



SPPIRIT

Scottish **Parasitology** Partnership in Research, Innovation and Training

Network Newsletter: August 2023

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Upcoming Event: SPPIRIT ECR Symposium 2023

After a successful event at the Moredun Institute in 2022 which drew over 150 talented early career parasitologists and established researchers, SPPIRIT's ECR Symposium is back...and it's free!

We are excited to announce our second symposium, will be held on Monday the 30th of October hosted by the University of Dundee, where early-career parasitologists from across Scotland will showcase their science. We have organised an exciting day of poster presentations and talks, including two invited keynote speakers. There will be an emphasis on building connections at this year's Symposium, and there will be opportunities to network at one of three dedicated sessions.

Get in quick and register at the [EventBrite page](#).

Gender equity in parasitology

Nichola Calvani from the University of Galway visited the University of Dundee in June to discuss gender equity in parasitology. Her analysis of gender equity amongst parasitology award winners, societies and journal editorial boards reveals an underrepresentation of women (1). She launched *Herminthology* (2) in August 2021 to demonstrate the diversity of work conducted by women parasitologists and promote the discipline as an exciting field to women considering STEM careers. *Herminthology* now aims to provide opportunities for women to participate and succeed in the discipline. This includes the recently launched Equity in Parasitology (EQUIP) Scholarship, which supports women from low- and middle-income countries to attend an international parasitology conference.

Nichola's visit to Dundee was organised by SPPIRIT committee member Simona Seizova (backed by Prof. Mike Ferguson and sponsored by WCAIR) and included a thought-provoking talk and discussions over lunch with local women in





parasitology. Look out for the *Herminthology* profiles of Dundee-based women parasitologists coming soon! If you know or are a woman in parasitology and would like to be profiled by *Herminthology*, please visit the website to make a nomination.

During her presentation, Nichola shared some thoughts on how parasitology could pursue a more balanced future:

1. **It's about quality, not quantity** –authorship, positions on grants, and nominations aren't all equal in calibre if women given those opportunities aren't also given the autonomy, respect and authority that men in these same positions are given.
2. **Avoid the 'poison chalice'** - Taking on roles with high levels of administration often lead to women becoming overburdened doing work other than science.
3. **Stop 'training women to succeed in the workplace'** - this does nothing to address institutional and cultural barriers and simply adds to their workload with unnecessary workshops and meetings.
4. **Learn how to identify and prevent unconscious bias** - what systems or behaviours do you perpetuate that disadvantage women and other minorities? How can you change this with your immediate surroundings?
5. **Be an ally!** – progressing equality is not the responsibility of women alone, it's a team effort.

Nichola has further provided a resource (see below for list) for those who are interested in learning more and to encourage discussions about this topic. If there is anything you think SPPIRIT can do to support equality within the Scottish parasitology community, please let us know.

Resources:

- **The Lancet: Microbe 'In Conversation With' Podcast**
- **Elsvier's Gender Report 2020: The Researcher Journey Through a Gender Lens**
- **'Building Parasitology Communities to Promote Gender equality'** - English, Power and Gómez-Díaz, 2020. *Trends in Parasitology* 36 (6)
- **'Institutional Report Cards for Gender Equality: Lessons Learned from Benchmarking Efforts for Women in STEM'** - Beeler et al., 2019. *Cell Stem Cell* 25
- **'Girls and Women in Science, Technology, Engineering, and Mathematics: STEMing the Tide and Broadening Participation in STEM Careers'** - Dasgupta and Stout, 2014. *Policy and Insights from the Behavioural and Brain Sciences I (I)*
- **'Identifying Barriers to Career Progression for Women in Science: Is COVID-19 Creating New Challenges?'** - Hansen, 2020. *Trends in Parasitology* 36 (10)
- **'Women Representation and Gender Equality in Different Academic Levels in Veterinary Science'** - Liu et al, 2021. *Veterinary Sciences* 8 (159)

- *Melanie Ridgway and Simona Seizova, University of Dundee*

1. Calvani NED, Verissimo CM, Cantacessi C, Clark E, Kanduma E. *Herminthology: promoting gender equity in science and parasitology: (Trends in Parasitology, 39:2 p:73-79, 2023). Trends Parasitol. 2023;39(5):402.*
2. <https://www.herminthology.com/>

