

**Daphne Jackson Trust
2022 Conference**

Overcoming Barriers and Making an Impact

Thursday 10th November 2022
Royal Society, 6-9 Carlton House Terrace,
London SW1Y 5AG
#DJT2022

**Daphne
Jackson
Trust**



WELCOME

to the 2022 Daphne Jackson Trust Conference

We are delighted to welcome you to our sixth Daphne Jackson Trust conference. It is three years since our last conference, and our working lives have certainly been 'different' in the intervening time!

This makes our theme for this year – Overcoming barriers and making an impact – even more relevant. For some of you, this may be your first Daphne Jackson Trust Conference, for others, you are already seasoned veterans – either way, a very warm welcome to you all and thank you for being here.

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Dr Katie Perry

Today is about creating change – identifying and understanding barriers, carefully deciding on a course of action, putting plans into motion, and measuring and reviewing their impact. It could be something small and individual, or part of a larger collaborative effort to challenge organisations and structures. I know that achieving change is not easy – if it were, it would already have happened by now. But recent history has taught us that change is sometimes forced upon us.

This is what makes Daphne Jackson Fellows pioneers of change. They already have a 'head start' because their lives have undergone such huge changes that they have all had to step away from their careers. Their shared experience of dealing with this, and their resolve to overcome and return to their careers is inspiring. This is what fuels my resolve to continue supporting all research returners no matter where they are from or what they specialise in.

Today, I feel things are different from where they were three years ago. I hear a growing chorus demanding change, a tiresomeness with a lack of action and steadfast resistance to return to 'how things have always been'. I wholeheartedly welcome this and want to see more. Now more than ever is the right time to act as linear careers become less likely. We need to improve the prospects for all returners at all stages of their research careers. If each one of us commit today to doing one thing to help achieve this, we can continue to move towards a research environment where everyone's contributions are welcomed and supported.

I hope you have a fantastic day and enjoy hearing more about the work of the Daphne Jackson Trust and the Fellows we support.

Dr Katie Perry
Chief Executive
Daphne Jackson Trust

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– identifying and understanding
barriers, carefully deciding on a
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Meet the Team

The Daphne Jackson Trust's team consists of 13 members of staff who all work part-time apart from the Chief Executive. All staff work flexibly and are a dedicated and supportive team of talented individuals. The Trust would not be as successful as it is without them. Do try to talk to them during the day.

Roz Casey Fellowship Advisor

Andy Clempson Project Lead

Julie Dallison Senior Fellowship Advisor

Gillian Halket Fellowship Advisor

Elaine Hunt Fellowship Officer

Tim Julier Executive Officer

Fiona Karimjee Finance Officer

Farhat Mahmood Trust Administrator

Helen Marsh Trust Manager

Deirdre McMahon Event Lead

Kay Pearson Fellowship Advisor

Katie Perry Chief Executive

Fran Scott Communications Lead

PROGRAMME

Overcoming Barriers

8.45

Arrival refreshments and registration

SESSION 1:

OVERCOMING BARRIERS

9.30 – 11.00

Session Chair: **Professor Tom Welton**, Chair of the Trust

9.30 – 9.45

Welcome and Introduction to the day

Dr Katie Perry, Chief Executive
Daphne Jackson Trust

9.45 – 10.00

**Keynote speech: Barriers to full participation
in the UK research ecosystem**

Dr Karen Salt, Deputy Director of Culture
and Environment, UKRI

10.00 – 10.15

Daphne Jackson Trust Barriers project

Dr Roz Casey, Fellowship Advisor,
Daphne Jackson Trust

10.15 – 10.30

Experiences as a Researcher

Dr Hamied Haroon, University of Manchester; Chair
of National Association of Disabled Staff Networks
(NADSNI)

10.30 – 11.00

Panel discussion and Q&A

**Dr Roz Casey, Dr Hamied Haroon,
Dr Katie Perry, Dr Karen Salt**

11.00 – 11.30

Morning refreshment break

SESSION 2:

BREAKOUT SESSIONS

11.30 – 12.30

Breakout 1

Fellows – What next?

Former Fellows share their career paths
post Fellowship

Chair: Dr Mario Moustras

**Dr Esther Crooks, Dr Catherine Elton,
Professor Tzany Kokalova,
Professor Pia Ostergaard, Dr Stefania Pasare,
Dr Maria Ribera Vicent, Dr Jenny Rivas Perez,
Dr Helen Thompson, Mr Anthony Wynne**

Breakout 2

Work with us!

How people work with us.
Speakers from a range of stakeholders showcase best
practice and the benefits and impact of working with
the Trust.

Chair: Dr Helen Marsh

**Dr Taryn Bell, Professor Jane Hill,
Dr Georgina Southon, Dr Banaz Star-Shirko,
Dr Lucy Harper**

Making an Impact

12.30 – 14.00

Lunch and poster session

SESSION 3:

FIVE MINUTE FELLOWSHIPS

2.00 – 3.00

Session Chair: Professor Dame Athene Donald,
Patron of the Trust

2.00 – 2.10

Welcome back and summary of breakout sessions

2.10 – 3.00

Informal competition in which six former Fellows have five minutes and two slides to say what their Daphne Jackson Fellowship did for them.

Chair: Mario Moustras

**Dr Nilmini Dissanayake, Dr Julia Hubbard,
Dr Kathy Kotiadis, Dr Rebecca McFadden,
Dr Jenny Spiga, Dr Gemma Sweeney**

SESSION 4:

MAKING AN IMPACT

3.00 – 4.00

Session Chair: Vivienne Parry OBE,
Patron of the Trust

3.00 – 3.20

Keynote speech

Professor Dame Ottoline Leyser, UKRI,
Chief Executive

3.20 – 3.50

Panel discussion and Q&A

Professor Dame Ottoline Leyser,
Dr Julie Maxton, Executive Secretary, the Royal
Society, **Dr Helen Pain,** Chief Executive,
Royal Society of Chemistry, **Professor Tom Welton**

3.50 – 4.00

Prize Giving and Close

SESSION INTRODUCTIONS

1 Session 1: Overcoming Barriers

Our first session explores the barriers that obstruct returners from restarting, progressing and flourishing in their research careers. Professor Tom Welton, Professor of Sustainable Chemistry at Imperial College London and Chair of the Board of Trustees of the Daphne Jackson Trust, will preside over the discussion and invite speakers from different parts of the research ecosystem to present their views on the barriers that have the greatest impact on returners and what can be done to mitigate them. Dr Karen Salt, Deputy Director for R&D Culture and Environment, UKRI will discuss the UKRI view of the barriers that prevent full participation in research and the actions that UKRI are taking to overcome them. Dr Roz Casey,

Fellowship Advisor at the Daphne Jackson Trust, will discuss the findings from a survey that identified the most impactful barriers that returners are facing. Finally, Dr Hamied Haroon, a Research Associate in Biomedical Magnetic Resonance Imaging at the University of Manchester will talk about his experiences as a disabled researcher and what the National Association of Disabled Staff Networks is doing to help overcome barriers.

This will be followed by a panel Q&A during which there will be an opportunity to identify how all of us can take relatively simple actions to reduce barriers and collectively work towards creating a better research ecosystem.



Chair

Professor Tom Welton, OBE

**Professor of Sustainable Chemistry, Imperial College London
and Chair of the Board of Trustees of the Daphne Jackson Trust**

Tom Welton is Professor of Sustainable Chemistry at Imperial College London. He served as Head of the Department of Chemistry from 2007 to 2014 and as Dean of the Faculty of Natural Sciences from 2015 to 2019. He is a Fellow and the former President of the Royal Society of Chemistry. Tom's research focuses on sustainable chemistry, with particular focus on ionic liquids and on solvent effects on chemical reactions. He is the author of over 140 research papers.

The promotion of Equity, Diversity and Inclusion has always been critically important to Tom. Under his tenureship as Head of Department of Chemistry, Imperial College won its first Athena SWAN Gold award. He co-founded the Irene Joliot-Curie conferences, dedicated to addressing barriers to career progression, and to support diversity in the chemical sciences.

Tom is a L'Oréal-UNESCO Male Champion for Women in Science and member of the EDI advisory boards of both UKRI and Elsevier.



Dr Roz Casey

Fellowship Advisor, Daphne Jackson Trust

Roz has been a Fellowship Advisor at the Daphne Jackson Trust since 2019. Prior to joining the Trust, she had a varied career in research in both academic and industrial settings. She worked as a postdoctoral researcher at Imperial College London and the University of Surrey, and as a graduate microbiologist at a drug discovery start-up

which was acquired by AstraZeneca. Roz has also worked in research administration as a Research Information Officer at the University of Surrey. She has a PhD in infectious diseases from the University of Surrey and a BSc in applied biology from the University of Bath.



Dr Hamied Haroon

Research Associate, University of Manchester

Hamied Haroon works in quantitative biomedical magnetic resonance imaging (MRI) at the University of Manchester where he gained his PhD in 2005. He helped to establish the University's Disabled Staff Network in 2007 and became its first Chair. In 2013, Hamied organised the "What Are We Hiding?" national conference for disabled staff, focussing the hidden contribution of disabled people to the economy. There, he launched

the National Association of Disabled Staff Networks (NADSN), a super-network that connects and represents disabled staff networks in universities and colleges, NHS trusts and other sectors, which he currently chairs. As 2021 began, Hamied was co-opted onto the Royal Society's Diversity Committee, delivered the University of Oxford's Annual Disability Lecture and featured in a new children's book called "Superhero Scientists"!



