

# PhD Position in Advanced Ultrasonic Devices for Medical Applications

Host Institution: UNSW

Stipend: \$37,684 annually for 3.5 years

Project Duration: 3.5 years

### **Project Overview:**

The <u>ARC Research Hub for Connected Sensors for Health</u> invites applications for **two** fully funded PhD positions focused on the development of advanced ultrasonic devices for medical applications. This project is at the forefront of innovative health solutions, aiming to enhance medical diagnostics and treatment through cutting-edge ultrasonic technology.

#### **Research Environment:**

You will join a dynamic team of researchers at the ARC Research Hub for Connected Sensors for Health, a collaborative initiative between leading universities and industry partners. The Hub is dedicated to pioneering and translating research in biophysical and biochemical sensors, sustainable energy solutions, and the integration of comprehensive data analytics to secure health data for improved health outcomes.

### **Project Goals:**

- Develop innovative ultrasonic devices tailored for enhanced medical imaging and therapy.
- Collaborate with engineers, medical professionals, and data scientists to integrate these devices into clinical settings.
- Address technical challenges such as device miniaturization, energy efficiency, and user-friendly interfaces.
- Contribute to the broader research goals of connected health technologies.

#### **Candidate Profile:**

- Hold a Master's degree in Electrical Engineering, Mechanical Engineering, Biomedical Engineering, Materials Engineering, Physics, or a related field.
- Demonstrated experience in ultrasonics, signal processing, or device fabrication is highly desirable.
- Strong analytical and problem-solving skills, with a keen interest in healthcare technology.
- Excellent written and verbal communication skills.



#### Benefits:

- Opportunity to work in a multidisciplinary research environment with access to cutting-edge facilities.
- Collaborate with leading academic and industrial partners.
- Receive a competitive stipend of \$37,684 per annum, tax-free.
- Potential for international conference attendance and networking.

## **Application Process:**

Interested candidates should submit a detailed CV and a cover letter outlining their research interests and experience.

For further information about the project or application process, please contact Scientia Prof. Chun H. Wang, <a href="mailto:chun.h.wang@unsw.edu.au">chun.h.wang@unsw.edu.au</a>
Dr. Shuai He, <a href="mailto:shuai.he@unsw.edu.au">shuai.he@unsw.edu.au</a>