Show and Tell

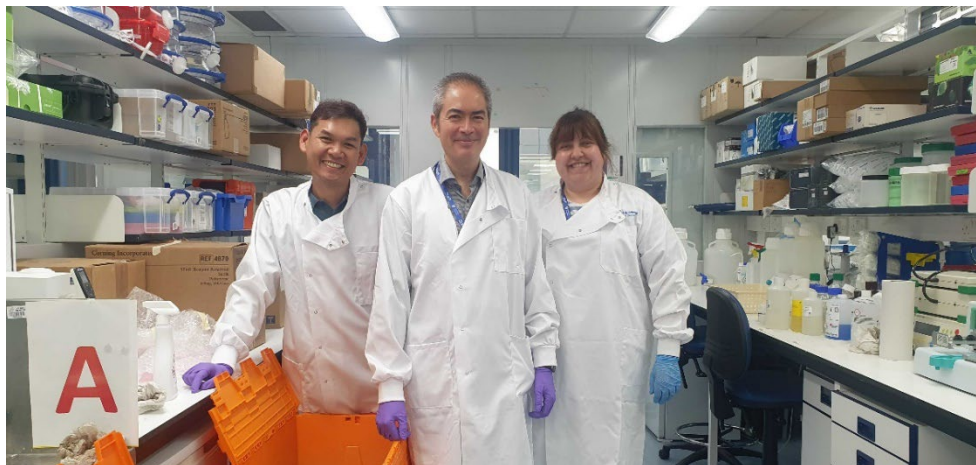
This is a new edition to the SPPIRIT newsletter, and we hope it is something everyone in the network can get involved in. It's a space to get to know what's happening within the network and celebrate each other. Tell us all about your student vivas, awards, publications, and everything in between. So, if you have something exciting to share with the community, please let us know!

Send a photo and a little blurb about your exciting news to sppirit.network@gmail.com, titled "Show and Tell", and it will be included in our upcoming newsletter. Or share it with your SPPIRIT representative.

Let's build our community together and celebrate each other's success.

Welcome to the Lee Lab

Marcus Lee has recently moved his lab to the University of Dundee from the Sanger Institute. Marcus is interested in the molecular basis of drug resistance in the human malaria parasite *Plasmodium falciparum*, and in developing molecular genetics approaches to interrogate gene function. This summer he welcomed two new postdocs (pictured), Nonlawat (Top) Boonyalai from Kasetsart University (Thailand) and Rebecca (Bec) Edgar from Deakin University (Australia), and all his gear!



The lab will continue to grow this year, with current postdoc Mukul Rawat arriving from the Sanger, two new PhD students, Jed Hawes (EastBio student, from the University of Birmingham) and Edem Adika (Africa Fellows student, from WACCBIP, University of Ghana), and Mairi Buchanan (RA). Welcome to SPPIRIT the Lee lab! Be sure to come say Hi to the team at the next SPPIRIT event.

SPPIRIT member wins SULSA Early Career Researcher Prize

Congratulations to Dr Matias Perez on winning the SULSA Early Career Researcher Prize for outstanding research in the Animal category. His application was short-listed for presentation, following which he was awarded the prize. The award (£2,000) will help support Matias' research on "microRNAs and modulation of immunity and inflammation during parasitic nematode infections" and enable him to establish new collaborations with other research groups in Scotland.

Well done Matias!



Five early career parasitologist graduate this June

Congratulations to Dr Jack Hanna (PhD, Pawlowic Lab), Ms Flora Caldwell (Masters, Pawlowic Lab), Dr Emma Sands (PhD, Pawlowic Lab), Dr Ross Bacchetti (PhD, Pawlowic Lab) and Dr Jose Paredes Franco (PhD, Ferguson Lab; not pictured) who all graduated this summer!! Sunny Dundee lived up to its name and the garden party was filled with bubbles, Ceilidh dancing, Tayside strawberries and Clark's pies. A fitting celebration and farewell to our students.



Jack Hanna is completing a Postdoc in Clare Harding's lab in Glasgow, and Jose Paredes Franco is working with Alvaro Acosta-Serrano in Indiana (USA). Flora Caldwell is starting her PhD this Autumn at University of Edinburgh with Joanna Young, Nisha Philips, and Joanne Thompson. Emma Sands has started working with Scotland Water helping to keep our waters clean and safe (from *Crypto* no doubt!). Ross Bacchetti is training to become a Clinical Microbiology Scientist at the NHS Greater Glasgow and Clyde Reference Laboratories.

