

RESEARCH FELLOW

DEPARTMENT/UNIT	Centre for Inflammatory Disease Monash Health, School of Clinical Sciences at Monash Health
FACULTY/DIVISION	Faculty of Medicine, Nursing and Health Sciences
CLASSIFICATION	Level A
DESIGNATED CAMPUS OR LOCATION	Monash Medical Centre

ORGANISATIONAL CONTEXT

At [Monash](#), work feels different. There's a sense of belonging, from contributing to something groundbreaking – a place where great things happen. You know you're part of something special and purposeful because, like Monash, your ambitions drive you to make change.

We have a clear purpose to deliver ground-breaking intensive research; a world-class education; a global ecosystem of enterprise – and we activate these to address some of the [challenges](#) of the age, Climate Change, Thriving Communities and Geopolitical Security.

We welcome and value difference and [diversity](#). When you come to work, you can be yourself, be a change-maker and develop your career in exciting ways with curious, energetic, inspiring and committed people and teams driven to make an impact – just like you.

We champion an [inclusive workplace culture](#) for our staff regardless of ethnicity or cultural background. We have also worked to improve [gender equality](#) for more than 30 years. Join the pursuit of our purpose to build a better future for ourselves and our communities – [#Changelt](#) with us.

The Faculty of **Medicine, Nursing and Health Sciences** is the largest faculty at Monash University, a global university with campuses across Victoria and international locations in Indonesia, Malaysia, China, India and Italy.

Our Faculty offers the most comprehensive suite of professional health training in Victoria, consistently ranked in the top 40 universities worldwide for clinical, pre-clinical and health sciences.

We want to improve the human condition. That is our vision - it has no expiration date. By educating the current and future healthcare workforce, and undertaking medical research, both discovery and clinical, our students, staff and alumni all work to directly improve people's quality of life, reduce health inequality and promote greater health and social outcomes.

We're globally recognised for our quality education of over 63,000 doctors, nurses, and allied health professionals and health researchers. The future health of our communities is underpinned by the sustained excellence of our education and research capabilities.

We are ambitious and committed to maintaining our position as a leading international medical research and teaching university. We're recognised for the quality of our graduates, the scale and depth of our research, our commitment to translational research, and as a thriving biotechnology hub. To learn more about the Faculty, please visit www.monash.edu/medicine.

Our Faculty includes four Sub-Faculties: Health Sciences, Clinical and Molecular Medicine, Biomedical Medicines, and Translational Medicine and Public Health.

The **Sub-Faculty of Clinical and Molecular Medicine**, embedded in Monash Health, comprises the School of Clinical Sciences (SCS), Hudson Institute of Medical Research, Monash Centre for Health Research and Implementation (MCHRI), and the Victorian Heart Institute (VHI) within the new Victorian Heart Hospital.

We improve health across the lifespan, in partnership with Victoria's largest health service. Our direct access to patient populations is enabled through Monash Health's multiple hospital campuses and community services.

We drive cutting-edge research across the human lifespan, from fertility to end of life. Our work spans the continuum from discovery and clinical research, through to implementation and health services research.

We strive to generate world-leading health outcomes and offer a strong record of entrepreneurialism and commercialisation, developing opportunities at every level, from molecule to community.

The **School of Clinical Sciences at Monash Health (SCS)** is one of nine schools of the Faculty of Medicine, Nursing and Health Sciences at Monash University, and is the third largest school within the Faculty and its largest clinical school. Most research and teaching activities of the School are based at Monash Medical Centre Clayton. Monash Medical Centre is the major tertiary referral hospital for Monash Health, which serves a population of over 1.5 million people and is Monash University's largest hospital partner. The School of Clinical Sciences at Monash Health is a major teaching resource for Monash as its largest deliverer of clinical teaching in the medical student curriculum and the host of its Nutrition degrees.

Basic, clinical, and translational research are undertaken by the departments of the School: Medicine; Nutrition, Dietetics & Food; Obstetrics and Gynaecology; Paediatrics; Psychiatry; Surgery; Radiology and Radiological Sciences, and associated University Research Centres. SCS has over 250 PhD students and also supports students completing a BMedSc (Hons) or MPhil, often in conjunction with medical training.

Researchers of the School collaborate closely with clinical areas in Monash Health and many of the School's principal investigators are leading clinician-scientists. The School is believed to have the largest number of clinicians enrolled in higher degrees by research of any teaching hospital in Australia. See more at: www.monash.edu/medicine/scs

The **Department of Medicine**, the largest Department within the School of Clinical Sciences at Monash Health, comprises more than 200 staff, including more than 50 EFT academic staff and 70+ PhD students, the majority of whom are medical specialists. Academic activities are divided into large research themes, including three University Centres. The **Centre for Inflammatory Disease** has the largest number of academic staff and covers associated disciplines of Internal Medicine, including rheumatology, immunology, nephrology, gastroenterology, and infectious diseases. Other research groups, many of which include Monash Health Department Heads or clinician-scientists, include bone and muscle research, oncology, haematology, stroke and ageing, and emergency medicine research. A key research group in the Department is Precision Medicine, which advances targeted diagnostic tools and treatments for chronic diseases, including breast and prostate cancer. The integration of research activities among the Department of Medicine research groups and

centres, together with our established strong national and international collaborations, enables us to contribute to thriving communities globally.

