IUIS Council Member Description

Personal description by the Candidate for 2022-2025 Council:

I am Professor of Cellular Immunity and Immunotherapy in the Division of Infection and Immunity and the Systems Immunity Research Institute at Cardiff University, Wales, UK. I trained in microvascular biology at Cambridge University and Boston. As a postdoctoral fellow with Professor Bill Ford at the University of Manchester, I started working on what has become my life-long interests in high endothelial venule (HEV) blood vessels and T-cell trafficking. I gained an MRC Senior Fellowship before moving to a Senior Scientist position at the MRC National Institute for Medical Research in London. I moved to Cardiff University in 2007 as Reader and was awarded a personal chair in 2018. A major focus of my research has been the regulation of L-selectin/CD62L expression by T lymphocytes and its impact on T-cell homing via specialized high endothelial venules and inflamed blood vessels. Recent studies have revealed an essential role for L-selectin on CD8+ T cells in homing to virus-infected lungs for virus clearance and in limiting cancer progression as well as a novel approach to improving immunity by boosting T lymphocyte homing. A new area of research is investigating the regulation of T lymphocyte interactions with the blood brain barrier and how this may contribute to neurodegenerative diseases, such as Alzheimer’s disease.

I have more than 30 years’ experience working on academic and clinically-related immunological research in Universities and Research Council funded Institutes in the UK and the US. I was elected as Chair of Forum and a Trustee of the British Society for Immunology (BSI) in 2019 and to IUIS council in the same year. In these roles, I strive to support, encourage and widen participation, addressing those issues important for the future of immunology such as career development, mentorship, training and scientific integrity. I endeavour to be a role model by voicing my opinion and standing for positions of responsibility. I wrote an article for a series on Women in Immunology in Nature Immunology about my experiences as an advocate, including for the BSI and IUIS, and why I wanted to stand for and take on these roles (https://doi:10.1038/s41590-020-0609-5).

The pandemic has demonstrated the importance of immunology to the world. IUIS is in a strong position to build on the current momentum and continue to promote engagement, training, participation and collaborative interactions for the benefit of a one health approach. The BSI has provided a trusted source of information both to the UK government and public on the complex issues of COVID-19 immunology and, more latterly, long COVID, as well as the use of mass vaccination. As a representative of the BSI, one of the oldest, largest and most active immunology societies in the world and one of the largest in Europe, I will be able to exchange ideas and best practice within the global community represented by IUIS. I was elected to IUIS council in 2019 but the pandemic has limited the activities that I can bring to Council and for this reason I wish to stand again.