres and nanomaterials for detecting hazardous gases



Dr Divya Tiwari completed her Daphne Jackson Fellowship, sponsored by the Royal Academy of Engineering, in July 2015 and is continuing at Cranfield University as a Research Fellow funded by an EPSRC Platform Grant.

Divya worked as an electronics engineer before her PhD at Cranfield University on nanomaterials. Following her PhD, Divya took a three-year career break after the birth of her second child. She always knew she wanted to return to research and was encouraged to do so by her husband, who is also an academic. Searching for jobs after her career break, Divya could not find postdoctoral positions that offered flexibility or part-time work, so she was delighted when she came across the Daphne Jackson Fellowships.

For her Fellowship research project, Divya applied techniques from her PhD in nanomaterials to developing an optical

fibre-based sensor for monitoring of carbon dioxide gas. Divya developed a high sensitivity chemical sensor for atmospheric monitoring of carbon dioxide at carbon capture and storage sites. She tested nanoscale phenol coatings on the fibre surface of optical fibres for improving sensitivity. These sensors will be used for carbon dioxide detection in technology that reduces the amount of carbon dioxide released when fossil fuels are burned for energy.

Divya's Fellowship supervisor, Professor Steve James, and the Head of Centre, Professor Ralph Tatam, named her as a Research Fellow on an EPSRC Platform

Grant. Divya continues her work part-time, balancing her research with family commitments.

A resource developed by the Royal Academy of Engineering about optics for key stage 3 pupils (ages 11-14) features Divya as a case study.

“I advise aspiring Fellows to keep in touch with research even when they are on their career breaks and look for research active teams who are winning grants.”

Dr Divya Tiwari

Harnessing nature for healing



Following her Fellowship at the University of Surrey, sponsored by the Royal Society of Chemistry, Dr Sianne Schwikkard now works as a full-time lecturer in organic chemistry at Kingston University.

Sianne, an organic chemist, had an active research career in South Africa and the UK before her career break to focus on her children and family. Sianne's PhD supervisor encouraged her to apply for a Daphne Jackson Fellowship so they could work together again. After an 11-year break, Sianne had more flexibility in her family situation and was eager to return to a career she enjoyed.

Plants naturally contain a number of different chemicals, some of which are bioactive – meaning they have

an effect on living things. Sianne searches for chemicals with potential medicinal properties from members of the Hyacinthaceae family of plants. This is like searching for a needle in a haystack, but Sianne discovered a chemical that prevents growth of blood vessels, i.e. antiangiogenic. Antiangiogenic drugs are used to treat cancer and other diseases in which blood vessels grow excessively or inappropriately.

The next step is to produce the chemical synthetically and test it for clinical value.

Sianne secured a full-time lectureship in organic chemistry at Kingston University, a role that also allows her to continue her collaboration with her PhD and Daphne Jackson Fellowship supervisor, Professor Dulcie Mulholland.

Sianne's children are old enough now that the transition from working part time to full time has been fairly straightforward.



Madagascar Rhodocodon flowers – members of Hyacinthaceae

“I would like to thank everyone at the Daphne Jackson Trust and the Royal Society of Chemistry who made my re-entry into work and offer of a lectureship possible. Your work makes a significant difference to people's lives, mine included.”

Dr Sianne Schwikkard

Retaining a talented STEM workforce

We continue to interact with our Fellows after the completion of their Fellowship and in doing so, gain both positive feedback and excellent ongoing information on their subsequent careers. This is when we really see the benefits of a Daphne Jackson Fellowship to the individual, the research knowledge base, and the wider STEM community.

To ensure that we continue to support our Fellows as effectively as we can and to learn the effect the Fellowship has had on their careers, we surveyed former Fellows about their Fellowship experience, and subsequent careers. In addition, we are keen to hear about our Fellows' successes as part of the strong bonds we build with them over the course of the Fellowship process.

We launched the results of the survey at our research conference while Fellows and supporters were present for further discussion – the survey results fitted in well with the panel discussion on maximising potential for returners.

The full survey report and accompanying infographic can be accessed from www.daphnejackson.org. But one thing not covered in the report is the extra achievements of former Fellows, highlighting the wider impact that the Daphne Jackson Fellowship has on a personal level.