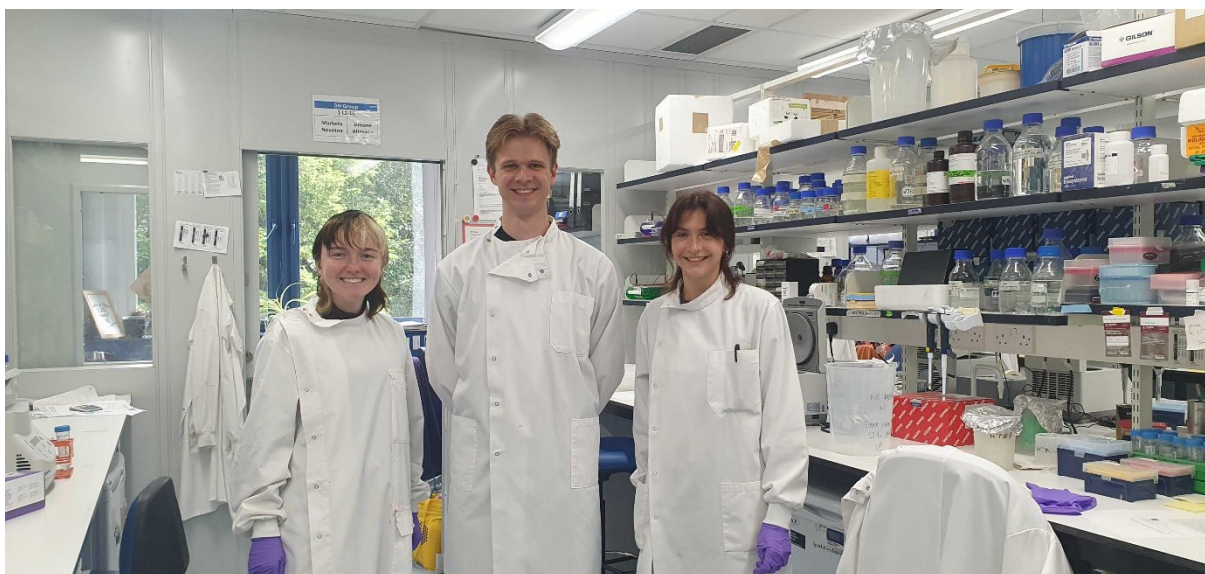
We wish all our students the best for the future!

New Edinburgh lab is awarded a Wellcome Discovery Award

Congratulations to Bungo Akiyoshi who was awarded an 8-year Wellcome Discovery Award! This comes just after the Akiyoshi lab moved from Oxford (in March this year) to the Wellcome Centre for Cell Biology, University of Edinburgh. The Akiyoshi lab work focuses on the mechanism of chromosome segregation in *Trypanosoma brucei*. We are excited to have another lab join our community and we hope this move provides an opportunity for some amazing collaborations!

Parasitology Summer Students at Dundee having a great time learning new skills

Emma Carrington (Pawlowic lab, supported by ECR Dr Simona Seizova), Sam Forsyth (Wyllie MOA lab, supported by ECR Dr Victor Corpas-Lopez) and Anna Creelman (Horn lab, supported by ECRs Dr Simone Altmann and Dr Melanie Ridgway) have had a wonderful summer learning all things parasitology (pictured from left to right). In the first week of August, they successfully presented their summer projects to the whole of Dundee's School of Life Sciences – for some it was the first taster of what a career in research could look like.



“Working on *Cryptosporidium* at the Pawlowic Lab this summer has been an amazing experience. I have run numerous experiments including molecular cloning, transfections, and so much more for my project to expand the molecular tools available for this parasite. This summer has been so much fun, and I've learned so much from this hands-on experience in the lab, which I know will help me in my future studies and employment opportunities.” – Carrington, University of St Andrews Student, Wellcome Trust Summer Student.

“I've had a brilliant time working with the Mode of Action group over the summer. All the researchers in the lab have been so welcoming, and it feels great to do some really valuable work.” - Forsyth, University of Dundee, Wellcome Trust Summer Student

“My summer placement at Dundee's School of Life Sciences has been an amazing insight into a career in research and the world of parasitology. I have enjoyed learning new techniques and presenting my results as a poster and I am excited to put these skills into practise in future projects.” - Creelman, University of Dundee, Wellcome Trust Summer Student

Congratulations to Lilach Sheiner, now Professor!

We are delighted to announce that Lilach Sheiner has been promoted to Professor!

Lilach has been studying apicomplexan parasites, mostly *Toxoplasma*, since 2005 and has passion for parasitology and empowering others within the community having been a founding member of both SPPIRIT and MeBOP. Congratulations Lilach!

First paper from the Pawlowic lab!

Congratulations to the Pawlowic lab who published their first paper last week!

The paper titled “Mode of action studies confirm on-target engagement of lysyl-tRNA synthetase inhibitor and lead to new selection marker for *Cryptosporidium*” was a collaboration with the Wyllie lab and worked to develop unbiased methods to identify drug targets for *Cryptosporidium* using a compound developed by Beatriz Baragana and her team in the DDU. In doing this work, the team also developed a desperately needed second selection marker for genetic work, expanding the capabilities of the *Cryptosporidium* field.



You can read the paper (open access) here: <https://doi.org/10.3389/fcimb.2023.1236814>

The Pawlowic lab was established in 2017 and this paper is a first for many: first-first author for Dr Jack Hanna (Jack's PhD work), first-senior author for Dr Mattie Pawlowic and the first-*Cryptosporidium* paper for all in the lab.

Those that were in Dundee last week (pictured) celebrated with treats and drinks.

- Simona Seizova, University of Dundee