

VOL. 2 · AUGUST 2024

# SPPIRIT NEWSLETTER

Official Newsletter of the SPPIRIT Network

Ascaris larva (credit: Creative Commons CCO).

## MAIN FEATURE

### JOINT PARASITOLOGY MEETING ANNOUNCED

The British, German and Swiss Societies of Parasitology have agreed to merge their annual meetings for a conference in Würzburg. The meeting will have all of the usual features of a BSP spring meeting but with a wider audience. Würzburg is a delightful Bavarian town with a historic town center. We are excited at this opportunity to cooperate with our European colleagues. The meeting will include a number of satellite meetings, so stay tuned for more information (adapted from BSP website).

Würzburg, Germany, 10th - 14th March, 2025

Abstract Submission & Registration - Expected October 2024



## Also in this issue:

PROFESSOR SUSAN WYLIE  
PAGE 2

ECR PROMOTIONS  
PAGE 3

NEW TSETSE FACILITY  
PAGE 4

UPCOMING EVENTS  
PAGE 6

PAPERS & OPPORTUNITIES  
PAGE 7

Contributions: Mattie Pawlowic; Olivia Ridgewell; Lilach Sheiner; Frank Venter; Mariana Ferreira Silva; Jeziel Damasceno; Andrew MacLean; Olivia Ridgewell; Craig Christie; Liam Morrison



“Science is a collaborative endeavour, so I consider this award a recognition of the tireless efforts of my entire lab”.

SUSAN WYLLIE  
UNIV. DUNDEE

## NEWS FROM OUR NETWORK

### SUSAN WYLLIE PROMOTED TO PROFESSOR

Congratulations to Professor Susan Wyllie on her well-deserved promotion! The team at the University of Dundee and the wider SPPIRIT network are thrilled to celebrate this achievement.

With over 15 years of experience in kinetoplastid biology, Professor Wyllie has made significant strides in understanding the mechanisms of action and resistance of drugs targeting kinetoplastid parasites. As a key contributor to the Wellcome Centre for Anti-Infectives Research, her work includes using complementary methodologies to determine the specific molecular targets of phenotypically-active compounds (adapted from Univ. of Dundee).



### LIFETIME ACHIEVEMENT AWARD

Andy Waters from the University of Glasgow has been awarded the prestigious European Molecular Biology Laboratory (EMBL) lifetime achievement award.

The announcement was made during the 20th-anniversary BioMalPar Conference in Heidelberg, which took place from May 21 to May 23. Julian Rayner, representing the BioMalPar 2024 committee, praised Professor Waters for his outstanding work, significant contributions to the field, and mentorship of younger scientists.

Leann Tilley from the University of Melbourne congratulated him on X, highlighting his contributions to malaria parasite biology and capacity-building efforts in Europe and Africa.

Congratulations, Professor Waters! (adapted from: Univ. of Glasgow).





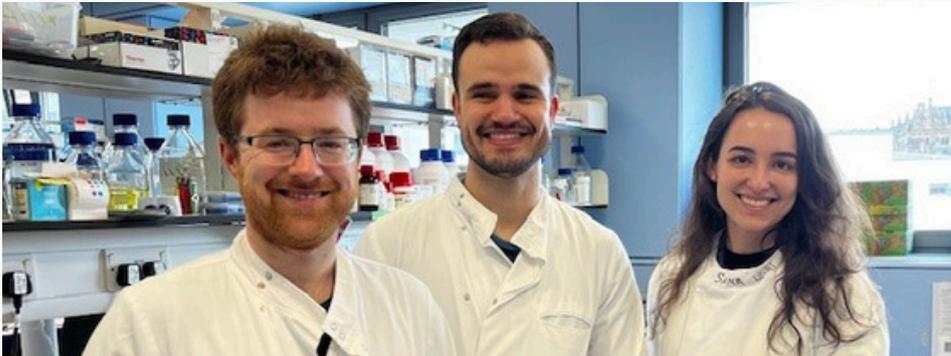
## EARLY-CAREER RESEARCHERS PROMOTED

Congratulations to three ECRs from the University of Glasgow, Mariana Ferreira Silva, Jeziel Damasceno, and Andrew MacLean, on their recent promotions.

Mariana, who works with Lilach Sheiner, was promoted from Research Assistant to Research Associate. Her short-term goal is to continue working in the Sheiner group to further understand the mitochondrial biology of *Toxoplasma gondii*. In the long term, she aims to return to Brazil to start her independent research career.

Jeziel Damasceno has been promoted to Research Fellow. He plans to continue exploring the fundamental biology of parasites and contribute to the elimination of neglected infectious diseases.

