Image credit:

VOL. 3 · DECEMBER 2025

SPPIRIT NEWSLETTER

Official Newsletter of the SPPIRIT Network

Cover: Calf gut infected with *C. parvum.* Credit: Peyton

MAIN FEATURE

SPPIRIT'S ECR SYMPOSIUM 2025

The 2025 SPPIRIT ECR Symposium was held on October 31st at the Roslin Institute, University of Edinburgh, bringing together over 100 attendees, primarily early-career researchers (ECRs). The program featured a dynamic mix of keynote talks, research presentations, and a panel discussion.

Keynote talks were delivered by Dr. Joanna Young (University of Edinburgh) and Dr. Pieter Steketee (The Roslin Institute), who both shared insights into their exciting research as well as their career journeys.

The symposium also included a fantastic panel discussion on "A Spectrum of Science Communication," featuring Andrew Kelloe, Frank Katzer (Moredun Institute), and Petra Schneider (University of Edinburgh). The career panel provided valuable perspectives on different approaches to science communication and ways for early-career researchers to get involved.

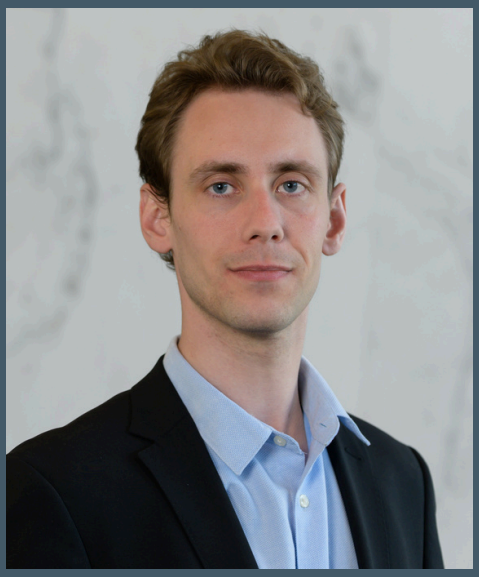
In addition to the talks, the symposium showcased a wide range of ECR research through both oral and poster presentations on diverse parasites. Mimi Cox (University of Glasgow) won the Best Talk Award, while the Best Poster Prize was awarded to Kallen Sullivan (University of Edinburgh/ Roslin Institute) and Rosie Street-Jeakings (University of Dundee)

Photo credit: Joanne Power

Also in this issue:

Contributions: Mukul Rawat, Frank Venter, Marketa Novotna

NEWS FROM OUR NETWORK



VICTOR TOBIASSON HAS RECEIVED A WELLCOME CAREER DEVELOPMENT AWARD

Over the course of four billion years, evolution has generated the remarkable biological diversity observed today. This diversity arises from differences in the chemical processes within living cells, driven by variation in the structure, composition, and regulation of protein complexes. Mitochondria are particularly notable in this context: they possess their own genomes and have a long evolutionary history central to the development of eukaryotes. They also contain a specialised translation system — the mitochondrial ribosome. As descendants of Alphaproteobacterial ribosomes, mitochondrial ribosomes have been shaped by the unique environment inside mitochondria, resulting in exceptional structural diversity despite carrying out one of the most ancient and highly conserved functions in biology: protein synthesis.

Victor's research focuses on the evolutionary forces shaping this long-term structural diversity. By combining structural characterisation through electron cryomicroscopy with classical evolutionary analysis and phylogenetics, his work aims to understand how conservation and divergence coexist, and to explore the development of protein complexity at evolutionary, structural, and functional levels.

