

## PhD opportunities

The BioNanoEngineering group is based at the newly established Future Industries Institute at the UniSA, which integrates components of the Ian Wark Research Institute, the Australian Research Council Special Research Centre for Particle and Material Interfaces. Our research activities focus at the interface of materials science, nanoscience, bioengineering and medicine and our main objective is to develop and implement novel biodiagnostic and prognostic technologies, with a focus on cancer with poor prognosis. We also aim to develop, in collaboration with biomedical researchers, technologies able to provide new insights about important biological processes, including the metastatic processes.

A major aspect of our translational research is the design of solid state biosensing approaches based on cutting edge nano/microtechnology principles to isolate and/or detect rare cells and cancer biomarkers from biological samples such as blood and resected tissues. In close collaborations with clinicians and cancer biologists, we also aim to obtain improved mechanistic understanding of the penetration of therapeutic and diagnostic agents inside tumour tissues and to translate these insights into more efficient diagnostic and therapeutic approaches. More information can be found at: <http://bionanoengineering.com/>

The group is *seeking two applicants* interested in pursuing a PhD in: 1) *development of solid-state biosensing technologies and bioelectronics* and 2) *development of integrated measurement units for point-of-care tele-diagnostic*.

This will be a 3- to 4-year doctoral program conforming to the general requirements of the University of South Australia and further exigencies imposed by the FII. The Institute has a strong research environment and is deeply committed to world-class research performance. It is expected that the applicant selected for this program will be highly competitive in the academic job market after completing this program. These positions are opened for International and Australian applicants. Selected candidates will be guided through application process of Australia Awards including prestigious Endeavour Scholarships (up to 272,500 AUD total). External scholarships (VIED, 911..etc) are highly welcomed.

For pre-selection purpose, interested candidates should send an updated academic CV to Dr. Duy P. Tran ([tradp002@mymail.unisa.edu.au](mailto:tradp002@mymail.unisa.edu.au)) plus contacts for 2 references, and a personal statement of research interests (800 words max).