Andrew MacLean was also recently promoted to Research Fellow at the University of Glasgow. He looks forward to continuing his work on the divergent mitochondrial biology of *Toxoplasma* parasites.



## SCOTTISH RESEARCHERS CELEBRATED IN GERMANY

The 17th International Congress on Toxoplasmosis was recently hosted in Berlin, Germany. The International Congress on Toxoplasmosis is an integral event for the field as it unites a global community of students, young researchers and established leaders. The conference covered all aspects of *Toxoplasma* research, ranging from molecular biology to clinical disease and epidemiology.

A number of Scottish ECRs, presented at the conference, including Shika Shika (Glasgow), Dana Aghabi (Glasgow), Andrew Maclean (Glasgow), and Lucas Pagura (Glasgow). Jack Hanna (Glasgow) and Kseniia Bondarenko (Edinburgh) both won prizes for their presentations. Kseniia presented work relating to her corresponding paper (see pg 7). Congratulations everyone!

“I am honoured to be promoted to Research Fellow and excited to be a part of the vibrant environment at the University of Glasgow”.

JEZIEL DAMASCENO  
UNIV. GLASGOW





## NEW TSETSE FACILITY IN EDINBURGH

The newly established Tsetse colony facility at the Roslin Institute, University of Edinburgh, is a crucial resource for studying Tsetse flies and the trypanosomes they transmit. This facility, transferred from the Liverpool School of Tropical Medicine (LSTM), continues a legacy of fostering extensive research in this field. The Roslin team would particularly like to acknowledge the generous help and support from Alvaro Acosta Serrano, Lee Haines, Aitor Casas Sanchez, and Jonathan Thornton in enabling the successful transfer of the colony from LSTM to Roslin.

The establishment of this facility was further supported by generous funding from the Roslin Foundation, which promotes the institute's strategic goal of advancing vector biology research. Located in the Alexander Robertson Building on the Easter Bush campus, the colony is co-located with cutting-edge laboratories that specialise in trypanosome research and containment facilities for controlled host infections. It is expected to be fully operational within 3-6 months, ensuring a stable supply of high-quality pupae and adults for research purposes. On-host studies, including those involving cattle, are anticipated to commence by early 2025. Researchers and industry partners are encouraged to collaborate with the facility to continue the impactful scientific inquiries initiated at LSTM.

For further information, please contact Craig Christie ([craig.christie@ed.ac.uk](mailto:craig.christie@ed.ac.uk)), Pieter Steketee ([pieter.steketee@ed.ac.uk](mailto:pieter.steketee@ed.ac.uk)), or Liam Morrison ([liam.morrison@roslin.ed.ac.uk](mailto:liam.morrison@roslin.ed.ac.uk)) at the Roslin Institute.



**“We hope that the establishment of the tsetse colony will mean that this valuable resource remains available to the UK tsetse and trypanosome community.”**

LIAM MORRISON,  
ROSLIN INST.



@SPPIRITnetwork



[sppirit.network@gmail.com](mailto:sppirit.network@gmail.com)

## BSI CAREER ENHANCING GRANT

Olivia Ridgewell from the University of Glasgow was awarded the BSI Career Enhancing Grant, which facilitated a three-week placement in Dr. Lisa Reynolds' lab at the University of Victoria, Canada, and allowed her to attend the CSI Conference. During her placement, she learned valuable techniques such as EdU staining and co-infection protocols, which she will apply to her PhD research in Glasgow. Olivia shared her project work through an internal seminar and a poster presentation at the conference. Additionally, she learned about other helminth research and explored postdoctoral opportunities in Canada.

Image description: Olivia (center) on a hike with members of the Reynolds Lab at the end of the CSI conference.



“The experience offered valuable networking opportunities and I met wonderful people”.

OLIVIA RIDGEWELL  
UNIV. GLASGOW

## DOCTORAL FELLOWSHIPS AWARDED

The University of Dundee has launched a multi-million-pound Doctoral Fellowship Scheme to build capacity in partner universities and foster sustainable, long-term collaborations between research teams in Dundee and Africa.

One of the first awardees, Edem Adika from the University of Ghana, is conducting research in Dundee's School of Life Sciences. His focus is on understanding the impact of parasite genetic background on antimalarial drug resistance in Africa. Edem explained, “I'm investigating whether the genetic background of parasites aids in developing resistance, to enhance our understanding of how resistance emerges. By doing this, we can counter drug resistance and develop new drugs, ultimately reducing the disease's prevalence. Although Ghana has not yet seen resistance to most frontline drugs, resistance is gradually emerging in other African countries, so we need to remain vigilant.”