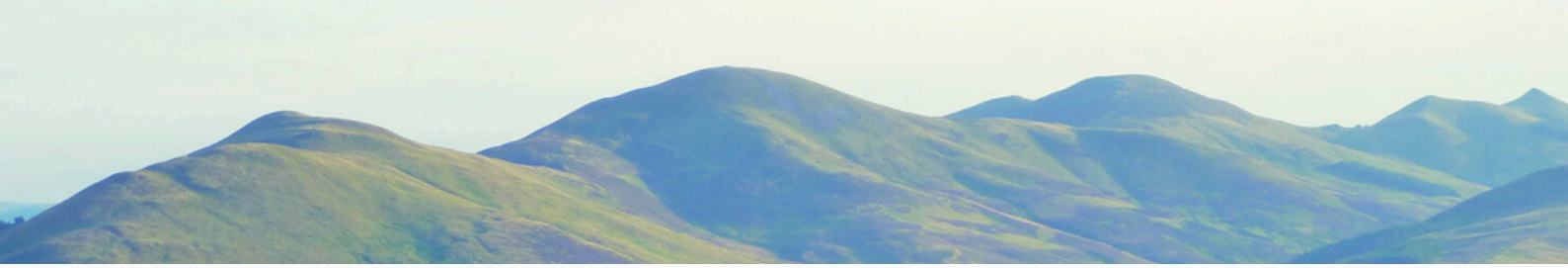
As a recent recipient of a Wellcome Career Development Award, Victor will be establishing his own research group at the School of Infection and Immunity in Glasgow from January 2026, investigating the assembly pathway of the *Toxoplasma gondi*i mitochondrial ribosome. He is currently hiring and welcomes interested researchers to get in touch.

GRANT HALL DEFENDS HIS PHD

Grant Hall has successfully completed his PhD viva and is now Dr. Grant Hall. He presented his thesis titled "Exploiting chemical proteomic tools to identify the mode of action of phenotypic hits in *Cryptosporidium*."

His research was carried out under the joint supervision of Mattie Pawlowic and Susan Wyllie at the University of Dundee. His examination panel included Prof. Rita Tewari (University of Nottingham) as the external examiner and Dr. Marcus Lee as the internal examiner.

Congratulations to Grant on this excellent achievement!



AWARDS & RECOGNITION

MANU DE RYCKER AWARDED WH PIERCE GLOBAL IMPACT IN MICROBIOLOGY PRIZE

Dr Manu De Rycker, Principal Investigator in the School of Life Sciences and Head of Biology at the Drug Discovery Unit, has received the WH Pierce Global Impact in Microbiology Prize, part of the Applied Microbiology International Horizon Awards 2025.

He leads the University's kinetoplastid and antifungal drug discovery programmes. His team's work has advanced drug discovery for African sleeping sickness, visceral leishmaniasis, and Chagas disease, including two clinical candidates for visceral leishmaniasis and several advanced compounds for Chagas disease in collaboration with GSK.

ALAN FAIRLAMB HONOURED FOR AN OUTSTANDING CAREER BY THE BRITISH SOCIETY FOR PARASITOLOGY

The BSP Trypanosomiasis & Leishmaniasis Seminar featured a special session honouring Alan Fairlamb, celebrating his contributions to molecular and biochemical parasitology.

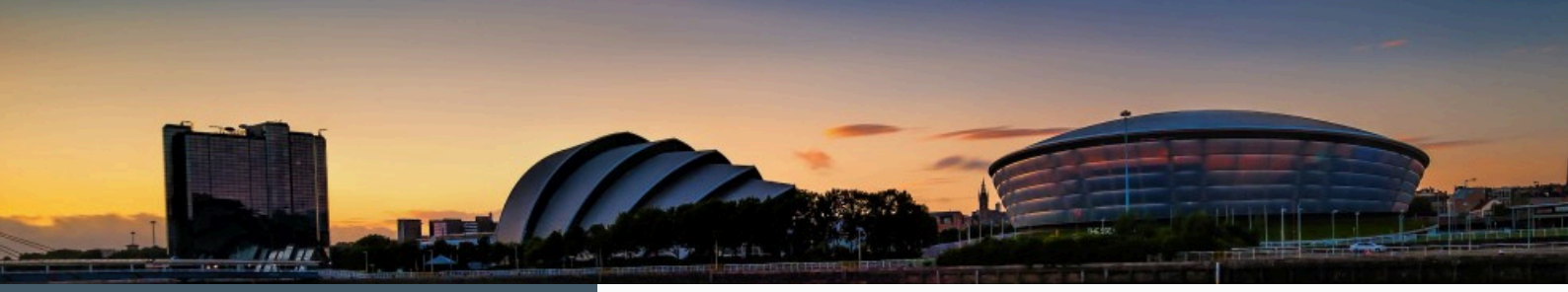
Speakers, including Piet Borst, Steve Beverley, Carl Nathan, Susan Wyllie, and Elizabeth Winzeler, highlighted his scientific impact, mentorship, and influence on drug discovery. Alan closed the event by thanking colleagues who supported him during his 57-year career, including 25 years at Dundee.

