

SCHOLARSHIP GUIDELINES

Radiation Oncology SWSLHD Medical Physics Research Scholarships



Introduction

The Radiation Oncology Medical Physics (ROMP) research group at Liverpool and Macarthur Cancer Therapy Centres is seeking high quality students to join their research team.

This research group consists of physicists, computer scientists, radiotherapists, radiation oncologists, engineers and students. We have collaborations with a number of universities and hospitals. Within the radiation oncology department there is also internationally recognised radiation oncology research across disciplines. Our major research project is the development of a Magnetic Resonance Imaging – Linear Accelerator (MRI-linac). This is one of only 2 other similar developments worldwide and will enable real time imaging of patient anatomy during radiotherapy treatment and the potential of improved cancer targeting and a reduction in treatment side effects. This and associated projects will be the focus of our research work over coming years. To take advantage of this facility and to strengthen our research group as we work towards the implementation of this facility, it is vital that high calibre students are involved in our research. Other project areas include:

- Electronic Portal Imaging Devices (EPIDs)
- Big Data analytics
- Image processing
- Magnetic Resonance Imaging
- Modelling
- Radiation Detection

To ensure high quality research is achieved a series of university student scholarships are available. The intention is to encourage high quality students to enter the area of Medical Physics and to further research collaborations between the ROMP department and universities. Research projects will be available at both Liverpool and Macarthur Cancer Therapy Centres.

The establishment of these scholarships is supported by the South Western Sydney Cancer Services Research Executive, the Director of Medical Physics, the Director of Radiation Oncology, and the Director of CCORE.

Eligibility

We are seeking students with a technical/scientific undergraduate major, which may include but is not limited to:

- Physics
- Maths
- Engineering
- Computer Science
- Chemistry/biology

The Scholarships

Value:

Each scholarship is for \$5,000 for 1 year with likelihood of continuation for up to 3.5 years for PhD candidates, upon favourable annual reports. Up to 2 new PhD scholarships, and 1 new honours scholarship may be offered each year, however the number of successful scholarship applications awarded in any given year may vary at the discretion of the Liverpool and Macarthur Cancer Therapy Centre Medical Physics research group.

PhD students may be required to apply for other scholarships opportunities as they arise.

Priority:

Students who already receive their base scholarship funding via the Radiation Oncology Medical Physics (ROMP) research group at Liverpool and Macarthur Cancer Therapy Centres will be given a lower priority for top-up scholarships than students who have their scholarship funded from sources external to SWS Radiation Oncology (e.g. University funded or APA scholarships).

Payment of the Scholarship:

The payment of the scholarships will be made through the university or to the individual, depending on university arrangements.

The honours scholarships will be made in two payments, one at the beginning of the year and the other at the beginning of second semester.

The PhD scholarships will be paid as 'top-up' scholarships adding to the regular payments the student receives.

Application Process:

Applications for the following years scholarships (new and continuing) will be circulated from August of each year and applications will close by the end of October each year. Application forms as attached will need to be completed. New scholarship students may be invited to an interview. Renewing scholarship students applications will be assessed based on a submitted summary of past years achievements and endorsement of clinical and academic supervisors.

Please note students who were successful in obtaining an Honours scholarship in the previous year and now wish to apply for a PhD scholarship will be treated as a new applicant.

The applications for these will be evaluated by the ROMP department in consultation with the Universities and the successful applicants will be informed by the end of year of application, prior to the scholarship year in question.

Commitment of the Department to the Student



The Honours/PhD Project:

The honours student will be able to select from at least two project options which will be provided to the student. Projects will be integrated with the research aims of the ROMP department and the university requirements. On negotiation with the department it may also be possible for another project to be undertaken of interest to both the student and the department.

PhD projects will be determined on consultation with the student and the university. This project will be integrated with the research aims of the ROMP department and will build on strengths of the ROMP department and at the university.

