ARMS 2024 CONFERENCE ABSTRACT

Theme: Bringing philanthropists, public research and industry research closer together

Title: AI-Powered Progress: Industry PhD Programs Transforming Healthcare Research

Authors: Maria Gonzalez[1], Rita Zhang[1], Sam Mcallery[1], Nikki McAusland[1], Nicole Jones [2], David Simar[1] & Louisa Jorm[3]

[1]Research Support team, Faculty of Medicine and Health, University of New South Wales; [2]School of Biomedical Sciences, Faculty of Medicine and Health, University of New South Wales; [3]Centre for Big Data Research, Faculty of Medicine and Health, University of New South Wales

Abstract:

Fostering industry collaboration in research is essential for addressing complex challenges, driving innovation, and maximising the societal impact of research outcomes. Moreover, the potential of artificial intelligence (AI) in health is transformative, promising to improve patient outcomes, enhance healthcare delivery, and advance medical research and innovation. Industry PhD (iPhD) programs play an important role in connecting industry partners, universities, and doctoral candidates to bridge the gap between these entities. These programs facilitate access to industry-specific resources, expertise, and additional funding opportunities, facilitating collective efforts to address real-world challenges. Experiences gained from academic and industry settings, along with the acquisition of scientific, technical, and soft skills, empower iPhD candidates to excel across various career paths.

A collaborative expert working group within the Faculty of Medicine and Health identified iPhDs as a meaningful mechanism to drive transformative change and foster broader engagement between the university and industry. This case study highlights the development of an iPhD program focused on AI applications in health and medicine, alongside the launch of its inaugural round. Here we describe the steps to implementation of the program and characteristics of the applicants and industry partners. We include details of the provenance of the partnerships (existing relationships and strategies to engage new partners) and any barriers or enablers to participation.

By sharing outcomes and lessons learned from initiating the AI iPhD program, we offer practical guidance for cultivating innovation ecosystems that bring research and industry closer together, support emerging researchers and address healthcare challenges through AI technologies.