EPAA'S REFINEMENT PRIZE FOR 2025

Lee Robinson and the Biological Services team at the University of Dundee have won the EPAA Refinement Prize 2025. Laboratory staff play a crucial role in regulatory testing and in applying Refinement, one of the 3Rs, to minimise pain and distress and improve animal welfare.

The prize recognises those who implement alternatives to animal testing and champion the day-to-day innovation of Refinement practices. At Dundee, oral gavage has been replaced with voluntary dosing wherever possible.

The Pawlowic lab now uses this approach to propagate *Cryptosporidium* in mouse models, employing palatable carriers like condensed milk and acclimising mice to handling to reduce stress.



SPOTLIGHT ON DR. PETRA SCHNEIDER

ANYONE INTERESTED IN PUBLIC ENGAGEMENT IS ENCOURAGED TO GET INVOLVED.
FOR QUESTIONS,

CONTACT PETRA.SCHNEIDER@ED.AC.UK.

Together with Aidan O'Donnell, Petra runs the Reece Lab on Tour programme for primary schools, an initiative that began nearly ten years ago with their first public engagement grant. Although both are academics with limited formal outreach training, they have embraced the opportunity to share their research and inspire young learners. With additional funding over the years, the programme has grown into a well-established and wide-reaching initiative.

They have developed a series of hands-on activities inspired by their research into the evolution and ecology of malaria parasites and their vectors. These activities align with the Scottish curriculum and are supported by teaching materials, resource boxes, and an accredited teacher-training course.

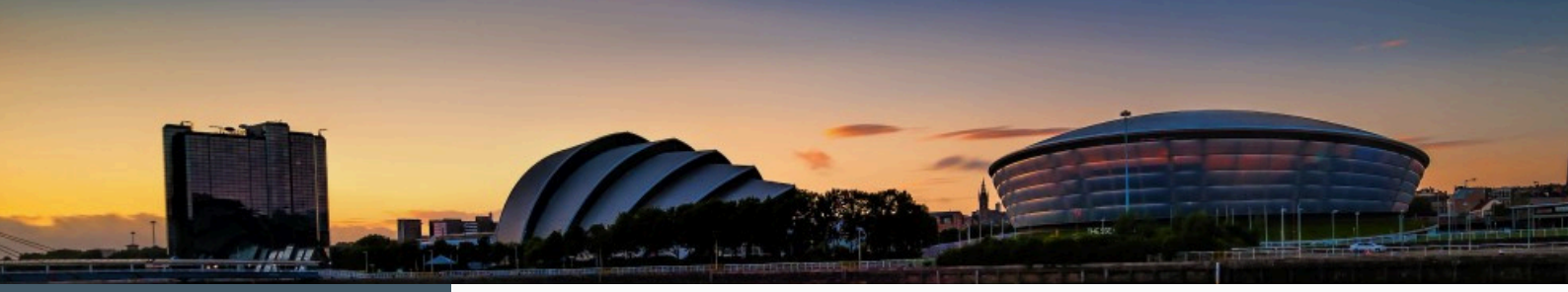
To date, the team has engaged more than 1,500 pupils, reached many more through teacher-led sessions, and trained nearly 100 teachers. The programme has travelled as far as Wales and Japan, strengthening their communication skills and earning recognition for public engagement. As they work to expand Reece Lab on Tour across Scotland, the joy remains in each visit—meeting enthusiastic pupils and teachers, hearing insightful questions, and rediscovering the excitement of a scientific career.

