

**Murdoch University Submission**  
**Inquiry into support for health and medical research funding and priorities**  
**14<sup>th</sup> July, 2024**

Murdoch University is pleased to make a submission to the Education and Health Standing Committee as part of its inquiry into health and medical research funding and priorities for Western Australia.

Murdoch University's 2023-2030 Strategy entitled "Ngala Kwop Bidji, or Building a Brighter Future, Together" sets out three strategic pillars of Sustainability, Equity, Diversity and Inclusion, and First Nations that seek to guide the core activities of the university in Education, Research and Engagement. Our research activities are organised across three thematic areas of Health, Food and the Environment.

Our translational approach to health and medical research has always been enabled through cross-disciplinary initiatives where Murdoch researchers can create the most impact. This is achieved by generating deep knowledge of human health, nutrition, our activities and their impacts in the total environment.

This One Health approach recognises the interconnected causes associated with minority group disadvantage, population growth and ageing, emerging infectious disease, climate change effects, food and water security. Murdoch seeks to solve these complex global health challenges by facilitating multi-disciplinary efforts through its Institutes and Schools such as the Health Futures Institute, Ngank Yira Institute for Change, the School of Medical, Molecular and Forensic Sciences and the School of Allied Health.

Murdoch University has also established a number of world-class infrastructure capabilities that seek to empower medical and health researchers with the tools for discovery science. These include significant commitments to the support of spectrometric and analytical technologies for phenomic medicine research and biomarker discovery, advanced data sciences, chemical biology and custom oligonucleotide syntheses, high-throughput automation and sequencing capabilities that is best-in class. Examples where Murdoch have been successful in the translation and commercialisation of its health research is in the application of **precision medicine** approaches to treat and diagnose a range of inherited or acquired conditions such as Duchenne muscular dystrophy, COVID-19, sepsis, dementia as well as emerging threats associated with zoonoses and anti-microbial resistance.

This focused approach is vital for a small to medium sized University like Murdoch to generate real impact for the community and realise significant returns on research investment. While modest, Murdoch continues to surpass expectations in its ability to generate a share of medical research income from the Commonwealth, industry and more recently, through the support of the Future Health Research Innovation Fund. Such success would not be possible without the continued support of the State in line with the WA Health and Medical Research Strategy 2023-33. In particular, Murdoch is the beneficiary of critical grant programs such as the WA Near Miss Awards, Future Health Research Innovation Enabling Scheme as well as other targeted funding



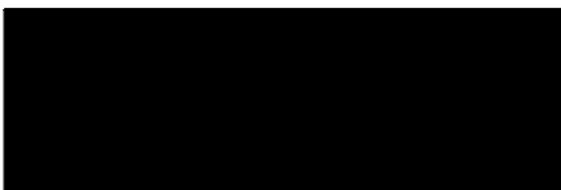
as part of WA's COVID-19 and Long-COVID research response. These programs allow Murdoch to sustain capabilities and continue to support a vibrant and competitive medical and health research ecosystem.

Murdoch has also benefited from the recent Future Health Research Innovation Research Infrastructure Support Scheme that seeks to address some of the cost challenges associated with medical research infrastructure. This is vital for supporting core infrastructure at Murdoch University, especially those of the Australian National Phenome Centre, a high-throughput biomarker discovery engine for industrial scale metabolic phenotyping. Established initially as part of an ARC LIEF between all four public WA Universities, the Australian National Phenome Centre has now established standardised methodologies that is being applied across WA's study cohorts including Busselton Health Ageing, Origins as well as other multiple clinical trials and epidemiological cohorts. This is a State capability that is unrivalled at both the national and global stage.

Murdoch is highly supportive of the State's initiatives to promote a Team WA approach to infrastructure sharing, especially those that would ensure a capability advantage in precision medicine research. Murdoch would welcome discussions with the State on ways in which its infrastructure capabilities can be supported and fully deployed to 1) enhance WA medical and health research through equitable access, 2) provide a competitive advantage that will improve grant success and income, and 3) stimulate cross-institution collaboration and accelerate the translation of clinically actionable outcomes for the benefit of the State.

Murdoch is also committed to the internationalisation of its research activities. We work across institutional, national and international borders to address global health challenges through strong networks and collaborations, especially those with our Indo-Pacific partners. With transnational campuses in Singapore, Dubai and Malaysia, Murdoch is well-positioned to translate our capabilities to emerging economies that has a strong appetite to partner, co-fund and co-develop new knowledge. Strategic funding and development of commercial-ready technologies will provide Western Australian researchers with a pathway to further disseminate our capabilities and provide new avenues for research funding and engagement through scientific diplomacy.

This submission underscores Murdoch's commitment to advancing medical and health research within Western Australia. Our efforts are aimed at fostering cross-disciplinarity between our researchers with the wider community, including industry, to improve the human condition through modern, precision approaches to medical research. We look forward to continuing our mission as a co-contributor to a rich legacy of medical research and excellence in Western Australia.



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