“Grateful for the recognition and thank you to everyone in the Matthews’ lab for their support.”

GUY OLDRIEVE,  
UNIV. EDINBURGH



## GUY OLDRIEVE AWARDED KER MEMORIAL PRIZE

The Ker Memorial Prize is awarded annually to recognize the best PhD thesis submitted at the University of Edinburgh. This year, the prize was awarded to Guy Oldrieve for his exceptional genomic analysis of distinct trypanosome field isolates. In his research, Guy identified and functionally confirmed molecular changes associated with the loss of the stumpy transmission stage in trypanosomes. Additionally, through laboratory selection, he uncovered reversible steps in the initial development of monomorphism, outlining a sequence of events that simplify the trypanosome life cycle. His findings have significant implications for disease spread, vector control strategies, geographical range, and virulence of the parasite.



## EVENTS

### DATES FOR YOUR CALENDAR

#### SULSA IndAc24

23-24 October 2024. Glasgow, Scotland

SULSA’s IndAc24 Conference is coming to Glasgow! Similar to IndAc23, this two-day conference will focus on industry engagement (for both collaborative R&D and employability) and skills development. Get an idea of the event by checking out our IndAc23 programme.

#### 3rd SPPIRIT ECR Symposium

25 October 2024. UWS Lanarkshire Campus, Scotland

SPPIRIT’s flagship ECR symposium returns and will be hosted by the University of the West of Scotland. Early-career parasitologists from across Scotland are invited to present their research and join for a day of networking. Check X (@SPPIRITnetwork) for more details.



@SPPIRITnetwork



sppirit.network@gmail.com



## RESEARCH FROM OUR NETWORK

### RECENT PARASITOLOGY PAPERS

Aguado et al. (2024). JCI. Identification and Validation of Compounds Targeting Leishmania major Leucyl-Aminopeptidase M17.

Bracha et al. (2024). Nature Micro. Engineering Toxoplasma gondii secretion systems for intracellular delivery of multiple large therapeutic proteins to neurons.

Bondarenko et al. (2024). BioRxiv. Expansion of in vitro Toxoplasma gondii cysts using enzymatically enhanced ultrastructure expansion microscopy.

Krasiņnikova et al. (2024). BioRxiv. Nanopore sequencing reveals that DNA replication compartmentalisation dictates genome stability and instability in Trypanosoma brucei

Morrison et al. (2024). Trends Parasit. What is needed to achieve effective and sustainable control of African animal trypanosomosis?

McLean et al. (2024). BioRxiv. Identification of novel PfEMP1 variants containing domain cassettes 11, 15 and 8 that mediate the Plasmodium falciparum virulence-associated rosetting phenotype.

Oldrieve et al. (2024). BioRxiv. Mechanisms of life cycle simplification in African trypanosomes.

Pacheco et al. (2024). Animal. Genetic profile of adaptive immune traits and relationships with parasite resistance and productivity in Scottish Blackface sheep.

**Want to feature your new paper?  
DM or tweet us @SPPIRITnetwork**

## OPPORTUNITIES

### FUNDING

EMBO POSTDOCTORAL FELLOWSHIPS. Supporting internationally mobile postdoctoral researchers in Europe and around the world.

More information:

<https://www.embo.org/funding/fellowships-grants-and-career-support/postdoctoral-fellowships/>

VITAECON2024 RESEARCHER BURSARIES. Funding available to enable researchers to attend the VITAECON2024 Conference 2024, sponsored by UKRI, British Academy's Early Career Researcher Network, and Wellcome. More information: <https://www.vitae.ac.uk/events/vitae-international-researcher-development-conference-2024/vitaecon2024-researcher-bursaries>

ESCMID RESEARCH GRANTS. Every year, ESCMID allocates around 800k EUR year to propel ground-breaking research projects in the fields of Clinical Microbiology (CM) and Infectious Diseases (ID) to aspiring young investigators. More information: <https://www.escmid.org/science-research/grants-awards/research-grants/>

### POSITIONS

Research Assistant position with Rick Maizels in Glasgow, studying parasite proteins as potential therapies for inflammatory disorders. Closing date: 28 August; details:

<https://www.jobs.ac.uk/job/DJE949/research-assistant>

Post-doctoral position with Isabel Roditi in Wurtzburg, investigating the role of cAMP signalling in different mammalian tissues during trypanosome infection. Starting 1 November 2024; Email: [isabel.roditi@unibe.ch](mailto:isabel.roditi@unibe.ch) for enquiries.