Dr Katie Perry

Chief Executive, Daphne Jackson Trust

Katie became Chief Executive of the Trust in 2011, having previously been Trust Manager. She is a physicist with a background in science communication and holds a degree and PhD in Physics from the University of Surrey, where she worked with Professor Daphne Jackson.

Under her leadership, the Trust has become the UK's leading organisation dedicated to realising the potential of returners to research careers after a career break. She manages

the Trust's activities, working closely with Trustees and developing strategic relationships with stakeholders. Katie sits on a number of national forums focusing on equality, diversity and inclusion. In 2022, Katie was awarded an honorary degree by the University of Surrey in recognition of her outstanding contribution and development of the Daphne Jackson Trust to become the UK's leading charity for returners to research after a career break.



Dr Karen Salt

Deputy Director for R&D Culture and Environment, UKRI

Karen has over 27 years' worth of experience working in and with communities, organisations, charities and governmental bodies. An expert on systems and transformative change, she has managed large research teams and collaborated on a number of research projects, including those involving community members as active researchers and those exploring the governance of technology deployed for the public good. Now based in UKRI, she is the Deputy Director for R&D Culture and Environment, a policy area that brings together teams working on ethics, research integrity, research

and innovation culture, equality, diversity and inclusion and open research. She is also the senior-level policy lead within UKRI on Trusted Research, leading an integrated programme of work to safeguard the security and integrity of international collaborations and partnerships. A sought after thought-leader and speaker, Karen works closely with senior leadership across Government, academia, civil society and industry and contributes to numerous international initiatives focused on embedding inclusive policy making.

2 Session 2: Breakout Sessions

Delegates will be invited to join one of two breakout sessions running in parallel.

Breakout one: Fellows – What next?

We're mixing things up slightly in this session! Nine former Fellows will share their career paths after their Daphne Jackson Fellowship in a speed-networking format. Be prepared to switch tables, talk to different people and be inspired by the incredible stories they have to share! The session will

be coordinated by Mario Moustras, Leadership & Talent Development Coach and founder of Mazamo Coaching and Consulting. This session is aimed at Fellows but can be attended by anyone who would like to know what Fellows might go on to do next.



Chair

Dr Mario Moustras

Coach & Learning & Development Consultant, Mazamo Limited

Mario is a coach, a facilitator and a learning & development consultant. He focuses on learning and development for researchers in leadership and teams development, entrepreneurship, and productivity and wellbeing.

Before becoming a coach, he worked for the Royal Society of Chemistry. Mario has extensive experience of leading teams in technology policy, in supporting small companies and at the academic – business interface. Mario had a PhD in Chemistry, is a Chartered Scientist and a certified member of the International Coach Federation.



Dr Esther Crooks

Lecturer in Forensic Chemistry, University of Derby

Esther graduated in 1998 with a PhD in Physical Chemistry from University of Bristol, then worked for over five years as a research chemist in industry. In 2003, Esther moved to Sweden and worked in Science Communication for seven years before taking

a few years out to care for her young children. Since completing her Daphne Jackson Fellowship in 2015, Esther has continued at University of Derby starting out as a temporary part-time lecturer before taking on a permanent full-time role.



Dr Catherine Elton

Qkine CEO and Founder

Catherine earned her PhD in platelet biochemistry from the University of Cambridge in 2003. After this, she joined the life sciences research tools provider, Abcam, where she was a member of the management team responsible for R&D and product manufacture. Following a career break, she returned to academic research in 2015 as a Daphne Jackson Fellow at the

Wellcome Sanger Institute studying blood-borne parasite vaccines. She co-founded Qkine in 2016 to address challenges in the growth factor and complex protein supply chain and support innovations in stem cell science, regenerative medicine and cellular agriculture; areas she believes underpin future advances in human health and wellbeing.



Professor Tzany Kokalova Wheldon

Director of the Positron Imaging Centre, University of Birmingham

Professor Tzany Kokalova Wheldon (Daphne Jackson Fellow 2011–2013) is a nuclear physicist and Director of the Positron Imaging Centre at the University of Birmingham. She was the driving force behind the measurements that set the world-best limit on the direct decay of the Hoyle state and led work on machine learning techniques for nuclear measurements. At the

Birmingham Cyclotron Facility she has initiated the alpha-gamma programme for establishing cluster structure and supervises eight PhD students. Tzany led an STFC-GCRF grant for training Armenian staff in the uses of cyclotrons. She is an expert consultant for the IAEA, a member of the Helsinki Institute of Physics Science Advisory Board and, from 2023, chair of the UK's STFC project panel (PPRP).



Professor Pia Ostergaard

Professor of Human Genetics, St George's University of London

Following a 3-year career break to bring up her children, Pia was awarded a Daphne Jackson Fellowship at St George's, between 2005 and 2007. Following this she worked as a postdoctoral researcher until appointed as Lecturer in Human Genetics in 2013.

At the Gordon Research Conference on Lymphatics in 2018, she was presented with the Career Achievement Award

in Lymphatic Research. She was also a former Fellowship Adviser at the Daphne Jackson Trust, and since 2017 a Trustee. Most recently she was promoted to Professor in 2020. Prof Ostergaard's research interest mainly lies within Lymphovascular medicine with a focus on the genetic causes of lymphatic failure in Primary Lymphoedema.



Dr Stefania Pasare

Collaborative Training Programme Manager of BARIToNE, University of Dundee

Stefania is a plant science researcher having studied horticulture as an undergraduate and plant genetics as a postgraduate. As a postdoctoral researcher, Stefania investigated apoptosis on cells in *Drosophila* epithelia.

She is currently a Collaborative Training Programme Manager of BARIToNE, a doctoral studies programme focused on barley research based at the University of Dundee.



Dr Maria Ribera Vicent

Senior Teaching Fellow, Imperial College London

Maria completed her Daphne Jackson Fellowship in 2017 at the University of Surrey before joining the Department of Aeronautics at Imperial College London as a Teaching Fellow. Maria graduated in the USA with a BSc in Aerospace Engineering from Saint Louis University, followed by a MSc and PhD in the same subject from the University of Maryland. After relocating to the UK, Maria worked as a Postdoctoral Research Fellow (computational engineering

and optimisation) at the University of Southampton. She credits her excellent team at the Rolls-Royce University Technology Centre, led by Professor Andy Keane, that led her to becoming a local expert in this field. Maria took time away from her career to look after her two young children before returning to research through her Daphne Jackson Fellowship. She was awarded one of the Top 50 Women in Engineering in 2018 (Sunday Telegraph).



Dr Jenny Rivas Perez

Academic Development Consultant, University of Leeds

Jenny is a former Daphne Jackson Fellow and Coordinator for the Trust. After her Fellowship (2005–2007 University of Leeds), Jenny moved into a career in researcher development and her first job was to design a new continuing professional

development programme for postdoctoral staff. 15 years later, Jenny continues to design and implement development programmes for academic staff and postgraduate researchers at the University of Leeds.



Dr Helen Thompson

Assistant Professor, Durham University

Helen graduated from the University of Liverpool with a BSc in Molecular Biology. After working in industry, Helen undertook her PhD at the John Innes Centre, after which she relocated to Italy and worked for an Italian Biotech, lectured at the University of Parma and had her son. Helen

returned to the UK and re-trained as a Secondary School Science Teacher for 13 years. Helen returned to research with a Daphne Jackson Fellowship in 2016 at Durham University. She was recently appointed Assistant Professor (Teaching) in the Biosciences Department.



Mr Anthony Wynne

Senior Data Scientist at SVGV, University of Plymouth

Currently a Senior Data Scientist at SVGV Limited. Leading the development of Business intelligence, AI and Machine learning systems for the Public sector. SVGV leads trusted collaborative clusters formed from specialist small

businesses and Academia to deliver innovation. Prior to this, he worked as a Data Scientist for a global corporation, a small Biotech company and the University of Plymouth, where he undertook his Daphne Jackson Fellowship.

Breakout two: Work with us

This session is aimed at delegates who would like to work with us but may not be aware of the different mechanisms of doing so. We can promise a 'show-and-tell' of the myriad ways you can support us – through sponsorship, hosting or supervising a Fellow, providing expert advice by being a technical referee or supporting us through our events, communications and campaigns. Our speakers from the

University of York will describe their first-hand experiences and motivations of hosting, supervising and sponsoring Daphne Jackson Fellows. You will be in the best of hands in this session as our Trust Manager, Dr Helen Marsh, will chair. This will be followed by a panel Q&A where more bespoke detail can be given about the different aspects of supporting our work.



Chair

Dr Helen Marsh

Trust Manager, Daphne Jackson Trust

Helen was appointed Trust Manager in 2018 after previously working at the Trust since 2013 as a Fellowship Advisor. She works closely with Katie Perry, Chief Executive, and the team, to manage the processes of awarding new and existing Fellowship sponsorship arrangements.

Helen has a strong background in research, having held positions at Imperial College London, the Health Protection Agency and the Pirbright Institute. Helen obtained a degree in Molecular and Cellular Biochemistry from the University of Oxford and holds a DPhil in infectious diseases at the Weatherall Institute of Molecular Medicine, also from the University of Oxford.



