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SPPIRIT NEWSLETTER

Official Newsletter of the SPPIRIT Network

MAIN FEATURE

C.A. WRIGHT MEDAL AWARDED TO LILACH SHEINER

Professor Lilach Sheiner, Deputy Head of Parasitology at the School of Infection & Immunity, has received the esteemed C.A. Wright Medal from the British Society for Parasitology (BSP). This award, named after renowned parasitologist Charles Atwood Wright, recognises outstanding contributions to the field. Presented on 14 March 2025 at the British-German-Swiss Parasitology Conference in Würzburg, Germany, the award honours Professor Sheiner's pioneering research in *Toxoplasma* mitochondrial biology and parasite survival mechanisms.

Professor Mike Barrett described Sheiner as “a global force in Parasitology,” highlighting her groundbreaking research, leadership, and commitment to training and public engagement. Expressing her gratitude, Professor Sheiner said: “I’m humbled and thrilled to receive this award. I feel privileged to contribute to the field’s progress and will continue to do so.”



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Andrew Maclean; Catherine Oke;
Mattie Pawlowic; Melanie Ridgeway;
Megan Sloan; Frank Venter; Marie-Louise Wöhrle



NEWS FROM OUR NETWORK

MATTIE PAWLOWIC SECURES WELLCOME CDA

Dr. Mattie Pawlowic, a Principal Investigator at the University of Dundee's Wellcome Centre for Anti-Infectives Research, has secured a prestigious £3.08 million Career Development Award from the Wellcome Trust. This competitive funding will support her lab for the next eight years, starting in May 2025.

Her research focuses on *Cryptosporidium*, a waterborne parasite that causes severe diarrhoeal disease, particularly deadly for malnourished children and immunocompromised individuals. With no vaccine or effective treatment available, infections lead to significant weight loss, dehydration, and high mortality rates. Dr. Pawlowic's team is pioneering research on how *Cryptosporidium* hatches and survives in water, using genetics, biochemistry, and microscopy. Their findings could provide vital insights into stopping transmission and developing new treatments for this global health threat.



SAVE THE DATE: 4TH SPPIRIT ECR SYMPOSIUM

Scotland is a vibrant hub for parasitology research, and SPPIRIT was founded to connect researchers across the country, fostering collaboration and supporting early-career researchers (ECRs). We're excited to announce that the 4th annual SPPIRIT ECR Symposium will be held at the Roslin Institute, University of Edinburgh, on 31 October. This one-day event brings together around 120 delegates from across Scotland, offering a platform for ECRs to present their work through talks and posters. Prizes will be awarded for the best presentations, and the programme will feature two invited speakers from the field. Buses will be provided from Dundee and Glasgow, making it easier for participants to attend and connect with peers from different institutions. More details and sign-up information coming soon.

The Wellcome
CDA provides 8
years of funding
for mid-career
researchers from
any discipline
who have the
potential to be
international
research leaders.





ANDREW MACLEAN JOINS UNIVERSITY OF EDINBURGH

We are delighted to welcome Dr. Andrew Maclean to the University of Edinburgh as an MRC Career Development Fellow. His lab will initially study apicomplexan parasites, including *Toxoplasma* and *Plasmodium*, using biochemical, molecular, and structural biology approaches to uncover novel pathways that could be targeted for new anti-infectives.

Andrew completed his PhD at the John Innes Centre, specializing in plant and yeast biochemistry, before moving to the University of Glasgow to investigate apicomplexan energy metabolism. Now leading his own lab, he will soon be recruiting a postdoctoral researcher and a technician, while also welcoming PhD enquiries.

A familiar face in the Scottish parasitology network since 2018, Andrew has been actively involved with SPPIRIT, serving on the committee in 2022 and 2023. He credits the ECR symposiums and networking opportunities as invaluable for early-career researchers. He is happy to share advice with those considering independent fellowships.



HANNAH DAIRY RESEARCH FOUNDATION AWARD

Peyton Goddard, a second-year EASTBIO PhD student at the University of Dundee, and Dr Mattie Pawlowic have been awarded a £25,000 Hannah Dairy Research Foundation Small Research Grant to study bovine cryptosporidiosis in Scotland. The two-year project will develop an organoid model to investigate host-parasite interactions and the mechanisms underlying *Cryptosporidium*-induced diarrhoea. By benchmarking this model against existing *in vivo* data, the research aims to advance farm animal health without requiring live animal testing. Goddard's research focuses on *Cryptosporidium parvum* biology in neonatal calves, exploring how the parasite causes severe diarrhoea and impacts animal welfare.