NEW CONSORTIUM UNITES RESEARCHERS AGAINST NEGLECTED VECTOR-BORNE DISEASES

Dr Elise van der Heijden, a postdoctoral researcher in bovine immunology at The Roslin Institute (RI), has been awarded $16,000 to launch a new consortium, "Scientists Without Borders – A United Front Against Neglected Vectors & Vector-Borne Diseases." The initiative links the RI, The Pirbright Institute (TPI), and the Universities of Cape Town, Pretoria, and Limpopo in South Africa to strengthen collaboration in this important yet neglected area of research.

Researchers from partner institutions will visit Edinburgh in May 2026 for a kick-off meeting, including a one-day symposium open to the wider research community (sign-ups to follow). Consortium partners will take part in capacity-building workshops, discussions to identify research gaps and build new partnerships, and visit the state-of-the-art Roslin Vector-born-disease Research Facility.

The award forms part of the £240k BBSRC Flexible Talent Mobility Award secured by the RI and TPI. The third funding call for applications will follow in early 2026.



BSP 2026: CALL FOR VOLUNTEER

GLASGOW WILL HOST THE BRITISH SOCIETY FOR PARASITOLOGY (BSP) SPRING MEETING FROM TUESDAY, 7 APRIL TO THURSDAY, 9 APRIL 2026

Recognising this as a valuable opportunity for Early Career Researchers (ECRs) to strengthen their CVs and increase visibility within the field, the organising committee is keen to involve ECRs in all aspects of planning, managing, and leading this year's event.

In collaboration with SPPIRIT, the BSP committee will recruit and select ECRs for a range of roles. ECRs will be paired with senior researchers to work in small, topic-specific groups to review and score abstracts. Each group (3–4 people) will select talks for 1–2 sessions. This role involves critical reading of a few dozen abstracts.

We aim to have mainly ECRs chairing sessions. Responsibilities include reading abstracts beforehand, preparing questions, contacting speakers to confirm slides and details, and keeping the session on time.

ECRs will help form the "face" of the conference by supporting check-in, acting as location ambassadors, and staffing information desks. Minimal preparation is required, but assistance will be needed in the days before the conference to assemble delegate bags and help with setup.

Interested?
For expression of interest please contact Lilach (lilach.Sheiner@glasgow.ac.uk) with a short few-line explanation of which role you are interested in and why.

BSP GLASGOW 2026

INTERESTED IN VOLUNTEERING FOR BSP 2026 AT THE UNIVERSITY OF GLASGOW?

SPPIRIT FORUM: EARLY-CAREER POSTDOCTORAL FELLOWSHIPS

The second SPPIRIT Forum, held on 14 November, focused on early-career postdoctoral fellowships. Guest speakers James Budzak, Archie Khan, and Megan Sloan shared insights from their experiences with EMBO, Marie Curie, and Wellcome Trust awards.
They discussed their career paths, how to identify suitable funding schemes, and practical tips for developing projects, approaching host labs, and preparing strong applications. A key message was that different funders prioritise different elements—ranging from the applicant profile to the project and the overall narrative.

SULSA SUPPORTS THE 2025 SPPIRIT SYMPOSIUM

We are delighted to announce that the SPPIRIT Symposium, held at the Roslin Institute, received £1,000 in funding from SULSA. This generous support played a key role in making the event a success. The proposal was jointly written by Megan Sloan and Jack Hanna (University of Glasgow), Rebecca Edgar(University of Dundee), and Frank Venter (University of Edinburgh).
Funding from SULSA was instrumental in helping us deliver a high-quality symposium, supporting Early Career Researcher (ECR) presentation prizes and catering for attendees.