Dr Taryn Bell

Fellowship Coordinator, University of York

Taryn is the Fellowship Coordinator at the University of York. She is responsible for coordinating the York Fellowship Programme, which supports current and prospective research Fellows, and aims to support the development of early career researchers at the University. She organises and runs selection processes, peer review

and professional development activities for Fellows throughout the University. Prior to this role, Taryn was a PhD researcher in the Department of Archaeology at York. She is passionate about improving access to academia, and ensuring that early career researchers are able to make the most of their time at York.



Professor Jane Hill

Professor of Ecology, University of York

Jane Hill is Associate Dean for Research (Sciences) and a Professor of Ecology at the University of York where she examines how climate change and habitat loss affect biodiversity, and solutions for enhancing biodiversity, such as increasing habitat connectivity. Jane is an honorary Fellow and President of the Royal Entomological Society, and a trustee

of the British Ecological Society. She received a Marsh/ZSL Award for Conservation Biology in 2011. Jane is passionate about promoting women in science, and lead the York Biology Department to an Athena SWAN Gold Award, as well as running Soapbox Science York.



Dr Georgina Southon

Plant Ecologist, University of York

Georgina is a plant ecologist, and her current research investigates temporal and spatial changes to non-native flora in the UK, in relation to urbanisation and climate. Her botanical journey started in horticulture which whetted her appetite for all things to do with plants and soils. After qualifying, her focus had become more ecological, aligning

with wild plants and their environmental interactions. She completed an MSc in Plant Diversity (University of Reading), honing her botanical skills and knowledge of terrestrial habitats before moving onto a PhD (Imperial College London), researching the impacts of atmospheric pollution on ecosystem structure and function.



Dr Banaz Star-Shirko

Department of Infection Biology, Faculty of Infectious and Tropical Diseases, London School of Hygiene & Tropical Medicine

Banaz completed two Masters degrees, one in Genetics, one in Medical Microbiology, and a PhD degree in Microbiology. Banaz started her working life as a microbiologist and lecturer overseas. She followed a classical scientific career until she took a break to move

to the UK, start a family and look after her children. In 2022, Banaz was awarded a prestigious Daphne Jackson Fellowship and started her role as a Research Fellow at the London School of Hygiene & Tropical medicine.



Dr Lucy Harper

Chief Executive, Applied Microbiology International

After completing a BSc in Medical Biochemistry at the University of Birmingham, Lucy worked in a number of hospital laboratories and university departments. She continued her research career after completing her PhD, also teaching final year students and spending her spare time writing articles for various publications. These experiences led Lucy to realise that her passion for science came from talking about it rather than doing it and when her postdoc contract ended, she took the position of Communications Officer for Med-Vet-Net, the £10m EU FP6 project on zoonotic disease.

Lucy began working for Applied Microbiology International in 2006, initially as Communications Officer. In 2009 she was promoted to Communications Manager. In 2010 Lucy was awarded an MBA with distinction, which she completed part-time at Aston University. After a period of maternity leave, Lucy returned to the AML as Deputy CEO, and was appointed Chief Executive in November 2014, steering the organisation through a number of significant changes including rebranding and name changes, operations, governance and strategy.

3 Session 3: Five Minute Fellowships

This entertaining and engaging session will give all delegates an insight into exactly how a Daphne Jackson Fellowship changes the lives of our Fellows.

Six former Fellows will take up the challenge to use just two slides and five minutes to say what their Fellowship has done for them. The audience will have the chance to vote for their favourite in this unique competition.



Chair

Professor Dame Athene Donald FRS

Master of Churchill College, University of Cambridge

Athene Donald is currently Master of Churchill College, University of Cambridge, and was Professor of Experimental Physics in Cambridge until her retirement in 2020. Her research area was soft matter physics. She has been a long time champion of women and, from 2010–14, was the University's Gender Equality Champion

of THE's. She has been awarded numerous awards for her Physics research, and was the winner of THE's Lifetime Achievement Award in 2019 for her work promoting women in science. She was appointed DBE in 2010 for services to Physics.



Dr Nilmini Dissanayake

Higher Research Scientist, National Physical Laboratory

Nilmini Dissanayake completed her Daphne Jackson Fellowship at the National Physical Laboratory from Oct 2018 – Sep 2021 and was subsequently appointed as Higher Research Scientist within the Advanced Engineering Materials group. Her research areas include Life Cycle Assessment, carbon fibre recyclability and durability of natural fibre composites. She currently acts as the chair

for IOM3 Southern Counties Materials, Minerals and Mining Society, committee member for IOM3 Natural Materials Group, sustainable working group for the British Composites Group and represents NPL at a British Standards Institute (BSI) committee. She gained Chartered Scientist (CSci) accreditation from The Science Council in 2022.



Dr Julia Hubbard

Programme Leader Drug Discovery, Newcastle University

Julia Hubbard is a program leader in drug discovery at Newcastle University since 2019. She leads a small research team dedicated to helping address the global problem of microbial resistance to antibiotics.

Before this, she was a Daphne Jackson Research Fellow at The Francis Crick Research Institute in London where she worked in Steve Gamblin's team.

She had previously enjoyed a long scientific career in the pharmaceutical industry at GlaxoSmithKline (1991–2015) but that was unfortunately interrupted by health issues in 2010.



Dr Kathy Kotiadis

Professor in Operational Research, University of Kent

Kathy Kotiadis is a Professor in Operational Research (OR) at the Kent Business School, University of Kent. She is a former Daphne Jackson Fellow (2014–2016). Her main research interests include simulation modelling applied to a number of contexts including health care and the development of the simulation methodology

through Problem Structuring Methods. In 2009 she was awarded the KD Tocher Medal by the UK OR society. She is a founding member of Women in OR and Analytics (WORAN) of the UK OR Society. She is an EPSRC college member and the co-EiC of Health Systems (journal).



Dr Rebecca McFadden

Team Leader Space Situational Awareness, Deimos Space UK, University of Oxford

Dr Rebecca McFadden currently leads the Space Situational Awareness team at Deimos Space UK. She is responsible for the development of space safety products covering space surveillance and tracking, resident space object characterisation, space environment modeling and collision risk assessment. She was previously a Daphne Jackson Fellow in the Machine Learning Research Group

at the University of Oxford, where she applied machine learning algorithms to radio astronomy data. She also has a PhD in Astrophysics from the University of Melbourne and has over 15 years of expertise in machine learning, communications and signal processing research applied to projects in defence, astrophysics, radio astronomy, space safety and sustainability, and Earth Observation.



Dr Jenny Spiga

Assistant Professor, University of Warwick

Dr Jenny Spiga is Assistant Professor at the Physics Department of the University of Warwick, which she joined in 2017 as a Daphne Jackson Fellow. She has a PhD in Physics from the University of Cagliari, Italy, and a long-lasting collaboration with the ESRF, France. Her research interests are in the area of medical physics, where she

contributes to the advancement of Microbeam Radiation Therapy, an innovative preclinical radiotherapy technique suitable for treating brain tumours in young children. She is member of the International Association for Women in engineering and science, and promotes initiatives for advancing career opportunities for women in science.



Dr Gemma Sweeney

Enterprise and Equality Manager, University of Huddersfield

Gemma Sweeney was a Daphne Jackson Research Fellow at the University of Huddersfield between 2013 and 2015, working on organic chemistry catalysis. Following

her Fellowship, she was employed by the University of Huddersfield, firstly as a Business Development Officer, and currently as Enterprise and Equalities Manager.

4 Session 4: Making an Impact

Our final session, chaired by Vivienne Parry, Patron of the Trust will be focused on the impact of Daphne Jackson Fellowships, both in terms of research progression and the wider societal benefits. We will be joined by Professor Dame Ottoline Leyser, Chief Executive of UKRI who will outline the impact that UKRI funding has made to Daphne Jackson Fellowships and the role that UKRI plays in supporting further opportunities through funding, collaboration and networks. A panel Q&A discussion will

follow with Dr Helen Pain, Chief Executive of the Royal Society of Chemistry, Dr Julie Maxton, Executive Secretary of the Royal Society and Professor Tom Welton, Professor of Sustainable Chemistry at Imperial College London and Chair of the Board of Trustees of the Daphne Jackson Trust. The panel will share their thoughts on how we can all work together to maximise the impact of initiatives aiming to address the UK research talent shortage and the creation of diverse and inclusive research environments.



Chair

Vivienne Parry OBE

Writer, Broadcaster & Facilitator

A scientist by training, Vivienne Parry hosts medical programmes for BBC Radio 4, writes widely on health, presents films, facilitates many high level conferences and debates and trains young researchers. She also has a part-time role as head of engagement at Genomics

England which delivered the 100,000 Genomes Project. She recently completed her term as a board member of UK Research & Innovation (UKRI) which is responsible for the UK's research and innovation strategy.



Professor Dame Ottoline Leyser

Chief Executive, UKRI

Professor Dame Ottoline Leyser is the Chief Executive of UK Research and Innovation (UKRI) and Regius Professor of Botany at the University of Cambridge. UKRI brings together the UK's Research Councils, Innovate UK and Research England, operating with a combined budget of more than £8bn per year.

Ottoline has a long-term interest in research culture and has worked extensively in science policy. She is a Fellow of the Royal Society, a Member of the Leopoldina and EMBO, and an International Member of the US National Academy of Sciences. In 2017 she was appointed DBE for services to plant science, science in society and equality and diversity in science.