"I became a STEM ambassador for schools and obtained a £3000 grant from the Royal Society School Partnership Award in conjunction with a local school." **AT**

"I contributed to my host Department gaining an Athena SWAN Bronze award, as well as putting together their recent application for a Silver award." **KON**

"I developed a programme which is very successful in widening participation in Engineering, Physics and Maths." **LO**

"I was awarded Chartered Engineer Status in 2009." **SK**

Former Fellows had some great advice for current and potential Fellows:

"Do it! It is possible and definitely worth it as you can return to what you love and what you are good at." **AT**

"I am on the funding committee of the Fund for Women Graduates. I am supervising a Daphne Jackson Fellow." **CC**

"I have through publications influenced lobbying carried out by RSPB." **TM**

"I work with NGOs on scientific education programmes. This includes developing methodologies for surveys, training 276 people from five countries on how to survey bat populations, organising events, inviting speakers, and securing sponsorship." **NI**

"Don't underestimate your capabilities just because you are a bit rusty. You are still the clever and capable person you were before your break. You also have a more balanced outlook having spent time out of academia and meeting people who have followed different career paths." **MA**



Working together

The Trust recognises that by working with other organisations, we are able to extend our reach and increase the impact of our work. We actively pursue our vision to develop ongoing Fellowship arrangements with all UK universities and research institutions.

Our mission is to realise the potential of scientists and engineers returning to research following a career break. One way we work towards this goal is to develop new collaborations and strengthen existing ones by delivering results and highlighting best practice.

We are going through an exciting period, as the value of engaging with returners is gaining greater recognition. Consequently, organisations are taking action – by setting up sponsored Fellowships with us, changing policies and grants available to researchers, or creating resources for returners. Although many of the issues around research careers remain, the research landscape is changing and many more organisations are becoming receptive to accepting a non-traditional career path for researchers. The Trust's post-Fellowship survey undertaken in 2015 backs up the message that those who take career breaks can enjoy a successful career for a substantial length of time.

FELLOWSHIP SPONSORS

Our sponsored Fellowships are advertised and competitive, the sponsor selects their preferred candidate, who then proceeds through the Daphne Jackson Fellowship application process.

Many arrangements are for the sponsorship of more than one Fellow and are ongoing, with an agreement to sponsor every year or every two/three years, thus ensuring a university has one or more Daphne Jackson Fellows in place at any time.

In 2015, the Trust welcomed the following organisations who have sponsored

Fellowships for the first time: Genesis Research Trust, Greater Manchester Patient Safety and Translational Research Centre, John Innes Centre, Kingston University, Sheffield Hallam University, University of Central Lancashire, and University of Sussex.

During the year our Chief Executive spent a significant amount of time working to secure new arrangements for the sponsorship of Fellows. We look forward to working with the Dr Hadwen Trust, Durham University, Keele University, The Kennedy Trust, Nuffield Department of Orthopaedics, Rheumatology and Musculoskeletal Sciences at the University of Oxford, Pharmacy Research UK, University College London, University of Oxford, and University of Westminster.

CONTINUING PARTNERSHIPS

The Trust is delighted that many fellowships are made possible by matched or full sponsorship from the research councils: Biotechnology and Biological Sciences Research Council, Engineering and Physical Sciences Research Council, Medical Research Council, Natural Environment Research Council, and Science and Technology Facilities Council, who have extended their funding arrangements with us during 2015.

WORKING WITH OTHERS

In addition to Fellowship sponsorship, there are many more benefits to be gained from working with other organisations. In the last year the Trust has been most grateful to the Royal Society of Chemistry and Institute of Physics for

Laura Woodland (L) of the Biochemical Society and Dr Marjorie Gibbon (R) Daphne Jackson Fellow sponsored by the Biochemical Society



the free use of meeting rooms in Central London. As ever, the Trust is very grateful for the immense amount of support offered by the University of Surrey, who give us a home in the Department of Physics.

One of the ways that organisations are recognising returners is through resources highlighting their value. This may inspire others in similar situations.

From 9-13 November 2015, the Royal Society of Biology held its first 'Returners to Bioscience Week' to celebrate their talents and to raise awareness that they represent an untapped pool of researchers. The Royal Society of Biology's resources included blog posts, podcasts, information about grants and schemes specifically for returners, and social media discussions using #BioReturners on Twitter.

The Trust was represented at conferences and events during the year; such as the Vitae Researcher Development Conference and the Association of Medical Research Charities Annual Conference.

