

A (mostly) sunny time in Hydra at 'Parasitic Helminths: New Perspectives in Biology and Infection'

In September 2023, I had the privilege of attending *Parasitic Helminths: New Perspectives in Biology and Infection*, where I presented a core part of my PhD research on the molecular epidemiology and evolution of antigens in the multi-host parasite, *Schistosoma japonicum*.

The conference was hosted on the picturesque Greek island of Hydra (Idra) in the Argo-Saronic Gulf, just a short ferry ride from the Athenian coast. With fewer than 2,000 inhabitants, Hydra is a serene island renowned for its pristine waters, narrow stone paved streets, hiking trails, and absence of motorised vehicles. It served as an ideal backdrop for a five day assembly delving deep into high-calibre scientific discussions on parasitic helminths.

Of the 20 neglected tropical diseases, seven are attributed to parasitic helminths. Consequently, enhancing our comprehension of their biology, life cycles, transmission dynamics, and pathogenicity is pivotal for developing sustainable control strategies. Fundamental to the global fight against parasitic helminths is the integrative collaboration across disciplines, taking a multi-faceted approach to bridging knowledge gaps and moving towards elimination of these diseases.

The conference embodied this interdisciplinary ethos, uniting both academic and non-academic researchers who specialise in various medically-significant parasitic helminths. The focus ranged from molecular biology to immunology and omics techniques.

Central to this conference was the priority placed on dialogue. The attendee count was intentionally limited to encourage in-depth, informal discussions on presented topics. This environment fostered rich conversations and paved the way for networking with potential collaborators.



Hydra, Greece

Moreover, there was a pronounced emphasis on promoting early-career scientists, and interaction with experts from endemic regions, broadening the spectrum of global perspectives.

This year's gathering featured 12 presentation sessions, a workshop by WormBase ParaSite, poster pitches, and two comprehensive poster sessions. The research encompassed all seven helminthic NTDs, showcasing a gamut of pioneering research techniques. Topics ranged from helminth immunology to drug resistance, from host-parasite interactions to human infections. Highlights spanned discussions on whipworms' invasion tactics to the intricacies of host immune responses and advanced drug screening methods.

The symposium provided an important platform to unveil my PhD research on *Schistosoma japonicum* antigen variations across different host species - pivotal for vaccine target development and understanding zoonotic transmission's impact on parasitic evolution. My PhD was a joint venture among three London Centre for NTD Research member institutions: Kingston University, the Natural History Museum, and the Royal Veterinary College. I am deeply honoured to have represented them. One of the conference's most gratifying elements was engaging with a diverse scientific community. The intimate setting fostered genuine interactions and idea exchanges that could lead to future collaborations. My time in Hydra was undoubtedly an unforgettable journey.

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