Dr Julie Maxton CBE

Executive Director of the Royal Society

Dr Julie Maxton is the Executive Director of the Royal Society, the first woman in 350 years to hold the post. Before taking up this position at the Royal Society in 2011 Julie was Registrar at the University of Oxford, the first woman in 550 years in the role. She is an Honorary Fellow of University College Oxford, a Bencher of the Middle Temple, a Freeman of the Goldsmith's Company and a Board member of Sense about Science. In the past she has also been on the Boards of the Alan Turing Institute, Blavatnik School of Government in Oxford, Haberdashers Aske's School (Elstree), Engineering UK, Charities Aid Foundation and The Faraday Institute. Originally

trained as a barrister at the Middle Temple, Julie combined a career as a practising lawyer with that of an academic, holding a number of senior academic positions, including those of Deputy Vice Chancellor, Professor and Dean of the Faculty of Law at the University of Auckland, New Zealand. Academic and other recognition Julie has received include a CBE (2017) and Honorary Doctorates from the Universities of Huddersfield, Warwick, Canterbury, Hull, Bristol and Brunel. She is the author of several books and numerous articles concerned with trusts, equity, commercial and property law.



Dr Helen Pain

Chief Executive, Royal Society of Chemistry

Helen joined the Royal Society of Chemistry after completing a degree and PhD in Chemistry. She is a Chartered Chemist and a Chartered Scientist. At the RSC, she has led many of its strategic functions and was appointed Deputy CEO in 2015. Helen is a champion for the profession and has commissioned bold campaigns such as Breaking the Barriers and work to support Technicians.

She took up the role of Acting Chief Executive of the Royal Society of Chemistry in January 2020 and was appointed Chief Executive in June 2021.

From 2018 – 2021 Helen was Chair of the Science Council, a UK organisation for the advancement of the science profession and now chairs the Technician Commitment Steering Board.

FELLOWS' POSTERS

In this section of the programme, you will find details of all the current and recently finished Daphne Jackson Fellows who are presenting a poster. The poster competition forms an essential component of the conference and prizes will be given for the best poster presentations.

This year we have 50 posters which are numbered 1 to 50 and ordered alphabetically by surname as marked below. The posters will also be laid out in the room in this order.

A new feature for this year's conference are presentations of iconic objects which are related to the Fellows' research. We have five objects ranging from pelvic mesh to an ancient rock from space. A special prize will be given to the best presentation of the iconic object.

All the Fellows have written an abstract to accompany their poster or object. Please scan the QR code which will take you to an electronic version of the abstract book which is to be found on our website www.daphnejackson.org

All the posters and objects will be in the dining room downstairs, please take the time to come and look at them and to meet the Fellows presenting them.

We look forward to seeing you there!



Scan above to be taken to the Abstract Book Page on our website.



Dr Rawaz Ahmed
Poster

With a BSc in Chemistry from Sulaimaniya University, Kurdistan, Rawaz was awarded a scholarship to undertake an MSc in Petroleum Engineering at Teesside University. Her scholarship was extended to fund a PhD in Chemical Engineering, also undertaken at Teesside University, specialising in heterogeneous catalysis. This led to a research post at Teesside, until she returned to Kurdistan where she worked as a lecturer and a researcher looking at oil and gas.

Now returning to research after a four year career break, Rawaz's project is entitled: **Newly-developed catalysts for environmentally friendly catalytic processes.**

Her Fellowship, sponsored by the Royal Society of Chemistry and Society of Chemical Industry is due to finish in 2023.

Host:
De Montfort
University

Sponsors:
Society of
Chemical Industry
and the Royal Society
of Chemistry



Dr Wafaa Aly
Poster

Wafaa Aly is a Daphne Jackson Fellow at the University of Reading in the Department of Biomedical Sciences. Wafaa has a degree in Biochemistry and an MSc in Microbiology from Sohag University, Egypt, where she became an Assistant Lecturer. After obtaining a highly competitive scholarship for a PhD, which she carried out at the University of Reading, she returned briefly to Egypt to work as a Lecturer at Sohag University before returning to Reading.

Wafaa is returning to research after a nine year break and her Fellowship, due to finish in 2023, is sponsored by the BBSRC.

Her research project is entitled: **Role of MbFA in intracellular survival of Burkholderia multivorans in macrophages.**

Host:
University of Reading

Sponsor:
BBSRC



3

Host:

University of Glasgow

Sponsors:

EPSRC

Dr Ali Alzwayi**Poster**

Ali Alzwayi is a Daphne Jackson Fellow at the University of Glasgow in the James Watt School of Engineering, in the Systems, Power and Energy Research Division.

With a BSc in Mechanical Engineering from Sabha University in Libya, Ali worked in industry before returning to Sabha University to teach engineering to undergraduates, alongside studying for an MSc looking at solar energy systems. After gaining promotion to Lecturer, Ali was awarded a scholarship from the Libyan government to study for a PhD in the UK, which he

undertook at the University of Glasgow, publishing several first author papers.

Returning to research after a break of seven years, Ali is developing a new thermal cooling system for electric car batteries to help make them more efficient.

The EPSRC is sponsoring Ali's Fellowship.

Due to be completed in 2024, his project is entitled: **A Novel Thermal Management System of Cylindrical Battery Cells Using Cooling Fins.**



4

Host:

University College London

Sponsors:

Royal Society of
Chemistry and
EPSRC

Dr Sobia Ashraf**Poster**

Sobia Ashraf is a Daphne Jackson Fellow at University College London in the Department of Chemistry.

As an inorganic chemist with a degree, MSc and PhD in Chemistry from University College London, Sobia has held post doctoral positions at the University of Oxford and the University of Liverpool and has many publications.

Returning to research after her ten year career break, Sobia proposes to develop a device for splitting water into hydrogen and oxygen for clean energy production.

Her Fellowship, due to finish in 2023 is sponsored by the Royal Society of Chemistry and the EPSRC.

Her research project is entitled: **Atomic Layer Deposition of Single Platinum Atom Catalysts for Photoelectrochemical Water Splitting.**



5

Host:

Birkbeck University
of London

Sponsor:

Birkbeck University of
London and MRC

Dr Samara Banno**Poster**

Samara Banno is a Daphne Jackson Fellow at Birkbeck University of London in the Department of Psychological Science.

With a BSc and MSc from Al Nahrain University in Iraq, Samara's background is in general information systems and her interest lies in developing intelligent cognitive computational and AI models. Having worked both as a lecturer and in industry, she completed her PhD at the University of Portsmouth/School of Engineering.

Now returning to research after a four year break Samara's Fellowship is sponsored by Birkbeck University of London and the Medical Research Council (MRC).

Due to finish in 2024, her project is entitled: **Developing an Intelligent Diagnosis Model for Early Awareness of Brain Deterioration in Dementia.**



6

Host:

University of York

Sponsor:

University of York
and BBSRC

Dr Fiona Bate**Poster**

Dr Fiona Bate was a Daphne Jackson Fellow at the University of York in the Department of Mathematics.

Fiona did an MSci in Theoretical Physics and Applied Mathematics at the University of Birmingham. Completing a PhD at the University of Birmingham which contributed to the development of fuel cell technology, Fiona then worked in industry as a mathematical modeller.

Returning to research after an eleven year career break this two year Fellowship was sponsored by the University of York and the Biotechnology and the BBSRC. Her fellowship was completed in 2022. Fiona's project was entitled: **Optimising Biofuel Production in Spatial Models of Wastewater Treatment.**



7

Dr Katherine Baxter

Poster

Katherine Baxter is a Daphne Jackson Fellow at the University of Strathclyde in the Strathclyde Institute of Pharmacy and Biomedical Sciences.

Katherine has a PhD in Cell Signalling from the University of Dundee. Post doctorally she has worked both in industry, as well as for NHS Scotland and at the University of Glasgow studying UVB photoreception in plants.

Katherine's three-year Fellowship is sponsored by Medical Research Scotland and is due to finish in 2023.

Returning to research after a six year break, her project is entitled: **Structural investigation of the *Candida albicans*/*Staphylococcus aureus* dual biofilm by Mesolens 3D imaging.**

Host:
University of
Strathclyde

Sponsors:
Medical Research
Scotland



8

Dr Louise Beattie

Poster

Louise Beattie is a Daphne Jackson Fellow at the University of Glasgow in the Institute of Health and Wellbeing.

With a PhD in Psychology from the University of Glasgow, Louise is returning to research after a four year career break to investigate sleep and sleep-associated emotion across the early psychosis trajectory, and to identify options

for translating therapeutic results into actions within the National Health Service.

Louise's Fellowship is due to finish in 2023 and is sponsored by Medical Research Scotland.

Her research project is entitled: **Sleep and emotional distress in early psychosis.**

Host:
University
of Glasgow

Sponsors:
Medical Research
Scotland



9

Dr Tanweer Beleil

Poster

Tanweer Beleil is a Daphne Jackson Fellow at Imperial College London, in the Institute of Reproductive and Developmental Biology. Tanweer is a researcher in the field of developmental biology.

Tanweer's career break lasted ten years, prior to which she studied Zoology at the University of Khartoum, and carried out her PhD in Reproductive Molecular Biology at the University of Cambridge.

Tanweer's Fellowship is sponsored by Imperial College London and the Genesis Research Trust.

Her research project is entitled: **The role of the reproductive tract microbiome in preterm prelabour rupture of membranes (PPROM)** and her Fellowship is due to finish in 2022.

