

VOL. 2 · 2026

SPPIRIT NEWSLETTER

Official Newsletter of the SPPIRIT Network

Photo credit: Sarah Stevens (UOD)

MAIN FEATURE

CRYPTOSPORIDIUM RESEARCH TAKES CENTRE STAGE IN EDINBURGH

Organised by Mattie Pawlowic (University of Dundee) and Adam Sateriale (The Francis Crick Institute), the second Biennial *Cryptosporidium* Meeting brought together researchers from across the field to discuss epidemiology, host immunity, parasite cell biology, diagnostics, and treatment.

The meeting showcased exciting new and unpublished research through two poster sessions, along with discussions on emerging therapeutic opportunities and the ongoing challenges in *Cryptosporidium* research. A particular highlight was the talk by Prof. Wes Van Voorhis, who also spoke about the Neglected Parasite Initiative (<https://neglectedparasite.org/>), which was a standout feature of the conference.

The meeting concluded with discussions on oocyst supply and new data and infrastructure resources, including CryptoDB and ClinEpiDB.

The event also provided an opportunity for the community to connect socially, with attendees enjoying a traditional Scottish ceilidh. Overall, the meeting highlighted the rapid progress in *Cryptosporidium* research and the importance of collaboration in tackling this important pathogen.

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Cover Image: Sarah Stevens (University of Dundee)

Image Description: COWP8-mNeon oocysts (blue) hatched, with the inner oocyst wall stained in pink. COWP8 localises to the entire shell.

COWP = *Cryptosporidium* oocyst wall protein

Photo credit: Mattie

Photo credit: Sebastian Shaw



SPPIRIT
MINI SYMPOSIUM

Hear from early career researchers across Scotland and connect with other parasitologists

Dr. Andrew Maclean
University of Edinburgh
Keynote speaker

University of Dundee
School of Life Sciences
October 29, 2026
1.30 pm - 3.45 pm

sign up here!

SPPIRIT MINI-SYMPOSIUM 2026

29TH OCTOBER 2026 - UNIVERSITY OF DUNDEE

The Scottish Parasitology Partnership in Research, Innovation and Training (SPPIRIT) will host a mini-symposium on Thursday, 29 October 2026 at the University of Dundee. This free, in-person event will bring together researchers from across Scotland to share ideas, showcase ongoing research, and strengthen connections within the parasitology community.

The scientific programme (13:00–15:30) will feature a keynote lecture, short talks, and a lab showcase highlighting early-career researchers and the breadth of work across SPPIRIT laboratories.

A key feature of the event will be the lab showcase, where early-career researchers will deliver brief, five-minute presentations introducing their groups and research focus. This format is designed to encourage visibility, stimulate discussion, and foster new collaborations across institutions.

The symposium will conclude with informal networking at a nearby venue, providing further opportunities to exchange ideas, build connections, and support collaboration within the parasitology community.

HELMINTH ECO-HEALTH HUB LAUNCH

The Helminth EcoHealth Hub is a newly established, BBSRC-funded research network, and the team is excited to announce its first launch event. The Helminth EcoHealth Hub Symposium will be held in Liverpool on 22–23 September.

The network aims to drive global efforts towards sustainable helminth control and welcomes researchers from all backgrounds with an interest in helminth science.

The [HEHH website](https://www.helminthhub.co.uk) is live. You can now join this exciting new BBSRC-funded research network now for FREE by simply clicking the banner at the top of the homepage.

Join the Helminth Eco-Health Hub now for FREE to:

- register for in-person and online symposia
- participate in discussion forums
- apply for seed funding through the network

Register for the HEHH membership and kick off symposium via website (www.helminthhub.co.uk) or scan the QR code now!



Awards and Recognitions

CHAIR OF THE MEDICINES DISCOVERY CATAPULT BOARD



Professor Sir Mike Ferguson has been named incoming Chair of the Medicines Discovery Catapult Board, starting in 2027. In this role, he will focus on driving impact as next-generation technologies and collaborations reshape drug discovery.

Mike Ferguson recently retired from the University of Dundee, where he served as Regius Professor of Life Sciences and made outstanding contributions to the University and the wider life sciences community.