See more at: <https://www.monash.edu/medicine/scs/medicine/home>

Monash and the Faculty of Medicine, Nursing and Health Sciences values staff diversity and champions inclusive practices. We are committed to equitable decision making and apply the principles of [achievement relative to opportunity](#) in our selection processes.

POSITION PURPOSE

A Level A research-only academic is expected to contribute towards the research effort of the university and to develop their research expertise through the pursuit of defined projects relevant to the particular field of research.

This Post-Doctoral Research Fellow position will focus on investigating new therapeutic targets to develop new treatments for autoimmune kidney diseases. The successful candidate will contribute to and support the Translational Kidney Therapies Group by conducting gut microbiome studies, investigating key targets to prevent the production of neutrophil extracellular traps, develop strategies to detect pro-inflammatory micro and nano plastics consumed through diet and use gene therapy strategies (adeno associated viral vectors) as new treatments for autoimmune kidney diseases. This position is ideal for an ambitious self-motivated early career researcher (ECR) who is seeking a career in academia. The successful candidate will be given mentorship to seek and write ECR grants, publications and establish a novel research program within the Translational Kidney Therapies Group.

The successful candidate will develop and lead a coherent research program within the Translational Kidney Therapies Group which results in high impact scholarly papers aligned with investigation of the gut microbiome, neutrophil extracellular traps, and identification of novel therapeutic targets and treatments for autoimmune kidney diseases whilst working to strict deadlines.

Reporting Line: The position reports to Research Fellow and Head of the Translational Kidney Therapies Group

Supervisory Responsibilities: This position provides direct supervision to PhD, Masters and Honours degree students

Financial Delegation: Not applicable

Budgetary Responsibilities: Not applicable

KEY RESPONSIBILITIES

Specific duties required of a Level A research-only academic may include:

1. The conduct of research under limited supervision either as a member of a team or, where appropriate, independently and the production or contribution to the production of conference and seminar papers and publications from that research
2. Identify gaps in research knowledge and emerging research topics that could lead to the development and implementation of new research programs
3. Assist the CI with external proposals, funded projects (including industry collaborations), internal discussions, and dissemination of results through journal publications and conference presentations
4. Contribute to the development and upskilling of the research group including mentoring and supervision of PhD, Master's degree and Honours students within the laboratory
5. Monitor the health and wellbeing of experimental animals (may include some after hours and on weekends/public holidays)

6. Manage mouse colonies, OHS compliance records, write ethics applications and contribute to the organisational structure of the laboratory
7. Involvement in professional activities including, subject to availability of funds, attendance at conferences and seminars in the field of expertise
8. Limited administrative functions primarily connected with the area of research of the academic
9. Development of a limited amount of research-related material for teaching or other purposes with appropriate guidance from other staff
10. Occasional contributions to teaching in relation to their research project(s)
11. Experimental design and operation of advanced laboratory and technical equipment or conduct of advanced research procedures
12. Attendance at meetings associated with research or the work of the organisational unit to which the research is connected and/or at departmental, school and/or faculty meetings and/or membership of a limited number of committees
13. Other duties as directed from time to time

KEY SELECTION CRITERIA

Education/Qualifications

1. The appointee will have:
 - a doctoral qualifications (or progress towards completion) in Immunology, microbiology, molecular biology or a closely related field

Knowledge and Skills

2. Extensive experience in animal models (mouse), animal handling and administration of treatment (eg intraperitoneal, oral gavage, intravenous and subcutaneous routes)
3. Demonstrated manuscript preparation skills, with an emerging peer-reviewed research publication track record (either published or pre-prints arising from PhD thesis)
4. Proven expertise in flow cytometry and analysis (preferably Cytex Aurora, Spectral Flow Cytometry)
5. Experience in producing recombinant proteins (preferably a baculovirus expression system)
6. Advanced computer/analytical skills, including Microsoft Office and analytical software such as FlowJo and PRISM
7. Experience in basic immunology assays: Cell culture, ELISA, Immunohistochemistry, Western Blots, and real time PCR
8. Ability to solve complex problems by using discretion, innovation and the exercise diagnostic skills and/or expertise
9. Well-developed planning and organisational skills, with the ability to prioritise multiple tasks and set and meet deadlines
10. Excellent written communication and verbal communication skills with proven ability to produce clear, succinct reports and documents
11. A demonstrated awareness of the principles of confidentiality, privacy and information handling
12. A demonstrated capacity to work in a collegiate manner with other staff in the workplace

OTHER JOB RELATED INFORMATION

- Travel to other campuses of the University may be required
- There may be a requirement to work additional hours from time to time
- There may be peak periods of work during which taking of leave may be restricted

GOVERNANCE

Monash University expects staff to appropriately balance risk and reward in a manner that is sustainable to its long-term future, contribute to a culture of honesty and integrity, and provide an environment that is safe, secure and inclusive. Ensure you are aware of and adhere to University policies relevant to the duties undertaken and the values of the University. This is a standard which the University sees as the benchmark for all of its activities in Australia and internationally.