The Department of Metabolism, Digestion and Reproduction at Imperial College London also included Tanweer in an article for their **Postdoc Appreciation Week 2020.**

Host:
Imperial College
London

Sponsors:
Genesis Research Trust



10

Dr Marilena Belesi

Poster

Marilena Belesi is a Daphne Jackson Fellow in the School of Physics and Astronomy at the University of Nottingham.

Having studied in Greece for her BSc and Masters in Physics, Marilena completed a PhD in experimental condensed matter physics at the NCR Demokritos Institute of Nuclear and Particle Physics.

Working in Nuclear Magnetic Resonance, Marilena has held post doctoral positions in organisations across the world. These include Iowa State University, USA and European Institutions, including Pavia University (Italy),

Leiden University (the Netherlands), the National Centre of Scientific Research (Athens), the Ecole Polytechnique Federale (Switzerland) and the Leibniz Institute for Solid State and Materials Research (Germany).

Due to finish in 2023 Marilena's Fellowship is sponsored by the University of Nottingham and the EPSRC.

Returning to research after a six year career break her project is entitled: **Advancing Dynamic Nuclear Polarization in Metal Organic Frameworks.**

Host:
The University
of Nottingham

Sponsors:
University of
Nottingham
and EPSRC

11



Dr Zana Bikbajeva

Poster

Host:
University
of Birmingham

Sponsors:
EPSRC and
University
of Birmingham

Dr Zana Bikbajeva is a Daphne Jackson Fellow at the University of Birmingham in the School of Physics and Astronomy. Zana is a chemical and environmental engineer and has a degree in Environmental Engineering from Vilnius Gediminas Technical University, Lithuania and a PhD in Chemical Engineering and Analytical Science from The University of Manchester.

Now returning to her career after a four year break, her project is entitled: **Improving the Trackers and Tracers for PET scans.**

Due to finish in 2022, her Fellowship is sponsored by the University of Birmingham and the EPSRC.

12



Dr Jay Biernaskie

Poster

Host:
John Innes Centre

Sponsors:
BBSRC and JIC

Jay Biernaskie is a Daphne Jackson Fellow at the John Innes Centre in the Department of Crop Genetics.

Jay's background is in evolutionary biology. He has a PhD in Ecology and Evolutionary Biology from the University of Toronto, Canada and has worked as a postdoctoral researcher at the University of Oxford, where he also held a BBSRC Future Leaders Fellowship.

Now returning to research after a two year break, his Fellowship project is entitled: **Testing alternative designs for cooperative and productive wheat crops.**

Due to finish in 2023 he is sponsored by the John Innes Centre and the BBSRC.

13



Dr Asme Boussahel

Poster

Host:
University of Bristol

Sponsor:
Animal Free Research UK

Asme Boussahel is a Daphne Jackson Fellow at the University of Bristol in the The School of Cellular and Molecular Medicine.

Originally from Algeria, with an MPharm and PhD in Pharmacy from the University of Nottingham, Asme is a researcher in drug delivery and tissue engineering. Working as a postdoctoral research associate at the University of

Portsmouth she researched nanoparticle-assisted delivery of drugs across the blood-brain barrier.

Returning to research after a five year break, her Fellowship is sponsored by Animal Free Research UK.

Her project is entitled: **A Perfused Microfluidic In-Vitro Model of the Human Subcutaneous Tissue for Bioavailability Assessment** and is due to finish in 2024.

14



Dr Winnie Chan

Poster

Host:
University
of Birmingham

Sponsor:
Kidney Research UK

Winnie Chan is a Daphne Jackson Fellow at the University of Birmingham in the School of Sport, Exercise and Rehabilitation Sciences.

Winnie has a BSc in Nutrition from King's College, University of London, an MSc in Food Technology, and a Diploma in Dietetics. Winnie initially worked as a dietitian, then as her interest in research grew, she went on to do a PhD in Sport, Exercise and Rehabilitation Sciences at the University of Birmingham studying the

Effects of Body Composition on Clinical and Quality of Life Outcomes in Kidney Transplant Recipients.

Returning to research after a six year career break, Winnie's project is entitled: **A Combined Home-Based Exercise and Nutritional Approach to Improve Frailty Status in Kidney Transplant Recipients: A Randomised Controlled Feasibility Study.**

Her Fellowship is sponsored by Kidney Research UK and is due to finish in 2023.

15



Dr Chao-Hui Chang

Poster

Host:

University of Oxford

Sponsors:

The Kennedy Trust for Rheumatology Research

Chao-Hui Chang is a Daphne Jackson Fellow at the University of Oxford in the Nuffield Department of Orthopaedics, Rheumatology and Musculoskeletal Sciences (NDORMS).

With a Master's degree from the National Yang-Ming University, Taiwan, Chao-Hui completed her PhD at the University of Oxford. She is now returning to research after a career break of five-years.

Chao-Hui's research project is entitled: **Identifying and characterising novel cofactors that mediate TGF β -Smad2/3 signalling** and she will complete her Fellowship in 2022.

Her Fellowship is sponsored by The Kennedy Trust for Rheumatology Research.

16



Dr Mousumi Chatterjee

Poster

Host:

Brunel University London

Sponsor:

Brunel University London

Mousumi Chatterjee is a Daphne Jackson Fellow at Brunel University London in the Institute of Environment, Health and Societies (IEHS).

Mousumi is a biogeochemist having studied toxic metals and persistent organic pollutants in estuarine sediments during her doctoral and post-doctoral work in India. With experience as a researcher and lecturer, and with

many publications, she is returning to research after a five year break.

Her project is entitled: **Assessment of the risks from combined exposures to heavy metals and other compounds leading to developmental neurotoxicity.**

Due to finish in 2023, her Fellowship is sponsored by Brunel University London.

17



Dr Andy Clayton

Poster

Host:

Imperial College London

Sponsors:

MRC and Imperial College London

Dr Andy Clayton is a Daphne Jackson Fellow and Research Associate in the Department of Metabolism, Digestion and Reproduction at Imperial College London.

Andy was previously a PhD student and post doctoral researcher at Imperial College and has returned to work in research after an 11-year career break.

Andy's 3-year Fellowship started in May 2021 and is sponsored by Imperial College London and MRC.

18



Dr Lisa Cole

Poster

Host:

University of Aberdeen

Sponsor:

NERC

Lisa Cole is a Daphne Jackson Fellow at the University of Aberdeen in the School of Biological Sciences.

An experienced soil scientist with a varied portfolio of skills, Lisa completed her BSc in agricultural science at the University of Newcastle and went on to do a PhD at the University of Manchester on a CASE studentship with an industrial partner, investigating carbon release from soils. This led to postdoctoral research positions at Lancaster University and the University of York, and a post as the

soil community ecologist at the UK Centre for Ecology and Hydrology (UKCEH) in Aberdeenshire.

Returning to research after a break of 14 years, Lisa's two year Fellowship is sponsored by the NERC.

Lisa's research project is entitled: **Examining soil carbon response to land use change through the lens of microbiome traits and her Fellowship is due to finish in 2023.**

19



Dr Bill Deakin

Poster

Bill Deakin is a Daphne Jackson Fellow in the Department of Biology at the University of York.

With a PhD from Durham University, Bill is a molecular microbiologist looking at bacteria that interact with plants. He held a post-doctoral research position in Geneva before a ten year career break.

Host:

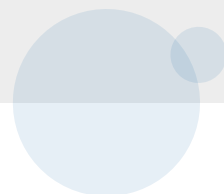
University of York

Sponsors:

BBSRC and University of York

His two year Fellowship is sponsored by the University of York and the BBSRC.

Bill's research project is entitled: **Development of Multi-Functional Bacterial Bio-Fertilizer** and he is due to finish his Fellowship in 2022.



20



Dr Naomi Dyer

Poster

Naomi Dyer is a Daphne Jackson Fellow at the Liverpool School of Tropical Medicine in the Department of Vector Biology.

After completing a BA in Natural Sciences at the University of Cambridge, Naomi went on to do her PhD at the Max Plank Institute of Molecular Cell Biology and Genetics at the University of Dresden in *Drosophila* genetics. This was followed by several postdoctoral positions at the Liverpool School of Tropical Medicine (LSTM).

Host:

Liverpool School of Tropical Medicine

Sponsor:

BBSRC

Returning to research after a five year career break and now retraining in bioinformatics and machine learning, Naomi's project is entitled: **Investigation of cis-regulation of metabolic insecticide resistance related gene expression in *Anopheles gambiae* using allelic imbalance.**

Due to finish in 2023, her Fellowship is sponsored by the BBSRC.

21



Dr Marwa Elhariry

Poster

Marwa Elhariry is a Daphne Jackson Fellow at the University of Central Lancashire in the School of Forensic and Applied Sciences.

Marwa graduated with a degree in Pharmaceutical Sciences from Cairo University and went on to complete her PhD in Phytochemistry from the same institution, whilst working part-time as an analyst for the National Organization for Drug Control and Research (NODCAR) in Cairo.

Host:

University of Central Lancashire

Sponsor:

BBSRC and University of Central Lancashire

Her Fellowship is sponsored by the University of Central Lancashire and the BBSRC.

Returning to the lab after a career break of three years Marwa's research project is entitled: **Use of brain penetration and in silico docking of tau aggregation inhibitors as a tool for discovery of new therapeutics against Alzheimer's disease**, which she is due to complete in 2022.