SULSA POSTDOCTORAL PRIZE



Dr Megan Sloan is a Research Fellow at the University of Glasgow in the Harding Lab. Her research combines molecular biology, RNA biology, and metabolism to understand how *Toxoplasma* adapts its gene expression in response to changing nutrient conditions within host cells.

A key focus of her work is how parasites sense and respond to iron availability, a process essential for survival. She has demonstrated iron-mediated post-transcriptional regulation in *Toxoplasma* and developed new tools to investigate parasite iron biology. Her current work explores how the mRNA-bound proteome changes under iron deprivation, providing new insight into mechanisms of parasite adaptation.

In June, Megan was awarded a SULSA Postdoctoral Prize, which will support her transition towards independence and enable new collaborations within Scotland's life sciences community.

 Watch Megan talk about her research: [HERE](#)

 Learn more about the SULSA Postdoctoral Prize: [HERE](#)

SMALL PILOT GRANT FROM TENOVUS SCOTLAND

Mukul Rawat, a postdoctoral researcher in Professor Marcus Lee's laboratory at the University of Dundee, has been awarded a Small Pilot Grant from Tenovus Scotland to support preliminary, pump-priming studies for his research. This funding will provide an important foundation for his development as an independent researcher focused on malaria parasites. *Plasmodium* parasites use a distinctive replication strategy and tightly regulate gene expression across their life cycle, and this project aims to deepen understanding of these processes and identify potential parasite vulnerabilities.





NEW COMMITTEE MEMBERS

Olugbenga Samuel Babatunde is a PhD researcher at Aberystwyth University studying parasitology and parasite diagnostics. His research focuses on *Fasciola hepatica* variation and triclabendazole resistance using proteomic and molecular approaches.

He is broadly interested in parasite biology and control, and is passionate about science communication, collaboration, and supporting early-career researchers.



Vitória Baptista is a Postdoctoral Research Associate in the Sheiner Lab, studying mitochondrial electron transport chain complexes in *Plasmodium*. Her PhD focused on the parasite's heme detoxification pathway for diagnostic and therapeutic applications.

She is also active in supporting early-career scientists and science communication, serving as Vice-Coordinator of the Portuguese Biochemical Society's Junior Section and leading Integration and Outreach for the FEBS Junior Section. Outside research, she enjoys socialising, exploring new places, music, TV, and the sea.

Sophia Raine Hernandez completed her PhD at Umeå University under the supervision of Dr. Ellen Bushell, where she studied exported proteins in *Plasmodium berghei*.

She is currently a postdoctoral research fellow at the University of Dundee in the lab of Dr. Mattie Pawlowic, investigating the mechanisms underlying hatching in *Cryptosporidium*. Outside the lab, she enjoys pottery and rock climbing.





MRC CDA AWARD: SHIKHA

Shikha will start her lab in the Department of Biochemistry at the University of Cambridge in January 2027 as an MRC Career Development Fellow. Her research will initially focus on mitochondrial RNA processing in *Toxoplasma gondii*, with the long-term aim of uncovering mechanisms that govern mitochondrial RNA biogenesis in apicomplexan parasites and other divergent eukaryotes.

She is currently a Research Fellow in the Sheiner Lab at the Centre for Parasitology, Glasgow. Her research has broadly centred on mitochondrial biogenesis, with a particular focus on gene expression.

Her interest in mitochondria began during her master's research on a calcium-regulating ion channel and continued through a PhD in Switzerland in Prof. André Schneider's lab, where she studied mitochondrial tRNA import and processing in African trypanosomes. This work led her to explore apicomplexan parasites.

She later moved to Glasgow on an SNSF postdoctoral fellowship to study mitochondrial ribosomes in *Toxoplasma gondii*, producing the first high-resolution structure of the *Toxoplasma* mitoribosome. During her postdoc in Glasgow, Shikha has also been active in SPPIRIT, contributing to mentoring, career development, and symposium organisation.

