

Adrian Liston

BSc(Hons) GCertHE MPH MA(Cantab) PhD FMedSci FRSB

• **Current Positions**

2023 – current	Professor of Pathology, University of Cambridge
2023 – current	Professorial Fellow, Equalities Fellow, Director-of-Studies, and Postgraduate Tutor (Welfare), St Catharine's College, United Kingdom
2023 – current	Editor-in-Chief, Immunology & Cell Biology
2021 – current	Director and CSO, Aila Biotech (pre-seed)
2024	Affiliate member, MRC Toxicology Unit
2024	Affiliate member, Cambridge Centre for Myelin Repair

• **Selected Previous Positions**

2019 – 2023	Senior Group Leader, The Babraham Institute
2020 – 2023	Senior Research Fellow, Churchill College
2009 –2022	Professor, Department of Microbiology & Immunology, University of Leuven, Belgium
2009 –2018	Group Leader, VIB Brain and Disease Research Center, Belgium

• **Education**

Aug-2024	Master of Arts (Cantab), University of Cambridge, United Kingdom
Dec-2009	Master of Public Health, University of Queensland, Australia
Dec-2006	Graduate Certificate in Higher Education, Australian National University, Australia
Dec-2005	PhD. Australian National University, Australia
Dec-2001	BSc (Honours), Adelaide University, Australia

• **Selected Fellowships and Awards**

2024	Genentech Immunology Seminar Series, USA
2023	Elected Professor of Pathology, University of Cambridge, UK
2023	Selected as Editor-in-Chief of Immunology & Cell Biology, Australia
2022	Fellow of the Royal Society of Biology, UK
2021	Fellow of the Academy of Medical Sciences, UK
2020	Wellcome Trust Investigator, UK
2018	Eijkman seminar, Netherlands
2017	Leaders in Science seminar, Australia
2016	Eppendorf Award for Young European Investigators, EU
2016	ERC Consolidator Award winner, EU
2016	Francqui Foundation Chair, Université libre de Bruxelles, Belgium
2015	Dr. Karel-Lodewijk Prize, Belgian Royal Academy of Medicine, Belgium
2010	ERC Start Grant Award winner, EU
2005	The Frank Fenner Medal – John Curtin School of Medicine, Australia
2001	University Medal – Adelaide University, Australia

• **Mentorship and the Development of Others**

A key focus of Liston is the development of others, both in his laboratory and beyond. Liston has trained 180 junior scientists, with many going on to leadership positions in academia, industry and the clinic. 21 PhD students have finished their degree under his supervision. Liston is a strong advocate for equality, diversity and inclusion, a philosophy based on both the moral imperative of broad social inclusion in science and also the benefits that arise from identifying and nurturing talent from historically under-represented groups. Liston has been a strong advocate for the

recruitment of women and under-represented racial minorities at the faculty level, using his leadership roles to reform hiring processes within his previous host institutions. More recently, Liston has led the creation of opportunity-based programs to create a pipeline of STEM inclusion focused on equalising enrolment according to economic, racial and personal opportunity. Liston has been active in soft advocacy, giving frequent guest lectures on the importance of diversity in STEM.

This ethos can be observed in the hiring record of the Liston laboratory: of the 180 scientists who have been trained in the Liston lab over the past 15 years, 65% are women and 60% are international. The current team (n=14) is 57% women, 80% international and 57% people of colour. Coupled with equality, diversity and inclusion at hiring is a personalised attention to mentoring towards the goals of each laboratory member. This support can also be observed through outcomes: seven trainees are now principal investigators, of whom all are from under-represented groups in STEM (women, people of colour, care leavers, LGTB). Many other alumni are now in leadership roles in industry (at CEO, COO, divisional head level) and the clinic.

The philosophy of development of others extends well beyond the Liston laboratory. Liston gives frequent career development seminars and workshops (10 in the last year alone) and has published 12 articles on different aspects of career development, including strategic career building in your PhD (Liston and Makaroff, *Immunology & Cell Biology* 2022), applying for a faculty position (Lesage and Liston, *Stroke* 2021), creating a positive research environment in your lab (Liston and Fitzgerald, *Wellcome Open Research* 2024) and building a positive research culture at the institute level (Liston and Fitzgerald, *Immunology & Cell Biology* 2024). This focus on career development is also reflected through the work of Liston in mentoring through the Academy of Medical Sciences and University mentoring schemes, in addition to many informal mentoring roles. Career development resources generated by Liston are listed at www.listonlab.uk/careers/

- **Institutional contributions**

At an institutional level, Liston is committed to good governance and the development of scientific infrastructure. This is reflected through committee work at the University of Cambridge and St Catharine's College, where Liston chairs six committees and serves on an additional nine, including serving as Equalities Fellow, Postgraduate Tutor for welfare, and on the EDI and Cambridge Africa committees. Liston has worked to integrate prioritisation of relative opportunity (economic, personal, familial, racial) into recruitment and funding processes, to widen participation and provide diverse representation.