22



Dr Fern Findlay-Greene

Poster

Fern Findlay-Greene is a Daphne Jackson Fellow at Edinburgh Napier University in the School of Applied Sciences.

Fern is returning to research after a four-year career break and has a PhD, also from Edinburgh Napier University.

Host:

Edinburgh Napier University

Sponsor:

Medical Research Scotland

Fern's research project is entitled: **Host Defence Peptides as novel modulators of autophagy in Inflammatory Bowel Disease** and she will complete her Fellowship in 2022. Her Fellowship is sponsored by Medical Research Scotland.

23



Dr Sreepriya G

Poster

Sreepriya is a Daphne Jackson Fellow at The University of Edinburgh in the School of Informatics. After studying mathematics at the Indian Institute of Technology and Computer Science at the University of Cambridge, Sreepriya went on to do her PhD in automated reasoning at The University of Edinburgh.

Host:

The University of Edinburgh

Sponsors:

EPSRC and The University of Edinburgh

Returning to research after a seven year break and due to finish in 2023, Sreepriya's project is entitled: **Verification of machine learning algorithms using symbolic logic.**

Her Fellowship is sponsored by The University of Edinburgh and the EPSRC.

24



Dr Samantha Garrard

Poster

Samantha is a Daphne Jackson Fellow at the University of Plymouth in the International Marine Litter Research Unit. With a PhD and background in marine biology, Samantha's research has focused on understanding how human activities impact on marine species and communities.

Hosts:

Plymouth Marine Laboratory and University of Plymouth

Sponsors:

NERC

Returning to research after five years, her project is entitled: **Does shape matter? Establishing the impact of environmentally relevant concentrations of microplastic fibres and fragments on a model invertebrate community.**

Due to finish in 2023, her Fellowship is sponsored by the NERC.

25



Dr Maria Hernandez-Soriano

Poster and Object

Maria Hernandez-Soriano was a Daphne Jackson Fellow at the John Innes Centre (JIC) in the Department of Metabolic Biology.

Maria has a background in environmental science and completed her PhD at KU Leuven, in Belgium. Having held post-doctoral positions in Belgium, USA and Australia, Maria returned to research after a three year break

Host:

John Innes Centre

Sponsors:

John Innes Centre and BBSRC

and her current research interests focus on microbial processes in the rhizosphere for nutrient delivery.

Her project was entitled: **Improving nitrogen use efficiency by increasing crop control of nitrification** and this two year Fellowship was sponsored by the John Innes Centre and the BBSRC.

26



Dr Victoria Herridge

Poster

DrTori Herridge is a Daphne Jackson Fellow at the Natural History Museum, London.

With a BSc in biology from University College London and an MSc in taxonomy and biodiversity from Imperial College London, Tori returned to University College London on a scholarship to study for a PhD in Evolutionary Biology. Realising the need for improved fossil dating, Tori successfully secured funding to work as a co-investigator at the Natural History Museum which she carried out alongside her PhD.

Host:

Natural History Museum

Sponsor:

Anatomical Society

Following further research, Tori went on to co-found TrowelBlazers, a women-in-science activist collective and began a parallel freelance career in Science broadcasting, developing and presenting factual television series.

As an expert on fossil elephants, particularly those species which lived in Europe during the Ice Age, Tori is returning to research after a four year career break. Her project is entitled: **Evolution of Elephant molar morphology**

Due to finish in 2023, this Fellowship is sponsored by the Anatomical Society.

27



Dr Juliet Holdstock

Poster

Dr Juliet Holdstock was a Daphne Jackson Fellow at Royal Holloway University of London, in the Department of Psychology.

With a PhD in Psychology from the University of St Andrews, Juliet's interests lie in human memory, cross model integration and attention. Having held post-doctoral and lecturing roles before her Daphne Jackson Fellowship, Juliet returned to her research after a thirteen year career break.

Juliet's two year Fellowship was sponsored by the ESRC.

Her project was entitled: **The effect of verbally describing the perpetrator on the accuracy and reliability of eyewitness.**

Her Fellowship was completed in 2022.

Host:
Royal Holloway
University of London

Sponsor:
ESRC

28



Dr Daisy (Jingqiu) Huang

Poster

Daisy (Jingqiu) Huang is a Daphne Jackson Fellow at the University of Edinburgh in the School of Geosciences.

Daisy completed a BSc in geophysics at Jilin University, after which she won a scholarship for an MSc at the University of Houston. This led to work as a borehole seismic geophysicist in Houston, but a funding cut forced her group to break up and she decided to study for a PhD at the University of Houston, in imaging and the investigation of surface deformation. Daisy felt it was important that her research was able to help people

which is why she expanded her studies to both the US and West Pakistan where she could have more of an impact.

Now returning to research after a break of three years, Daisy's Fellowship is sponsored by the NERC.

Due to finish in 2023 her research project is entitled: **Mapping recent movement rates along active faults in the Kathmandu Valley before and after the 2015 Gorkha earthquake.**

Host:
The University
of Edinburgh

Sponsors:
NERC

29



Dr Elizabeth Hughes

Poster

Elizabeth Hughes is a Daphne Jackson Fellow at The University of Edinburgh at the Institute for Cell Biology in the School of Biological Sciences.

A molecular biologist with a PhD in Medical Microbiology, Elizabeth is returning to research after a fifteen year career break. Her project will look into how an environmental fungus adapts to cause disease in humans.

Her Fellowship is sponsored by The University of Edinburgh and the BBSRC.

Due to finish in 2023, Elizabeth's research project is entitled: **Dynamic mRNA processing in response to environmental stimuli in the fungal pathogen *Cryptococcus neoformans*.**

Host:
The University
of Edinburgh

Sponsors:
BBSRC and
The University
of Edinburgh

30



Dr Susan Hutton

Poster

Susan Hutton is a Daphne Jackson Fellow in the Department of Physics at the University of Surrey.

Susan initially studied for a degree in Aeronautical Engineering at Imperial College London, which was sponsored by British Airways and which required her to work for the company on its completion. Alongside her job, Susan completed a part time evening-based MSc in Astrophysics, eventually leaving her job to undertake her PhD in Astrophysics at University College London at the Mullard Space Science Laboratory (MSSL). To

help support her family Susan wrote up her PhD having returned to working part-time in industry.

Now in a position to return to Astrophysics research after a six year break, Susan will explore the idea of 'warm dark matter' by creating a model and applying this to data previously collected from dwarf galaxies.

Due to finish in 2025 her Fellowship is sponsored by the STFC and her project is entitled: **BRIDGE: Bringing light Into the Darkness of Galaxy Evolution.**

Host:
University of Surrey

Sponsor:
STFC

31



Dr Anirban Jyoti

Poster

Anirban Jyoti is a Daphne Jackson Fellow at The University of Nottingham in the Wolfson Centre for Stem Cell, Tissue Engineering and Modelling. After studying microbiology at the University of Dakar, Bangladesh, Anirban completed his PhD at Soonchunghang University, South Korea. Having worked as a post-doc researcher in the field of Biomedical Sciences at two different universities in South Korea,

he is now returning to his career after a four year break. Anirban's Fellowship is sponsored by the University of Nottingham and Ceramisy and he is due to finish in 2022.

His project is entitled: **Enhancing the Effect of Antibiotics released from HA/ β -TCP bone grafts on Biofilm Mediated Osteomyelitis Using Quorum Sensing Inhibitors.**

Host:

University of Nottingham

Sponsors:

Ceramisy and University of Nottingham

32



Dr Alexandra Karamitrou

Poster

Alexandra Karamitrou is a Daphne Jackson Fellow based in the Department of Archaeology at the University of Southampton and the National Oceanography Centre, also in Southampton.

Alexandra's research project is entitled: **Detection of Ancient and Modern-era Shipwrecks Before They Become Environmental Hazards** and she will complete her Fellowship in 2022.

Host:

University of Southampton

Sponsors:

NERC

Studying geology and geophysics at the Aristotle University of Thessaloniki in Greece, Alexandra completed her PhD whilst in Boston, USA.

Her Fellowship is sponsored by the NERC.

33



Dr Hermine Landt-Wilman

Poster

Hermine is a Daphne Jackson Fellow at Durham University in the Department of Physics.

Having studied physics at Muenster, Glasgow and Hamburg Universities, Hermine carried out research towards her PhD at the Space Telescope Science Institute, Baltimore, obtaining her PhD from Hamburg University. This led on to post doctoral positions at Harvard, Melbourne and Durham and the publication

of many papers. Hermine is now returning to research after a four year break.

Her project is entitled: **Astrochemistry of the Dust Around Supermassive Black Holes in the New Era of Transient Infrared Sky Surveys.**

Hermine's Fellowship is sponsored by the STFC and is due to finish in 2023.

Host:

Durham University

Sponsor:

STFC

34



Dr Huiqi Lu

Poster

Huiqi Lu is a Daphne Jackson Fellow at the University of Oxford in the Institute of Biomedical Engineering.

Huiqi is a biochemical engineer and has a degree in Computer Science and Engineering from the University of Jilin, China, and a PhD in Engineering and Design from the University of Sussex. With an interest in applying

engineering solutions to the clinical setting she is returning to her career after a three year break.

Her project is entitled: **Gestational Diabetes: Predictive Monitoring and Management.**

Due to finish in 2022, her Fellowship is sponsored by The Royal Academy of Engineering.

