

Dr Katherine Martin



EDUCATION

2006–12 - PhD, Monash University, Australia

2004 - Bachelor of Science Hons, Hudson Institute, Australia

2000-03 - Bachelor of Art/Science, Monash University, Australia

PROFESSIONAL EXPERIENCE

Industry: 2024-Present – Senior Scientist (R&D), CSL, Australia

Academia: 2018–24 - Senior Research Officer/CJ Martin Fellow, WEHI, Australia

2013–18 - Postdoctoral Research Associate/CJ Martin Fellow, INSERM/Institute Cochin, France

2012–13 - Postdoctoral Research Associate, William Harvey Research Institute, UK

PROFESSIONAL ACTIVITIES

Society: Professional Development Committee (SLB 2022-present), Co-chair Members in Training and Transition Committee (SLB 2020-21), Executive board member WEHI Postdoctoral Association (2020-21), Communications Committee (SLB 2018–21), Members in Training and Transition Committee (SLB 2017–20), Equity and Diversity Committee (British Pharmacology Society 2013–17), Monash Institute of Medical Research Student Council (2006-07).

Awards: Arthritis Australia Project Grant (2022), CSL Industry Grant (2019), Lorne Infection & Immunity Career Development Award (2018), NHMRC CJ Martin Early Career Fellowship (2015), Département Hospitalo-Universitaire Autoimmune Project Grant (2016), Fokko van der Woude Best Research Prize (2015), British Pharmacology Society Bain Memorial Award (2013), Australian Postgraduate Award (2006).

Editorial: Junior Editor for the Society of Leukocyte Biology Newsletter (2017 – 2020), Review Editor for J Leuk Biol, J Immunol, J Innate Immun and Frontiers Immunol.

Conference roles: Organizer and chair of poster flash talks at the SLB Annual meeting (Hawaii, 2022), Organizer of the SLB SCHOOL (Virtual, 2020-2021), Organizer and chair of the Australian Inflammation Symposium (2019), Organizer and chair of the Lorne Infection and Immunity Early Career Research Workshop (Australia, 2019), Invited participant in parliamentary inquiry into science and diversity (UK, 2013).

RESEARCH INTERESTS

Identifying novel molecular drivers of autoimmunity

1. Targeting neutrophils to treat autoimmune diseases.

While essential for host defense, dysregulated neutrophil responses cause chronic inflammation and irreversible organ damage in autoimmunity. Studies use in vivo, in vitro, and human patient samples to understand how neutrophils facilitate tissue damage and develop novel therapeutic strategy to target pathogenic neutrophils, while leaving essential neutrophil-mediated host defense intact.

2. Controlling the production of pathogenic autoantibodies.

B cells can become self-reactive and generate autoantibodies which contribute to the development of autoimmunity. In the context of systemic lupus erythematosus (SLE), B cells produce autoantibodies directed against nucleic acids and their binding proteins which in turn promote inflammation and tissue damage. This research focuses on identifying new targets that control the production of these pathogenic autoantibodies to treat SLE.

STATEMENT OF INTEREST

I am a Senior Research scientist with experience in both academia and industry. My career has taken me from Australia to the United Kingdom, France and back to Australia again. This has provided me with an appreciation of the challenges facing the international research community and insights into the innovative approaches different countries implement.

The SLB has created a welcoming and inclusive environment and resultantly, had a genuine impact on both my research and career development. I have been an active member of SLB for nearly a decade and have held various leadership positions. I was the co-chair of the Members in Training and Transition Committee (2020-2022), a committee dedicated to nurturing junior members of the society. During my tenure I organized scientific workshops, produced scientific content for the website and curated an international funding database. I also helped to create the SLB SCHOOL, a virtual seminar series launched during the pandemic to support and connect our members from across the globe. I have participated in several committees including communications and professional development, providing invaluable insight into how the society operates and the varying needs of our global membership.

As an Associate Councilor with SLB, I would work with the council to:

- Provide opportunities for early career researchers to enhance their scientific visibility and obtain scientific and professional mentorship through discussions with leaders in the field.
- Enhance the global reputation of the SLB and expand international membership. This will include a specific focus on growing our Australian and New Zealand members.
- Create increased connections between academia and industry including professional opportunities beyond academia that redefine our understanding of what it means to have a successful scientific career.
- Continue to promote the experimental, intellectual and career development of scientists from all backgrounds.
- As the liaison to MTTC, build the confidence of our future leaders by providing the necessary support to successfully execute new initiatives.

This associate council position would allow me to support the global leukocyte biology research community and give back to a society that has always enriched my scientific career.