Moving towards our mission

The Daphne Jackson Trust is a lasting testament to the vision of Professor Daphne Jackson, who noticed an appalling waste of talent and investment when qualified and trained scientists failed to return to their careers after a break.

The Chief Executive, staff, and Trustees continue to work together to develop Daphne's mission and vision to eliminate barriers to returners and are delighted with the developments that have been made during the last 12 months.

During 2015, we saw a record number of Fellowships awarded and we partnered with a number of new sponsors. In 2016, this will be complemented by our efforts to increase opportunities for working collaboratively with a variety of stakeholders with an interest in the equality and diversity agenda, while also maintaining and developing existing relationships. A working group will consider ways to enhance the working relationships with Learned Societies and Professional Institutions.



Professor Daphne Jackson, OBE (1936-1991)
A legacy of diversity and empowerment

The Trust is positioned as an expert in the issues and needs of those returning to a career in STEM research after a prolonged break and its expertise is being recognised and called upon more frequently. The Trust intends to build on this success with an increase in policy work, which will in turn lead to a raised level of awareness of the Trust and the Fellowships.

The Trustees are aware of the need to continue to demonstrate the impact of the Fellowships to potential stakeholders. Following on from the launch of the report of the survey of former Fellows, the Trust will produce more statistics and a deeper analysis from the large dataset it now holds. The Trust can use the data to learn about trends in progress after the Fellowship according to research experience prior to career break, length of career break and discipline. This data will help us to evaluate policies to ensure that the Trust supports Fellows effectively during their Fellowship, and that the selection criteria is still appropriate. In addition, there are plans to produce sector or subject specific statistics that will be of great use to many of the stakeholders with whom the Trust works.

The first ever Fellowship, arranged by Daphne Jackson herself, was awarded in 1986, and so 2016 represents the chance to celebrate 30 years of the Fellowships being awarded. The Trust will be planning a range of events and activities to celebrate this milestone.

300TH
Fellowship
awarded in 2015

26
Fellowships
awarded in 2015

Number of
Fellows
supported in...

1986 - 1990	27
1991 - 1995	19
1996 - 2000	39
2001 - 2005	49
2006 - 2010	65
2011 - 2015	109

We rely on the generosity of sponsors and donors to continue our work in helping to remove the barriers STEM professionals face when returning from a career break. We would like to thank all our supporters who make it possible for us to be the UK's leading organisation dedicated to realising the potential of scientists and engineers returning to research following a career break.

This is a list of all sponsors and donors who have sponsored fellowships and made donations since the Trust was established in 1992. Please note: new sponsors are added at the point when a fellowship commences and we would also like to thank the sponsoring organisations, not listed here, that will be supporting Fellows in the coming year.

Sponsors

RESEARCH COUNCILS/PUBLIC FUNDING

Biotechnology & Biological Sciences Research Council	Engineering & Physical Sciences Research Council	Natural Environment Research Council
European Social Fund	Medical Research Council	Science & Technology Facilities Council

UNIVERSITIES AND RESEARCH INSTITUTES

Aston University	Royal Holloway, University of London	University of Hull
Durham University	Sheffield Hallam University	University of Kent
Edinburgh Napier University	University College London	University of Leicester
Heriot-Watt University	University of Aberdeen	The University of Manchester
Imperial College London	University of Bath	The University of Nottingham
John Innes Centre	University of Birmingham	University of Oxford
King's College London	University of Brighton	University of Portsmouth
Kingston University	University of Bristol	University of Sheffield
Loughborough University	University of Cambridge	University of St Andrews
Lucy Cavendish College, Cambridge	University of Cardiff	University of Stirling
NIHR Greater Manchester Primary Care Patient Safety Translational Research Centre	University of Central Lancashire	University of Surrey
Newcastle University	University of Derby	University of Sussex
Northumbria University	University of Dundee	The University of Warwick
The Open University	The University of Edinburgh	University of the West of England
Oxford Brookes University	University of Exeter	University of York
Peninsula Medical School	University of Glasgow	Wellcome Trust
	University of Huddersfield	Sanger Institute

LEARNED SOCIETIES/PROFESSIONAL INSTITUTIONS

Biochemical Society	The Royal Astronomical Society	The Royal Society of Chemistry
Institute of Physics	The Royal Meteorological Society	Society of Chemical Industry
The Physiological Society	The Royal Society	
The Royal Academy of Engineering		

