

PhD scholarship opportunities: microelectronic brain machine interface

The Biomedical Microsystems Lab at the Graduate School of Biomedical Engineering, University of New South Wales, is a multidisciplinary team of senior researchers, postdoctoral fellows and students. We develop cutting-edge tools for studying the brain and for therapeutics. We are housed in a new, well-equipped and well-funded (multi-million AU\$) laboratory on the UNSW campus, with close proximity to UNSW Medicine and UNSW Biological Sciences.

We have extensive on-campus collaborations with other groups at Biomedical Engineering and the School of Electrical Engineering & Telecommunications, School of Photovoltaic and Renewable Energy and as well as external collaborations with leading Australian and overseas research labs in the USA, the Netherlands, and in Korea.

The scholarship opportunity

We have several exciting research opportunities for outstanding PhD candidates to work in the following areas: (1) CMOS integrated circuit design for neural implants, and (2) microfabricated biomedical sensors. The students will work on challenging but rewarding research supervised by Dr David Tsai (NHMRC Early Career Fellowship recipient, Senior Lecturer) and UNSW Scientia Professor Nigel Lovell (Head of School of Biomedical Engineering; Past President of IEEE EMBS).

What we are looking for

We are seeking talented and motivated graduates with Honours First Class, or equivalent qualification via a Masters degree. The student should have a strong background in electrical engineering or computer engineering, with outstanding hands-on laboratory skills. Prior research experience in the biomedical field is desirable but not required.

Applicants must fulfill the UNSW PhD admission criteria, set out by the university's Graduate Research School, and demonstrate excellent capacity and potential for research, for example through publications in peer reviewed journals.

Remuneration

The living allowance stipend we offer is per Australian Government Research Training Program (RTP) rate, plus a top-up, for a total of AU\$ 35,000 per year (2024 rate). This is tax-free. These stipends are for three years, with possibility for up to six months extensions (conditions apply).

Enquiries and applying

The candidate should contact Dr David Tsai (d.tsai@unsw.edu.au) with the following documents: (1) CV, (2) academic transcripts, including undergraduate study, (3) Contact details of two academic referees able to appraise your research performance.

To find out more, please see our group page: <https://www.biomicrosyslab.org/>