

[1] Indigenous Student Engagement in Science: A Case Study Addressing the Lack of Diversity and Equity in Biomedical Science and Pharmacy Research for Aboriginal and Torres Strait Islander People

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Abstract

Indigenous representation in Australian biomedical science and pharmacy research remains limited due to systemic barriers and culturally inappropriate frameworks. This case study highlights initiatives at the University of Newcastle (UoN) addressing these inequities. Central to this is the Indigenous Student Engagement Committee, which fosters Indigenous participation at all academic levels. Programs such as Yapug and Miroma Bunbilla, alongside culturally inclusive curricula and research fellowships, exemplify UoN's commitment to supporting Indigenous researchers. Collaboration with local Aboriginal communities ensures these efforts are culturally safe and relevant. Early engagement with primary and secondary schools, facilitated by the Wollotuka Institute, creates pathways to demystify science and higher education. Programs such as laboratory work placements enhance accessibility and interest. At the tertiary level, indigenised curricula, mentorship, and dedicated cultural spaces support academic and personal success. Challenges remain, including inflexible funding models, the discomfort of non-Indigenous staff engaging in this space, and the need for inclusive recruitment practices. Addressing these requires sustained cultural capability training, mentorship programs, and funding structures accommodating community commitments. This case study showcases UoN's culturally responsive strategies to increase Indigenous engagement in biomedical sciences. It underscores the necessity of systemic change, collaboration, and investment to create equitable pathways for Indigenous students and researchers. By prioritising cultural safety and inclusion, UoN offers a model for fostering diversity and building a more inclusive academic and research environment in Australia.

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