ICOPA 2026: PARASITOLOGY CONGRESS

The 16th International Congress of Parasitology (ICOPA) was held in Montreal, Canada, in August, bringing together over 1,400 participants for five days of sessions and posters. Opening with a keynote by Professor Peter Hotez, the meeting addressed key challenges in parasitology, including climate change, misinformation, and global instability.

Under the theme "Parasites in a Changing World," topics included parasite ecology, vaccine and drug development, host immunity, neglected tropical diseases, and AI. Highlights included Professor Abdoulaye Djimdé's antimalarial research in Mali and a closing message from Dr. Osamu Kunii on global responsibility in disease control.

Led by Professors Momar Ndao and Martin Olivier, the congress will next take place in Sarawak in 2030 under the Malaysian Society of Parasitology and Tropical Medicine (MSPTM).

Summarised by Rebecca Edgar, University of Dundee



INSIDE THE JOURNEY

VICTOR TOBIASSON

WELLCOME CAREER DEVELOPMENT
AWARD FELLOW
SCHOOL OF INFECTION AND IMMUNITY
UNIVERSITY OF GLASGOW

Can you briefly introduce yourself?

I am an evolutionary structural biologist with some background in bioinformatics. I have spent most of my initial years in science looking at the evolution of mitochondrial ribosomes across eukaryotes. I tend to care less about immediate biological function and instead look at the underlying evolutionary forces which generate the changes which lead to function. I recently started my research group at the School of Infection and Immunity at Glasgow University on a Wellcome Career Development award looking at the mitochondrial biology of human parasites.

Was there a defining moment that confirmed this path?

Haha, no not really. I feel that the whole "becoming a PI" is maybe a bit misleading. I am still the same person I was a few months ago, there is no anointment, no ceremony, I just have some money to spend now and forms I need to sign. I think once you send out applications out and start getting positive, or at least non-hostile, feedback on them, you realize that you are on the right track.

What kept you motivated during difficult phases?

Here I think it's important to be able to appreciate your own work and to be able to compartmentalize. There will be a lot of people what will have opinions on your work (and you personally!) but they rarely have the same level of insight as you do. Doing work, you think is excellent and that you know you will be proud of in the future helps a lot.



What inspired you to start your own research group?

Not sure I have much of an inspirational story here, unfortunately! No great epiphany or divine intervention, mainly the promise of job security and a continued place in academia. If you want to stay in science for a prolonged period of time, you sort of need to start your own group eventually. I guess its the curse of many lines of work that once you become good enough at it, you are destined to be a manager.



Most exciting part of running your own lab?

While not directly exciting, people at conferences who previously would be politely uninterested in your work are all of a sudden very friendly. There seems to be a more general consensus that people need to respect your opinions now. Like magic. Also, the policy and alignment documents on funding websites magically become the most exciting thing you can read! In all seriousness though, there is defiantly a broader range of opportunities afforded to you once you have some independent funding, which puts the fun in funding. For me specifically, what has been most fun is probably finding someone who has equally stupid ideas as me, and to be able to reach out to them and say, "hey do you want to do this silly thing"?

What has been the toughest hurdle in the first year of independence?

Once you have your own money and need to spend it, hire people, get equipment, etc., you quickly realize that there are a whole lot of people required to maintain a university who have no interest or care for your career or your science whatsoever. These systems follow different and foreign rules, often completely unaligned with your interests. This is naturally dependent from department to department, but some friction with estates, admin and human resources is probably to be expected no matter where you end up. While it is in part frustrating, I think Glasgow is still very supportive here, and the vast majority of people have been genuinely kind and supportive.

How do you manage pressure, uncertainty, and workload as a new PI?

"No" is a very powerful word. "I do not want to do that" are seven even more powerful words. Nevertheless, managing input is a whole lot easier than output. Most of us physically can't work more hours in the week, so managing the incoming work stream is essential. Here I speak from experience but am also a massive hypocrite. I almost never do this myself because I am bad at saying no.

Advice for early career researchers?

Since I have only become an independent researcher once I don't have any statistical support to base any advice on. Once I have $n > 3$ I will get back to you. From personal anecdote though I would say that knowing your strength is essential. You need to know exactly what only you can do, and then try to use that to formulate an idea that you are passionate about pursuing. This in and of itself is not enough but it is a possible place to start which only requires input from yourself.