Andrew's research focuses on how single-celled parasites acquire and utilise nutrients to fuel infection, with a particular interest in sulfur metabolism.



SPPIRIT's
activities are
organised by ECR
parasitologists
from across
Scotland.

Get in touch with
us if you would
like to be a part of
our committee.



SPPIRIT WELCOMES NEW COMMITTEE MEMBERS

Please join SPPIRIT in welcoming our two newest committee members to the team. Dr Catherine Oke recently completed her PhD in Professor Sarah Reece's lab at the University of Edinburgh, where she studied the evolutionary ecology of vector-parasite interactions. She is now a postdoc and is building on her PhD research, using a combination of lab, semi-field and field approaches to investigate how daily rhythms shape malaria parasite transmission and evolution.

Marie-Louise Wöhrle is a PhD candidate in medical anthropology at the School of Social and Political Sciences, researching the impact and management of infectious disease within Scottish conservation work and what this tells us about relationships between people and ecosystems. They are interested in mapping different approaches to microbes and parasites within Scottish and international conservation and research; particularly in emerging narratives around parasite extinction, extermination, care, and conservation.



AMY BUCK ELECTED FELLOW OF THE RSE

Professor Amy Buck, from the School of Biological Sciences, University of Edinburgh, has been elected as a Fellow of the Royal Society of Edinburgh in recognition of her cross-disciplinary research into how pathogens use RNA to survive in hosts.

A leader in the field of extracellular RNA, her work has shown that parasites release RNAs that influence host cells and disease progression. Her research uncovers how specific RNAs and RNA-binding proteins affect immune responses, informing new strategies for treating infectious diseases.

Election to the RSE is one of Scotland's highest academic honors, celebrating excellence and impactful contributions across disciplines.





RECLAIMING QUEER HISTORIES IN SCIENCE

LGBTQ+ History Month is a time to acknowledge the overlooked contributions of queer scientists. While Alan Turing's story is well known, many others navigated their careers in secrecy, their identities erased from scientific history. This lack of visibility has shaped not only who enters the field but also how scientific achievements are remembered.

One such figure is Sara Josephine Baker, a pioneering physician in early 20th-century New York. As Director of the Bureau of Child Hygiene, she revolutionized child health, developing programs to combat infant mortality, promote breastfeeding, and improve sanitation. Her work drastically reduced infant deaths and influenced global public health. Baker lived with writer Ida Alexa Ross Wylie, though she never publicly addressed her sexuality. Her story raises important questions: Should scientists retrospectively viewed as queer be recognized as such? While modern labels may not apply, acknowledging these histories ensures that queer individuals see themselves reflected in science. Visibility fosters inclusion, reminding us that LGBTQ+ individuals have always shaped the scientific world.

Adapted from the original text written by Dr Jack Hanna, Sii Research Assistant in Parasitology at the University of Glasgow.
See <https://tinyurl.com/37yv636x> for the full article.

DUNDEE TO DOWN UNDER: MELANIE RIDGEWAY

SPPIRIT bids a fond farewell to Dr Melanie Ridgeway, who is leaving the University of Dundee for a new chapter in Australia. Melanie has been a valued member of the SPPIRIT committee and a Senior Research Associate in the David Horn Lab at the School of Life Sciences.

She now takes on an exciting new role as Lecturer in Parasitology at the University of Adelaide, where she will continue her work in both research and teaching. Reflecting on her time with SPPIRIT, Melanie shared, "Joining SPPIRIT was key to developing my network in Scotland, especially when conferences were suspended during the COVID-19 pandemic. I have met many inspiring parasitologists through SPPIRIT who supported my career development."

Melanie says she'll miss the people she's met in Scotland, as well as the beautiful scenery and historic sites. We're grateful for her contributions to the SPPIRIT community and wish her every success in her new role!

In the UK, 28%
of LGBTQ+
scientists
considered
leaving their jobs
because of
discrimination at
work

INSTITUTE OF PHYSICS,
ROYAL ASTRONOMICAL
SOCIETY AND
ROYAL SOCIETY OF
CHEMISTRY





Are you parent
working in the
field of
parasitology?
Then we would
like to hear from
you.