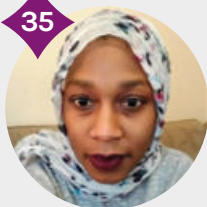
Host:

University of Oxford

Sponsor:

Royal Academy of Engineering

35

**Host:**

The University of Manchester

Sponsor:

BBSRC

Dr Fatima Madugu

Poster

Fatima Madugu is a Daphne Jackson Fellow at The University of Manchester in the School of Chemical Engineering.

After completing a BSc in Quantity Surveying at the Abubaker Tafawa Balewa University, Nigeria, Fatima worked at the Centre for Renewable Energy Research, Umaru Musa Yar'adua University, Katsina, Nigeria. She secured funding from the Petroleum Technology Development Fund for a masters at the University of Newcastle, followed by a PhD in Renewable Energy Engineering at Cranfield University. After completion of her PhD, she

returned to work at the Centre for Renewable Energy Research working on bioenergy technologies including working on an EU funded project on sustainable Agro-forestry and fuelwood conservation.

Fatima is now returning to her research after a four year career break and her project is entitled: **Bioprocessing of Microalgae for Enhanced Production of Carotenoids using a Mathematical Modelling Approach.**

Due to finish in 2023, her Fellowship is sponsored by the BBSRC.

36

**Host:**

The University of Edinburgh

Sponsors:

NERC and The University of Edinburgh

Dr Melissa Marr

Poster

Melissa Marr is a Daphne Jackson Fellow at The Royal (Dick) School of Veterinary Studies and The Roslin Institute, The University of Edinburgh.

With a background in wildlife conservation, Melissa has an MRes in Biosystematics. For her PhD, she was based primarily at the Natural History Museum London, and her research background is in genetics and morphometrics. In particular, she is interested in how this research can be used to inform conservation and analyse taxonomic boundaries.

Melissa's Fellowship is sponsored by The University of Edinburgh and the NERC.

Returning to research after a three year career break Melissa's project is entitled: **Comparative population genomics of Scottish red squirrels: understanding diversity to support conservation management in a key species stronghold** and finished in 2022.

37

**Host:**

The University of Edinburgh

Sponsor:

AHRC

Dr Ainsley McIntosh

Poster

Ainsley McIntosh is a Daphne Jackson Fellow at The University of Edinburgh in the School of Literatures, Languages and Cultures.

With a Masters in Scottish and English Literature from the University of Aberdeen, Ainsley won the Carnegie/ Caledonian PhD Scholarship in 2005, which she held at the University of Aberdeen. On completion of her PhD, Ainsley worked as a Research Fellow and lecturer at the same university.

Returning to research after a ten year break, Ainsley proposes to study the annotations of manuscripts during the romantic era and investigate what the annotations tell us about the author.

Her project is entitled: **Thinking in Ink: Composition, Materiality, and Mediation in Nineteenth-Century Scottish Literature.**

Due to finish in 2023, her Fellowship is sponsored by the AHRC.

38

**Host:**

De Montford University

Sponsor:

BBSRC

Dr Nazia Nazar

Poster

Dr Nazia Nazar is a Daphne Jackson Fellow at De Montford University in the Faculty of Health & Life Sciences.

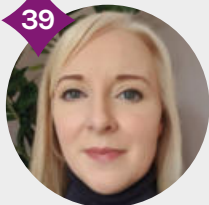
Nazia's background is in plant research, specifically medicinal plants. During her PhD, she was awarded an International Research Support Fellowship and spent time at the Royal Botanic Gardens at Kew. On completion of her PhD, Nazia worked as an Assistant Professor at the PMAS-Arid Agriculture University

Rawalpindi Pakistan, where she taught and continued her research.

Her Fellowship is sponsored by the BBSRC.

Returning to research after a six year career break and due to finish in 2022, her project is entitled: **Genetic and molecular analysis of essential oils production in Lamiaceae glandular trichomes.**

39



Dr Marita O'Sullivan

Poster

Marita O'Sullivan is a Daphne Jackson Fellow at the University of Liverpool in the Department of Physics. Completing a degree in Physics at Trinity College Dublin, Marita worked for a year before returning to Trinity College Dublin to do her PhD. A postdoctoral position at the University of Liverpool followed and Marita is now a cross-disciplinary Physicist, having moved from Theoretical Physics into Experimental Condensed Matter

Physics during her career. She has published from her PhD and postdoctoral positions and is now returning to research after a four year break.

Marita's Fellowship is sponsored by the EPSRC.

Due to finish in 2023, her project is entitled:

Geometrical lattice engineering of correlated metallic oxides.

Host:
University of Liverpool

Sponsor:
EPSRC

40



Dr Samuel Powley

Poster

Sam Powley is a Daphne Jackson Fellow in the Department of Chemistry at The University of Manchester.

A synthetic chemist, Sam has a First Class MChem in Chemistry from Heriot-Watt University. During his master's project, he was offered a fully funded departmental PhD after which he worked as a post doctoral researcher at the Technical University of Munich in Germany.

Returning to research after a four year career break, Sam is interested in the chemical design and synthesis of new light-emitting materials for use in electronics and visual display technologies.

Sam's Fellowship, sponsored by The University of Manchester and the Royal Society of Chemistry is due to finish in 2024 and his project is entitled: **Boron-rich carbenes from fundamentals to applications in energy materials.**

Host:
The University of Manchester

Sponsors:
Royal Society of Chemistry and The University of Manchester

41



Dr Saroa Rashid

Poster

Dr Saroa Rashid was a Daphne Jackson Fellow at the University of Leicester in the Department of Genetics and Genome Biology.

Saroa has a BSc and MSc in Biology from Salahaddin University, Iraq and studied for her PhD in Microbiology at the University of Leicester.

Returning to her research after a three year break, Saroa's two year Fellowship was sponsored by the University of Leicester and the BBSRC.

Her project was entitled: **Molecular characterisation of Clostridium difficile in Northern Iraq and identification of phage-host interactions.**

Host:
University of Leicester

Sponsors:
University of Leicester and BBSRC

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Dr Kirsty Roberts

Poster

Kirsty is a Daphne Jackson Fellow at Liverpool John Moores University in the Research Institute for Sport and Exercise Sciences.

Whilst completing her degree in Sports Therapy at the University of Staffordshire, Kirsty became fascinated by cardiovascular science and after working as a sports therapist for a year she embarked on a PhD in Cardiovascular Health

Sciences at Liverpool John Moores University investigating the effects of dietary flavonoids in tea on cardiovascular health.

Returning to research after a 3 year career break and due to finish in 2024, Kirsty's project is entitled: **The Menopausal Hot Flush: Cutaneous Vascular and Sudomotor Function and Structure in Symptomatic Women**

Her Fellowship is sponsored by the British Heart Foundation.

Host:
Liverpool John Moores University

Sponsor:
British Heart Foundation

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**Host:**

University of Surrey

Sponsors:

EPSRC and NERC

Dr Sophie Rocks

Poster

Dr Sophie Rocks is a Daphne Jackson Fellow at the University of Surrey in the Centre for Environment and Sustainability and the Centre for Vision, Speech and Signal Processing.

With a BSc in Biochemistry and an MSc in Toxicology from the University of Surrey, Sophie completed her PhD in free radical chemistry at the Queen Mary University of London and went on to work as a postdoctoral researcher at Cranfield University in environmental risk and nanomaterials. This led to her becoming a lecturer in Nanotoxicology and subsequently Senior lecturer in

Emerging Risks at Cranfield University. As well as being the PI on a number of grants, Sophie has also sat on expert committees for DEFRA.

Returning to research after a five year career break, Sophie's Fellowship is being sponsored by the EPSRC and the NERC.

Due to finish in 2023, Sophie's project is entitled:

Artificially Intelligent risk assessment: removing human susceptibility from complex risk assessment.

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**Host:**

Durham University

Sponsor:

Durham University

Dr Alma Santibanez

Poster

Alma Santibanez is a Daphne Jackson Fellow in the Department of Chemistry at Durham University.

Having studied in Mexico for her BSc and Masters in Chemical Engineering, Alma moved to Rome to study for a PhD in Materials for Environment and Energy. Completing her PhD at the National Institute for Materials Science in Tsukuba, Japan, Alma then worked as a post doc at the

University of Liverpool, developing novel solid state lithium ceramic electrolytes.

Due to finish in 2023 Alma's Fellowship is sponsored by Durham University.

Returning to research after a six year break, her project is entitled: **Development of Solid Oxide Electrolyser Cells for Sustainable Green Energy Technologies.**

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**Host:**

University of York

Sponsors:

The University of York and NERC

Dr Georgina Southon

Poster

Georgina Southon is a Daphne Jackson Fellow at the University of York in the Department of Biology.

With a first degree in English Literature, Georgina then went on to do a diploma in horticulture at the Hadlow College of Agriculture. This led to a Masters in Plant Science at the University of Reading, which she did on a part time basis, whilst working at the National Fruit Collection in Kent. Following this, Georgina went on to do her PhD at Imperial College London, investigating lowland heathland ecosystems.

Now returning to research after a four year break, Georgina's project is entitled: **Are urban centres a source of heat-adapted biodiversity for the wider landscape as a result of early establishment in urban heat-islands and subsequent spread?**

Due to finish in 2023, her Fellowship is sponsored by the University of York and the NERC.

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**Host:**

University of Glasgow

Sponsor:

Medical Research Scotland

Dr Simon Swingler

Poster

Simon Swingler is a Daphne Jackson Fellow at the University of Glasgow in the Centre for Virus Research.