RESEARCH FROM OUR NETWORK

RECENT PARASITOLOGY PAPERS

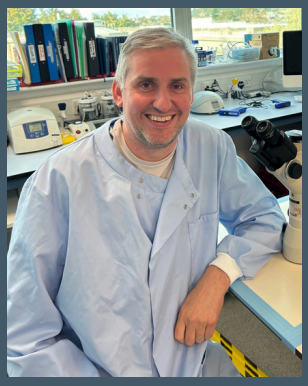
HAVE A NEW PAPER TO SHARE? GET IT FEATURED IN OUR NEWSLETTER — EMAIL US!

Bacchetti, Ross, et al.(2025) PLoS Pathogens. Cryptosporidium oocyst wall proteins are true components of the oocyst wall and COWP8 is not required for parasite transmission.

Rawat, et al. (2025) mBio. Mechanistic Insights into Dual-Active Liver and Blood-Stage Antiplasmodials.

Ridgway, Melanie, et al. (2025) bioRxiv. Acoziborole resistance associated mutations in trypanosome CPSF3.

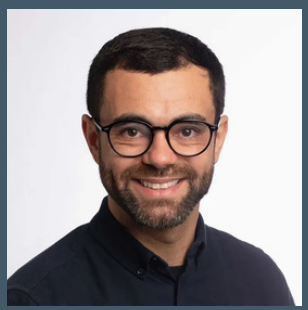
Herbert Mainero, Alejandra, et al. (2025) bioRxiv. Malaria parasites adjust liver stage development to synchronise the blood stage of infection with host daily rhythms.



STEPHEN LARCOMBE

Larcombe, Stephen D., et al. (2025) Nature Communications. *Trypanosoma brucei* cattle infections contain cryptic transmission-adapted bloodstream forms at low parasitaemia.

Trypanosoma brucei infections in cattle reveal hidden, transmission-ready parasite forms even at very low parasitaemia. Using cattle infections and single-cell RNAseq, the study shows that parasites display stumpy-like transcriptomes without fully adopting stumpy morphology. These findings challenge rodent-based assumptions and provide new insight into how *T. brucei* differentiates in its natural host.



DOUGLAS ESCRIVANI

Escrivani, Douglas O., et al. (2025) Nucleic Acids Research. A non-coding role for trypanosome VSG transcripts in allelic exclusion.

We have uncovered an RNA-based mechanism that enables African trypanosomes to switch surface coats and evade immune defences. The study shows that the transcript of the active Variant Surface Glycoprotein (VSG) gene not only encodes protein but also acts as a regulatory RNA that influences competition between VSG alleles for exclusion factors. This also affects cell-cycle progression and nuclear organization, offering new insight into how antigenic variation is controlled.

EVENT FOR YOUR CALENDAR

Apicomplexa 2026 | II Virtual Symposium on Apicomplexan Parasites Research
January 27-28, 2026 | Online

BSP - The British Society for Parasitology Annual Meeting
7- 9 April 2026, University of Glasgow

2nd Biennial Cryptosporidium Meeting
Edinburgh
24-26 May 2026

POSITIONS

PARASITOLOGY VACANCIES

Post Doctoral or Research Scientist Position
The Weiss Laboratory in the Department of Pathology of the Albert Einstein College of Medicine, Bronx, NY
Deadline: 02/02/2026

Research Assistant/Associate in Molecular Parasitology
Dr. Emma Briggs Lab, Newcastle University, UK
Deadline: 18/12/ 2025

Interested in volunteering with SPIRIT?

We'd love to hear from you!
📩 Email us at sppirit.network@gmail.com
Follow us on X and Bluesky for the latest updates @SPPIRITnetwork

Did you attend the SPPIRIT ECR Symposium 2025?

We'd love to hear your thoughts! Your feedback will help us improve future events.