CHARITIES

The Clothworkers Foundation	The Laura Ashley Foundation	National Grid Transco
Diabetes UK	The Leverhulme Trust	The Nuffield Foundation
The Elizabeth Nuffield Education Fund	Make My Day Better	Prostate Cancer UK
Gatsby Charitable Foundation	Medical Research Scotland	Royal Commission for the Exhibition of 1851
Genesis Research Trust	National Endowment for Science, Technology & the Arts	Thriplow Charitable Trust
		Vodafone Group Charitable Trust

Donors

British Pharmacological Society
Buckee Family Trust
Department of Physics, University of Surrey
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GEC
The Goldsmiths' Company
HSBC
ICI
Institute of Physics
L'Oreal
JSF Pollitzer Trust
Motorola Solutions Foundation
Oxford Instruments
PowerGen
The Royal Academy of Engineering
The Royal Society of Chemistry
The Science Council
Smiths Industries
UK Resource Centre for Women in SE
Vodafone
The Wellcome Trust
Zenica

INDUSTRY

BICC
BP
British Gas
British Telecom
Cable & Wireless
Eastern Electricity
Electricity Council
GEC
GlaxoSmithKline
ICI
ICL
Lloyds TSB
Pfizer Limited
Rank Xerox
Rolls Royce
Scotia Pharmaceutical
Shell UK

FELLOWS IN POST ACROSS THE UK IN 2015

Seventy-seven Daphne Jackson Fellows were in post in institutions across the country at some point during 2015. 26 new Fellowships were awarded and 19 Fellows completed their Fellowships.

The map below shows the regional distribution of these Fellows and the facing page gives information about the organisations sponsoring and hosting them.



KEY	H HOST	S SPONSOR
BBSRC		
Biotechnology and Biological Sciences Research Council		
EPSRC		
Engineering and Physical Sciences Research Council		
MRC		
Medical Research Council		
NERC		
Natural Environment Research Council		
NIHR-GMPSTRC		
National Institute for Health Research Greater Manchester Patient Safety Translational Research Centre		
SCI		
Society of Chemical Industry		
STFC		
Science and Technology Facilities Council		
RAEng		
Royal Academy of Engineering		

SOUTH EAST ENGLAND

	Dr Sreelekha Benny H University of Reading S Royal Society of Chemistry S BBSRC
	Dr Mary Board H University of Oxford S Make My Day Better
	Dr Nicky Farrer H University of Oxford S Royal Society of Chemistry S MRC
	Dr Christine Friedeberg H University of Portsmouth S University of Portsmouth S BBSRC
	Dr Mary Gearey H University of Brighton S University of Brighton
	Dr Kathy Kotiadis H University of Kent S University of Kent
	Dr Matt North H University of Surrey S STFC
	Dr Maria Ribera-Vicent H University of Surrey S University of Surrey S RAEng
	Dr Sianne Schwikkard H University of Surrey S Royal Society of Chemistry
	Dr Caroline Scott H University of Oxford S University of Oxford S MRC
	Dr Rachel Wade H Oxford Brookes University S Oxford Brookes University S NERC
	Dr Humin Wan H University of Sussex S University of Sussex
	Dr Kate Ward H University of Sussex S NERC

LONDON

	Dr Elena Boguslavskaya H Brunel University London S EPSRC
	Dr Charlotte Bonneau H Kingston University S Kingston University S Royal Society of Chemistry
	Dr Nokuthula Dube H Imperial College London S RAEng
	Dr Margarita Fernandez-Chas H King's College London S RAEng
	Dr Hanadi Hassan-Nixon H Imperial College London S Imperial College London S EPSRC
	Dr Eleni Makrinou H Imperial College London S Genesis Research Trust
	Dr Maria Marcha H University College London S Royal Astronomical Society
	Dr Jamuna Selvakumaran H Royal Holloway, University of London S BBSRC
	Dr Zoulikha Zaidi H King's College London S King's College London S MRC

WEST MIDLANDS

	Dr Elena Lestini H The University of Warwick S The University of Warwick S Royal Society of Chemistry
	Dr Margaret O'Hara H University of Birmingham S University of Birmingham S EPSRC

SOUTH WEST ENGLAND

	Dr Marjorie Gibbon H University of Bath S Biochemical Society
	Dr Gretel Loten H University of Bristol S University of Bristol
	Dr Helen Morrogh-Bernard H University of Exeter S NERC
	Dr Emma Pilgrim H University of Exeter S BBSRC
	Dr Anna White H University of Bristol S University of Bristol
	Mr Anthony Wynne H Plymouth University S BBSRC

