Section	Description
Project title	Sex and Gender-Based Bias in Type 2 Diabetes Care: A Systematic Review
Hours & delivery	**Hours:** 30–36 hours per week **Delivery mode:** Hybrid **Location:** Herston **Typical working arrangement:** Flexible weekday hours, with regular supervision meetings and independent research time. The project will run within the official 2027 Summer Research Program dates. Specific working days and hours can be negotiated with the successful student, provided program requirements are met.
About the project	Type 2 diabetes is a major global health challenge and an important cause of cardiovascular disease, kidney disease, disability and premature mortality. Early diagnosis and appropriate management are essential for preventing complications and improving long-term health outcomes. However, growing evidence suggests that women and men may not always experience the same pathways to diabetes diagnosis, treatment and ongoing care. Differences may occur in the recognition of risk, diagnostic testing, treatment decisions, access to recommended therapies, monitoring and management of diabetes-related complications. This project will investigate sex- and gender-based disparities and potential bias in the diagnosis and clinical management of adults with type 2 diabetes through a systematic review of the international literature. The review will examine where differences occur, whether they can be explained by clinical or biological factors, and where they may indicate inequities in healthcare delivery. The student will contribute to identifying, evaluating and synthesising the available evidence, helping to build a clearer understanding of sex and gender equity in type 2 diabetes care and identify priorities for future research and clinical practice.
What you'll do	Working with the research team, you will contribute to the major stages of a systematic review. Activities will include developing and running searches across health research databases and screening titles, abstracts and full-text articles against predefined eligibility criteria. You will help extract information from eligible studies, including study characteristics, participant demographics, diagnostic practices, diabetes treatments, monitoring and reported sex- or gender-related differences. You will also assist with assessing study quality and risk of bias using established critical appraisal tools. As the project progresses, you will contribute to organising and interpreting the findings, preparing evidence tables and identifying patterns across studies. Depending on the available evidence and project progress, you may also contribute to quantitative synthesis or meta-analysis and preparation of a manuscript for publication.
What you'll learn	This project will provide practical experience in conducting a rigorous health research project from question development through to evidence synthesis. You will develop skills in systematic reviewing, literature searching, critical appraisal, data extraction and evidence synthesis. You will learn how to distinguish between biological sex differences, gender-related disparities and potential bias in healthcare delivery, while developing a deeper understanding of type 2 diabetes and health equity. You will also gain experience using academic databases and systematic review tools, interpreting epidemiological and clinical research, managing research data and communicating scientific findings clearly. Where appropriate, you will be introduced to

	principles of meta-analysis and statistical interpretation. The project will also strengthen transferable skills in critical thinking, teamwork, academic writing, research integrity, organisation and independent problem-solving.
Project outcomes	By the end of the project, we expect to have completed substantial components of a systematic review examining sex- and gender-based disparities in the diagnosis and management of type 2 diabetes. Expected outputs include a structured literature search, a screened database of relevant studies, evidence extraction tables, quality or risk-of-bias assessments, and a synthesis of key findings. The review will identify areas of diabetes care where sex- and gender-based disparities are most consistently reported and highlight priorities for future research and clinical practice. Subject to project progress, findings may contribute to a peer-reviewed journal manuscript, conference abstract or research presentation.
Who should apply?	This project would suit students from public health, medicine or related health disciplines who are interested in developing practical research skills. Students with an interest in diabetes, chronic disease, health equity, gender and health, or evidence-based healthcare are particularly encouraged to apply. Previous systematic review experience is not required, as training and guidance will be provided. Applicants should be comfortable reading scientific literature and demonstrate attention to detail, curiosity, reliability and good organisational skills. Previous coursework or experience in epidemiology, research methods, biostatistics, literature searching, Excel or reference-management software would be useful but is not essential.
Team & supervision	The student will be supervised by Dr Mehwish Nisar, Research Fellow, Faculty of Health, Medicine and Behavioural Sciences. The project will be undertaken within a supportive research environment, with regular supervision meetings to discuss progress, address challenges and develop research skills. The student will work closely with Dr Nisar and, where appropriate, other researchers with expertise in public health, epidemiology, diabetes, health equity and evidence synthesis. Supervision will combine structured guidance with opportunities for independent work. Support will be provided throughout the systematic review process, including literature searching, study selection, critical appraisal, data extraction, interpretation and academic writing.
Additional opportunities	Depending on project progress and the student's contribution, there may be opportunities to contribute to a peer-reviewed publication, conference abstract, poster or oral presentation. The student will gain exposure to an active research environment and may have opportunities to engage with researchers working in diabetes, chronic disease, public health, epidemiology and health equity. The experience may also provide a useful foundation for students considering Honours, postgraduate research or further study in public health or medicine.
Additional requirements	No fieldwork, clinical contact or specialised licences are anticipated. Access to relevant academic databases and systematic review software will be provided where available. Students will be expected to work accurately with scientific literature, maintain organised research records and complete any standard university research or integrity training required for participation in the program.
Contact	**Yes**, students may contact the supervisor before applying. Direct enquiries to: Dr Mehwish Nisar, mehwish.nisar@uq.edu.au