DUNDEE-DEVELOPED ANTIMALARIAL ADVANCES IN CLINICAL TRIALS

Cabamiquine, a novel antimalarial developed at the University of Dundee, has shown promising safety and efficacy in early clinical trials in Africa. In combination with pyronaridine, it demonstrated a strong benefit–risk profile and potential for further development.

This single-dose combination could simplify malaria treatment and improve disease management, particularly in regions affected by drug resistance and limited healthcare access.

Source: [The Lancet Infectious Diseases](#).



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



JACK HANNA



AISHA SYED

RESEARCH FROM OUR NETWORK

RECENT PARASITOLOGY PAPERS

Forte, Barbara, et al. (2026) Journal of medicinal chemistry. Structure-Guided Optimization of Novel Inhibitors of Plasmodium Lysyl-tRNA Synthetase with Multistage Activity against Malaria Parasites.

Rawat, M, et. al. (2026) Current Opinion in Microbiology. Molecular mechanisms underlying resistance to antimalarial compounds (Review).

Hanna, Jack C., et al. (2026). Mbio. Global translational and metabolic remodeling during iron deprivation in *Toxoplasma gondii*.

Toxoplasma gondii infects a wide range of host cells and must adapt to varying environments, including limited iron availability. We found that under low iron conditions, the parasite reduces protein synthesis and remodels its metabolism, shifting towards glycolysis while suppressing mitochondrial respiration.

These findings highlight iron as a key regulator of *Toxoplasma* metabolism and reveal potential vulnerabilities that could be targeted during infection.

Syed, Aisha J., et al. (2026) ACS Infectious Diseases. Using Unbiased Chemical Proteomics Approaches to Explore the Target Landscape of the Resistance Refractory 7-Azaindole MMV022224 in *Plasmodium falciparum*.

We explored the target landscape of MMV022224, a promising multi-stage antimalarial that shows resilience to resistance. Using complementary chemical proteomics approaches like chemical pulldown and thermal proteome profiling, we demonstrated that it selectively binds the essential kinase PfPK6, along with several other *Plasmodium* kinases. We discuss how polypharmacology contributes to its activity and include comparative data for the related azaindole compound TCMDC-135051.

mBio



EVENT FOR YOUR CALENDAR

British Association for Veterinary Parasitology
10-11th SEPTEMBER 2026
Royal Veterinary College (RVC), Camden Campus, London

Kinetoplastid Molecular Cell Biology Meeting (KMCB)
September 8–12, 2026

Molecular Parasitology Meeting (MPM)
September 13–17, 2026

MOSQUITOS IN SCOTLAND: FRIEND AND FOE?

The Royal Society of Edinburgh
22-26 George St, Edinburgh EH2 2PQ
Saturday 12 September • 6 PM - 7 PM

SPEAKER

Professor Heather M. Ferguson FRSEz

CHAIR

Professor Sarah Reece, FRSE

Hybrid event

Oline spot - [Book here](#)

In person spot - [Book here](#)

Interested in volunteering with SPPIRIT?

We'd love to hear from you!

Email us at: sppirit.network@gmail.com

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POSITIONS/FELLOWSHIP

PARASITOLOGY VACANCIES

Postdoctoral Research Associate - Molecular Microbiology

Ben Mamoun Laboratory at Yale School of Medicine

Closing date: 30/9/2026

Postdoctoral Researchers – Molecular Parasitology, RNA Biology and Antiparasitic Drug Discovery

Contact: Professor Karine Le Roch at: karinel@ucr.edu.

Postdoctoral Immunologist

Jenner Institute, University of Oxford

Dr Lisa Stockdale Lab

Closing date: 07/09/2026

Animal Technician (AT) - Schistosomiasis Drug Discovery

Aberystwyth University

Closing Date 06/09/2026

Ref No: 6268

FRIAS Fellowship Programmes

FRIAS Early Career Fellowship Programme (4.8 months)

FRIAS Senior Fellowship Programme

Call for Applications: 18 September 2026

More details [here](#)



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