EAST OF ENGLAND

	Dr Batool Ahmed-Omer H University of Cambridge S University of Cambridge
	Dr Anita Dawes H The Open University S The Open University S STFC
	Dr Siobhan Dorai-Raj H John Innes Centre S John Innes Centre S BBSRC
	Dr Sheila Flanagan H University of Cambridge S University of Cambridge
	Dr Johanna Jarvis H The Open University S The Open University S STFC
	Dr Anne Jay H The Open University S The Open University S NERC
	Dr Clare Lawson H The Open University S The Open University S NERC
	Dr Catherine Onley H Wellcome Trust S Sanger Institute S Wellcome Trust S Sanger Institute
	Dr Divya Tiwari H Cranfield University S RAEng

EAST MIDLANDS

	Dr Aman Asif-Malik H University of Leicester S University of Leicester S BBSRC
	Dr Esther Crooks H University of Derby S University of Derby
	Dr Susan Franks H The University of Nottingham S The University of Nottingham S EPSRC
	Dr Li Liu H University of Leicester S University of Leicester S Royal Society of Chemistry
	Dr Tamsin Majerus H The University of Nottingham S The University of Nottingham S NERC
	Dr Deborah Mitcheson H University of Leicester S University of Leicester S BBSRC
	Dr Paula Severi H University of Leicester S University of Leicester S EPSRC

NORTH WEST ENGLAND

	Dr Aisha Baba-Dikwa H The University of Manchester S BBSRC
	Dr Heather Imrie H University of Liverpool H The University of Nottingham S BBSRC
	Dr Hilary Kay H The University of Manchester S Royal Astronomical Society S The University of Manchester
	Dr Yogita Patil-Sen H University of Central Lancashire S University of Central Lancashire S Royal Society of Chemistry
	Dr Marina Ptushkina H The University of Manchester S MRC
	Dr Jane Sarginson H The University of Manchester S NIHR-GMPSTRC
	Dr Kim Woodruff H The University of Manchester S Leverhulme Trust S The Physiological Society
	Dr Latha Vellaniparambil H The University of Manchester S NERC S BBSRC

YORKSHIRE AND THE HUMBER

	Dr Janet Cronshaw H The University of Sheffield S The University of Sheffield S BBSRC
	Dr Julian Daniels H University of Hull S University of Hull S EPSRC
	Dr Brendan Garrett H University of York S University of York S Royal Society of Chemistry
	Dr Clare Gee H University of Leeds S NERC
	Dr Suhaila Mattar H University of Leeds S RAEng
	Dr Amanda Noble H University of York S Prostate Cancer UK
	Dr Gemma Sweeney H University of Huddersfield S University of Huddersfield S EPSRC
	Dr Louise Vickers H Sheffield Hallam University S Sheffield Hallam University

NORTH EAST ENGLAND

	Dr Wenye Tian H Newcastle University S Newcastle University
	Dr Palat Ushashree H Northumbria University S Northumbria University

EASTERN SCOTLAND

	Dr Clare Bird H The University of Edinburgh S The University of Edinburgh S NERC
	Dr Alexandra Di Domenico H The University of Edinburgh S Medical Research Scotland
	Dr Alan Fox H Heriot-Watt University S Heriot-Watt University
	Dr Christel Garcia-Petit H University of Dundee S University of Dundee
	Dr Dimitra Kosta H The University of Edinburgh S The University of Edinburgh S EPSRC
	Dr Dominique Meunier H The University of Edinburgh S Medical Research Scotland
	Dr Lorraine Wilson H University of St Andrews S University of St Andrews S NERC

NORTH EAST SCOTLAND

	Dr Rachel White H University of Aberdeen S University of Aberdeen
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SOUTH WEST SCOTLAND

	Dr Sarah Buchanan H University of Glasgow S Medical Research Scotland
	Dr Natalia Gorenkova H University of Strathclyde S Medical Research Scotland
	Dr Elaine Hunter H University of Glasgow S Medical Research Scotland
	Dr Jharna Paul H University of Glasgow S University of Glasgow

NORTHERN IRELAND

	Dr Ruramayi Nzuma-Mswaka H Queen's University Belfast S SCI
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Trust



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