In terms of scientific infrastructure, Liston works to create open-access facilities, to catalyse the uptake of high-end equipment across the institution. To this end, Liston founded and directed two core facilities at the University of Leuven, the FACS Core and Genome Engineering Core, which have now been running for 10 years and are considered the model for open core facilities in Leuven. In Cambridge, Liston has led on equipment applications to bring in new high-end equipment for the Flow Cytometry and Imaging facilities.

- **Selected Public Engagement**

Liston is an extensive science communicator for the general public, and an advocate for harnessing lived experiences for authentic science communication (Liston, *Nature Reviews Immunology*, 2024).

To help drive a positive narrative about vaccination, Liston authored three young children's books about immunology: "Battle Robots of the Blood", "Maya's Marvellous Medicine" and "Just for Kids! All About Coronavirus", translated into multiple languages and available free online. For the older school-aged audience, the Liston laboratory created the award-winning educational online simulator of viral outbreaks, www.virusfighter.org, which includes multiple game scenarios that educate about the role of vaccination. Liston recently published the graphic novel "[Becoming a](#)

[Scientist](#)” to encourage a diverse set of school leavers to enter STEM subjects at university by telling the stories of the scientific members of his research team, as each overcame barriers to reach their current position.

For the adult lay-population, Liston is frequently engaged by the media to explain immunological concepts and comment on immunological advances (>200 news articles, two radio interviews and seven national TV segments over the past five years). He also gives public lectures at venues such as the Athenaeum Club and public learned societies. Liston strongly believes in expanding the audience of science communication beyond these traditional groups to under-served communities. As part of that process he recently initiated and organised the highly successful “Sensory Science Cambridge” program, which created and displayed new scientific art exhibits tailored towards the blind and low vision community. Examples of his innovations in public engagement are listed at www.listonlab.uk/outreach/

- **Contributions to the wider research community**

At a grant program level, Liston undertakes substantial work reviewing, refereeing and on committees. He has served on grant review boards such as the MRC Infection & Immunity Board, the MRC Training & Careers Board and the African Leaders Programme, and chaired review boards such as the Finnish National Academy of Science. He ad-hoc reviews for many programs, including in the past year the Wellcome Trust, Academy of Medical Sciences, Knut and Alice Wallenberg Foundation and Swiss Cancer Research foundation.

For manuscript reviewing, Liston is Editor-in-Chief at Immunology & Cell Biology, with oversight over all submissions. Liston has implemented major reforms, including improving research culture by enabling cross-platform review transfer, appointing the first research integrity Deputy Editor, and initiating and developing a new journal section, [Immunology Futures](#), which is devoted to early career researchers and improving equality, diversity and inclusivity within immunology. This feature is building into a community resource with career advice, diverse role models, and extensive discussions on the future of our discipline. Liston also frequently reviews for other journals, including in the past year Nature, Science, Immunity, Nature Reviews in Drug Discovery, Science Translational Medicine, Nature Aging, Nature Reviews Immunology, Science Immunology and Nature Neuroscience.

- **Contributions to the innovation community**

Liston has been heavily involved with clinical immunology and clinical trials, being primary investigator on two clinical trials and co-investigator on five clinical trials and co-chair for translational research on one clinical trial. Liston is experienced at industry-academic partnerships, with Novartis, OctiMet, Janssen, Noxxon, Complix, Reflection Therapeutics and BD Biosciences. Liston currently sits on the SAB on Dualxy and Enhanc3D, and previously served with Imcyse and Sangamo. Liston is inventor of 9 submitted patents, with two spin-off companies founded from the laboratory, Aila Biotech Ltd and Colibri Cytometry. His team developed AutoSpill, with an industrial agreement with BD resulting in the integration into FlowJo v10.7 (impact >80,000 users). Liston mentors in the EnterpriseTECH program to develop young entrepreneurs, and has consulted for pharma, biotech, venture capital and patent law.

- **Current Research Support**

- PI Wellcome Trust Investigator, Brain CD4 T cells and their influence over microglial homeostasis, £1,781,917, 2021-2026
- PI DPFS. Development of a humanized delivery system for interleukin 2 to treat traumatic brain injury. £616,051, 2023-2025
- CoPI The Brain Cancer Charity. Using micro-targeted IL-2 to boost CAR-T cell therapy for aggressive brain tumours. Total budget, £150,000, amount awarded to Liston £83,890

- **Key publications**

Liston has published 235 scientific articles, 13 career development / education articles, and 8 popular science books and articles. Key articles as last author included many in high profile leading journals such as *Cell*, *Nature Immunology*, *Nature Genetics*, *Nature Medicine*, *Nature Reviews Immunology*, *Science Translational Medicine*, *Journal of Experimental Medicine*, *Science Immunology* and *Immunity*. These articles have led to ~20,000 citations and a H-factor of 64.

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