Having graduated with a degree in microbiology from the University of Reading, Simon did his PhD in HIV-1 gene expression in neural cells at the University of Warwick. He progressed through post-doctoral training in the UK and the USA working at the Salk Institute, San Diego and the University of Massachusetts.

Simon's three-year Fellowship is sponsored by Medical Research Scotland.

Returning to research after a nine year career break, his project, due to finish in 2023 is entitled: **Pharmaceutical induction of the body's natural anti-viral proteins as a means to control HIV-1 infection.**

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**Host:**

Brunel University London

Sponsors:

Royal Academy of Engineering and EPSRC

Dr Debarati Torrens

Poster

Debarati Torrens is a Daphne Jackson Fellow at Brunel University London in the Institute of Energy Future.

With a Masters in Mechanical Engineering from Kings College University, Debarati went on to do her PhD at Brunel University London, researching Frosting and Demand Defrost Control of Retail Food Refrigeration Systems. As a post doctoral researcher she continued to work on projects relating to commercial refrigeration.

Now returning to her research following a 16 year break, Debarati wishes to update her existing expertise in modelling

retail refrigeration energy usage and associated computer modelling to create a computer model of optimised energy usage in supermarket chilled food storage systems. Her project is entitled: **Devising Demand Side Response Strategy for Supermarket Energy Management using Neural Networks.**

Due to finish in 2024, her Fellowship is sponsored by the Royal Academy of Engineering and the EPSRC.

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**Host:**

University of Edinburgh

Sponsors:

Royal Society of Chemistry and the University of Edinburgh

Dr Anna Toth

Poster

Anna Toth is a Daphne Jackson Fellow at the University of Edinburgh in the School of Physics and Astronomy.

After completing an MPhys from Eötvös Lóránd University (ELTE) and the Budapest University of Technology and Economics (BUTE), Anna enrolled in the Doctoral School of ELTE to work on lattice quantum chromodynamics.

Developing a strong interest in condensed matter physics, Anna switched fields and after obtaining her PhD at BUTE,

she went on to work as a postdoctoral associate at Rutgers University in the USA and then at Vienna University of Technology.

Returning to research after an eight year career break, Anna's project is entitled: **Search for Novel Non-Fermi Liquid Models and Materials.**

Due to finish in 2023, her Fellowship is sponsored by the University of Edinburgh and the Royal Society of Chemistry.

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**Host:**

University of Edinburgh

Sponsor:

Medical Research Scotland

Dr Christine Tyrrell

Poster

Dr Christine (Kirsty) Tyrrell is a Daphne Jackson Fellow at the University of Edinburgh in the Centre for Inflammation Research.

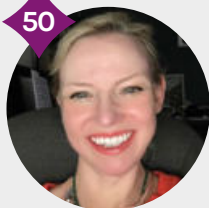
Kirsty has a degree in zoology and an MSc in ecology. After finding work in the Centre for Inflammation Research at the University of Edinburgh, she gained experience in biomedical research and decided to continue working in this field. Kirsty went on to complete her PhD at the

University of Edinburgh after which she became a post doctoral researcher.

Now returning to research after a ten year career break, Kirsty's project is entitled: **The Role of Defensins in Hidradenitis Suppurativa.**

Her Fellowship is sponsored by Medical Research Scotland and is due to finish in 2024.

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**Host:**

Elizabeth Blackwell Institute for Health Research

Sponsors:

MRC and Elizabeth Blackwell Institute for Health Research

Dr Claire Woodall

Poster

Claire Woodall is a Daphne Jackson Fellow at the Elizabeth Blackwell Institute for Health Research at the University of Bristol.

Claire is an experienced microbiologist and has a PhD from the School of Life Sciences at the University of Warwick. As well as holding a post doctoral position at the University of Cambridge, Claire has worked as a researcher in commercial and NHS laboratories.

Her Fellowship is sponsored by the Elizabeth Blackwell Institute for Health Research and the MRC.

Claire's research project due to finish in 2023 and is entitled: **Unravelling the microbiome in individuals with seasonal respiratory tract infections: a feasibility study.**



Dr Jayshree Ahire

Object

Jayshree Ahire is a Daphne Jackson Fellow at the University of East Anglia in the School of Chemistry.

With a degree from the University of Pune, India, Jayshree completed her PhD in Chemistry at the University of East Anglia.

Host:

University of East Anglia

Sponsors:

Royal Society of Chemistry and University of East Anglia

Now returning to research after a five year career break, her project is entitled: **Polyurethane embedded SPION Nanoparticles, a next generation mesh material for pelvic floor implant.**

Due to finish in 2023, her Fellowship is sponsored by the University of East Anglia and the Royal Society of Chemistry.



Dr Christina Biggs

Object

Dr Christina Biggs is a Daphne Jackson Fellow at Swansea University in the College of Engineering.

Christina has a PhD from the University of Cambridge in Mineral Physics. As a specialist in ice and water-containing rock minerals, she has held post-doctoral positions at the University of Birmingham and at the ILL (Institut Laue-Langevin) in Grenoble, France.

Host:

Swansea University

Sponsors:

Royal Academy of Engineering and the Royal Society of Chemistry

Now returning to her career, Christina is an active environmental campaigner and would like to promote the use of hydrogen as a clean fuel. Her research project is entitled: **Mineralogical Routes to Cheap Hydrogen Production: developing clay based membranes for the electrolysis of water.**

Due to finish in 2023, this three year Fellowship is sponsored by the Royal Academy of Engineering and the Royal Society of Chemistry.



Dr Shannon Leone Fowler

Object

Shannon Leone Fowler is a Daphne Jackson Fellow at the University of Roehampton in the Centre for Integrated Research in Life and Health Sciences, within the School of Life and Health Sciences.

With a PhD from the University of California, Santa Cruz, Shannon has worked extensively around the world in the field of marine mammal biology, as a researcher, teacher and writer.

Host:

University of Roehampton, London

Sponsors:

NERC and University of Roehampton

Returning to research after thirteen years, Shannon's research project is entitled: **Unravelling the mysteries of how elderly seabirds keep flying, diving, thriving when they should be retiring: the effects of ageing on the physiology, behaviour, and ecology of a long-lived seabird.**

Due to finish in 2025, her Fellowship is sponsored by the University of Roehampton and the NERC.



Dr Tim Tomkinson

Object

Tim Tomkinson is a Daphne Jackson Fellow at the University of Bristol in the Department of Earth Sciences.

With a PhD from the Open University and after a career break of four years, Tim is returning to research to study the history of water on Mars and any related implications for possible future missions to Mars.

Host:

University of Bristol

Sponsor:

STFC

Tim's Daphne Jackson Fellowship is due to finish in 2023 and is sponsored by the STFC. His research project is entitled: **The history of Mars in a drop of water.**

NOTES



Dr Richard Greaves

It is with great sadness that we write this tribute to Richard Greaves who sadly died last month.

Richard was in the second year of his Daphne Jackson Fellowship hosted by the University of York, working with both the Hull York Medical School and the Department of Computer Science. His Fellowship was co-funded by the University of York and Medical Research Council and his project was titled 'Agent-based simulation of the thymic B cell – thymic stroma cross-talk that promotes type 1 diabetes'. He was supervised by Dr Allison Green, Senior Lecturer in Immunology at Hull York Medical School.

With a PhD from the University of York in computational chemistry, Richard held various post doctoral positions at the University of York and the University of Manchester. He undertook an MSc in computer modelling of immunological networks, which led to a fresh perspective on the application of computational methods in the study of bio-medical systems. Richard's career break was caused by ill health and he was delighted to return to his love of research.

Those who met Richard will remember him as a charming, chatty, likeable, and humble man. I was lucky enough to meet him prior to the pandemic when he came to the University of York for his initial selection interview. He was immediately engaging, and it was clear from his interview the depth of his knowledge and the respect his peers at the University had for him. We have been delighted to support his progress through the application process and into the Fellowship.

Tragically, Richard's ill health caught up with him and although his current research was close to coming to fruition, we look forward to seeing the outcomes of this in publication soon. He was such a dedicated and enthusiastic scientist and will be very much missed. We are sure you will join us in sending our deepest condolences to Richard's family.

Dr Helen Marsh

Daphne Jackson Trust

THANK YOU

We are extremely grateful to everyone who has been involved in the planning and organising of the 2022 Conference.

In particular we would like to thank those who were part of the conference steering group, including former Fellows Helen Thompson, Gillian Halket, Kelly Thornber and Polly Couldrick; Trustees Carol Bewick, Sabine Best and Maria Tennant; Darren Pirt from BBSRC; and staff members Katie, Deirdre, Helen, Andy, Tim, Elaine, Roz, Julie and Lucy.

We would also like to extend our thanks to the poster judges who always have a very difficult task due to the variety and quality of the posters and objects from the Fellows. The day would not be what it is without the superb contributions from our Session Chairs, Tom Welton, Athene Donald, Vivienne Parry, Mario Moustras and Helen Marsh, and all our speakers. Finally, thanks to all our Fellows and former Fellows and to all delegates for making it here today in spite of rail strikes!

The conference would not be possible without the hard work and dedication of the entire Daphne Jackson Trust staff team. A huge thank you to them all!



SPONSORSHIP

We are also extremely grateful to the Royal Society of Chemistry and the British Pharmacological Society for sponsorship towards the cost of the conference this year:



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