



## A journey to BSEEN: bringing career pathways to the Biomedical Science experience

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The University of Queensland's Bachelor of Biomedical Science is a large (n=500) generalist degree, which most students undertake as a pathway to an intended career in medicine (Panaretos et al, 2018). However, approximately half gain entry into medicine, and most are unaware of career options for Biomedical Science graduates beyond Research. The sense of belonging to a professional community, vital for career success and satisfaction (Gray et al, 2020), is also a commonly reported absence in the degree. Consequently, we have explored biomedical science students' perspectives and experiences over three years, to inform how best to embed employability and enrichment initiatives that prepare students for intended and alternative career paths. Here, we share our insights and outcomes.

To really understand this cohort, engagement with our student body throughout this journey has been vital. We established deep, collaborative connections with relevant student societies via 1) regular meetings to identify and plan common goals, 2) reciprocal participation at Society/School events, 3) invited students to be members on School/Faculty committees, and 4) harnessing their expertise in the design and implementation of student resources/events. These relationships have been a critical pipeline to the student body, informing our strategic directions and decisions about their needs and interests.

In 2020, we engaged in a student-staff partnership (SSP) to unpack the Biomedical Science landscape through a student-centered lens. Our program-wide 'My Future Survey' (n=160) revealed that while students recognized the degree provides career-relevant skills and attributes like critical thinking or effective communication, there is need for information about career opportunities and pathways, how to navigate their undergraduate experiences to enhance their employability, and exposure to industry and the health sector. Importantly, 75% of students either did not know of, or did not believe there are sufficient networking/experience opportunities for Biomedical Science students.

In 2021, we expanded on this insight through a Faculty-funded project aimed at strengthening how we empower students' employability capabilities and cohort experience within the curriculum (employability authenticity and proximity within assessment and activities; Young et al, 2017) and through meaningful enrichment experiences. From this analysis, we identified the need to raise staff awareness of employability, better scaffold and embed employability experiences in our core curriculum, implement more elements of reflection, and the need to badge existing activities as employability experiences. Then, to identify how we could improve, we conducted an extensive literature review, compiled examples/models of employability from UQ and nationally, and connected with our Alumni (via another SSP). This work yielded a series of recommendations centred on increasing engagement with industry, providing more co-curricular employability experiences, developing and creating a repository of biomedical employability resources, and embedding a Work-Integrated-Learning opportunity within the degree program. These recommendations have been included in a recent review of the Biomedical Science degree program for implementation in 2024, demonstrating the value and influence of this work.

In Aug 2022, we launched BSEEN (Biomedical Students' Employability and Experiences Network) which aims to provide the conduit for implementing initiatives, education, activities, and experiences informed by the past three years of exploratory work and our ongoing collected insight. Drawing on student and alumni perspectives, we designed three workshops complementing students' strong interests in better understanding 1) Career pathways & Value propositions, 2) Networking, and 3) Unpacking and articulating experiences for future success. These workshops are currently underway, so data is preliminary. Feedback from participants has stressed the value for these activities being interactive with peers, academics & alumni, and that opportunities for dialogue and sharing of ideas has been vital.

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Panaretos C, Colthorpe K, Kibedi J, Ainscough L (2019). Biomedical science students' intended graduate destinations. *Int J Innov Sci Math Edu* **27**(9): 1-16.

Young K, Palmer S, Campbell M (2017). Good WIL hunting: Building capacity for curriculum re-design. *J Teach Learn Grad Employability* **8**(1): 215-232.