Students will not be required to accept or reject the scholarship offer until a project has been determined. The department will liaise with the university to ensure provision of the necessary equipment for the project to be undertaken.

The department will provide a hospital based supervisor for the duration of the project to work in collaboration with the university based supervisor of the student. This supervisor will be available to meet with the student at least fortnightly to discuss the progress of the project and will provide necessary training and support for the completion of the project.

Other Clinical Training:

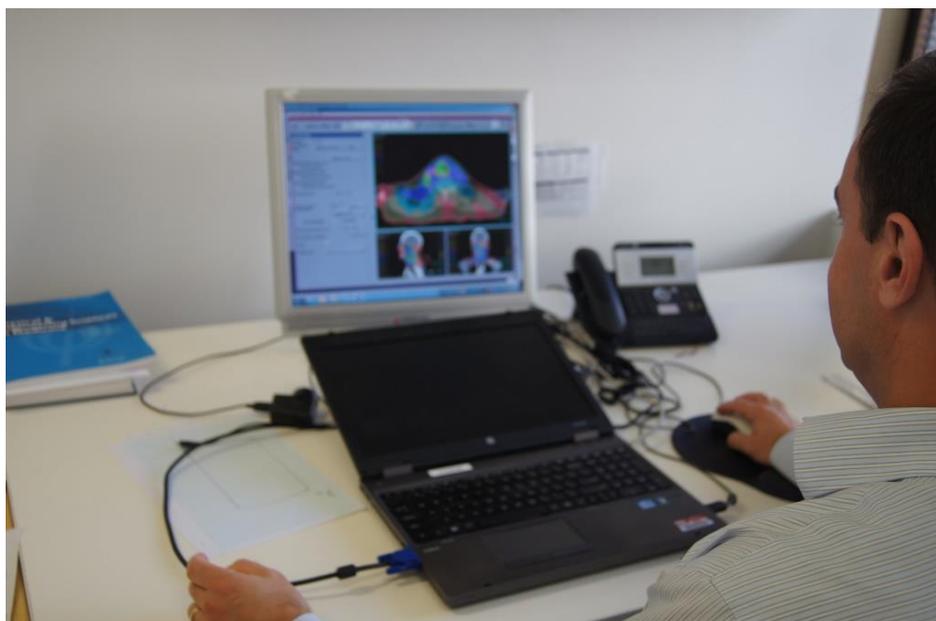
The department will also provide other clinical training to the student in areas of benefit to the student and the department. This will involve working with a number of Medical Physicists and possibly other medical professionals in the department.

Commitment of the Student to the Department

The project

As described above the student will be expected to undertake their honours/PhD project in collaboration with the department on a topic integrated with the research goals of the ROMP department.

- The student will agree to update their ROMP department supervisor at least fortnightly on the progress of the project and raise any issues that may delay or impede the project as soon as they become apparent.
- The honours student will agree to present their research to the ROMP department mid-way through the project and at the completion of the project.
- The PhD student will agree to present their research to the ROMP department on a regular basis.
- Both honours and PhD students are obliged to attend regular research meetings at either Liverpool or Macarthur hospital. It is expected that scholarship recipients will attend weekly broad department research meetings as well as relevant research stream meeting, and clinical site meetings if appropriate on a regular basis.
- A minimum attendance of 1 day per week is expected so the student can contribute to the department's research group by engaging with and critiquing/advising/supporting other researchers (staff and students).
- The student will agree to successfully complete the project (noting that in some instances the project result may be negative), as established by the examination of the honours/PhD thesis.
- The student will acknowledge support from SWS Radiation Oncology when presenting or publishing their work.



Other Clinical Training:

Opportunities for other clinical training will be provided to the student as described above. However the student is not obliged to undertake this training if they do not wish.



Completed Applications

Forward completed applications and any requests for further information to:

Dr. Lois Holloway

Research Physicist

E: SWSLHD-RadOncResearchSupport@health.nsw.gov.au