Follow the link:
tinyurl.com/5xxtdfnp

or scan below



PARENTS OF PARASITES

Academic parents face unique challenges balancing work and family, including attending conferences and maintaining professional networks. Connecting with other academic parents can be difficult, especially for those new to parenthood or returning to work after a break. Many scientists also live far from family, making support networks essential. SPPIRIT aims to foster these connections and build a stronger community for academic parents in parasitology.

We asked SPPIRIT co-founder Dr Mattie Pawlowic for a few reflections on her experience as an academic parent.

How has your work-life changed since becoming a parent?

Before my son was born, I worked evenings and weekends. Now, that time is gone! My colleagues are supportive, but I'm still learning to set realistic expectations. Virtual meetings help when my son is sick, and he's even attended a PhD celebration!

Has parenting influenced your career?

I now prioritise travel opportunities with high collaboration potential and flexible timing. This might be a smarter strategy overall! In research, I'm more determined than ever to tackle tough challenges.

What's the biggest challenge for academic parents?

Lack of community is a challenge I hope SPPIRIT can help address. Few female PIs at my institute are parents to children my son's age. Each career stage brings unique challenges, and having a peer group is invaluable. I've built my own network of parasitology mom PIs, and though we're all busy, I cherish our virtual coffee chats on balancing grant writing and parenting.

What support has been most helpful?

The most helpful thing has been to have my son at the right nursery. He attends the on-campus nursery which is very convenient. But more importantly the staff are excellent. My mind is at ease, knowing that he is playing and learning and being very well taken care of.

Advice for academic parents?

The best advice I have received was to do the thing that work best for you and for your kid and to "experiment" with different things and see what works for you. All those things you thought "When I'm a parent I will never do..." throw them out the window and don't look back!





EVENT FOR YOUR CALENDAR

BSP TRYPANOSOMIASIS AND LEISHMANIASIS SEMINAR

The BSP Trypanosomiasis and Leishmaniasis Seminar will take place from September 1–4, 2025, in České Budějovice, Czechia, bringing together leading researchers to discuss recent advancements in these major parasitic diseases. Topics will include the biology and epidemiology of *Trypanosoma* and *Leishmania* species, vector transmission, molecular and genetic studies, genomic technologies, and drug discovery. The event will provide a platform for researchers at all career stages to share knowledge and foster collaborations aimed at improving disease prevention, control, and eradication.

Key dates:

Abstract submission opens January 30, 2025, and closes July 31, 2025. Further details will be announced soon. More information: <https://bsp.uk.net/Events>

POSITIONS

PARASITOLOGY VACANCIES

Research Associate position with the Papotto Lab at The University of Manchester, is looking for a research technician with experience in the fields of immunology, molecular biology and parasitology, for a period of 12 months, starting in May 2025. Contact: pedro.papotto@manchester.ac.uk

Senior Lecturer/Lecturer in One Health Microbiology, (Research & Teaching Track) at the University of Glasgow. To carry out high-quality research in microbiology, candidates with demonstrated relevance to animal/human health and a broader One Health context are invited to apply. Closing date: 5 May Contact: Roman.Biek@glasgow.ac.uk

RESEARCH FROM OUR NETWORK

RECENT PARASITOLOGY PAPERS

Keneskhanova, McWilliam, Cosentino et al. (2025) Nature. Genomic determinants of antigen expression hierarchy in African trypanosomes.

Corripio-Miyar, Hayward et al. (2025) Disc. Immun. T-helper cell phenotypes are repeatable, positively correlated, and associated with helminth infection in wild Soay sheep.

Laidlaw, Garcia Sanchez et al. (2025) BioRxiv. The *Trypanosoma cruzi* cell atlas; a single-cell resource for understanding parasite population heterogeneity and differentiation.

Damasceno et al. (2025) Nat. Comms. R-loops acted on by RNase H1 influence DNA replication timing and genome stability in *Leishmania*

Rawat et al. (2025) PLoS Pathogens. Quinoxaline-based anti-schistosomal compounds have potent anti-plasmodial activity.

Larcombe et al. (2025). BioRxiv. *Trypanosoma brucei* cattle infections contain cryptic transmission-adapted bloodstream forms at low parasitaemia

Holland, O'Donnell et al. (2025) Phil. Trans. B Phenotypic and fitness consequences of plasticity in the rhythmic replication of malaria parasites.

**Want to feature your new paper?
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