

Perth Radiological Clinic & Theranostics Australia Fellowship in Molecular Imaging and Therapy

Fellowship Objectives

The aim of this fellowship training in Molecular Imaging and Therapy is to enable a qualified nuclear medicine physician or dual trained radiologist/nuclear medicine specialist to expand and develop:

1. Expertise in newer molecular imaging agents such as gallium-68 octreotate, gallium-68 PSMA, F-18 amyloid agents, etc.
2. Expertise in the treatment of oncological patients with radionuclide agents in particular radiopeptide and radioimmunotherapeutic agents
3. Improved understanding of the use of various imaging modalities in the management of malignant conditions
4. Comprehensive knowledge in the multidisciplinary management of different malignancies
5. Knowledge and expertise in the development of preclinical and clinical trials protocols.

This fellowship program is designed to impart knowledge and clinical experience in all aspects of radioisotope application in cancer within a planned and monitored training program. The fellowship is also aimed at providing experience in more than one centre in Perth to ensure exposure to a balance of various management algorithms and imaging protocols. The fellowship is also intended to enhance the research potential of the candidate.

The Fellowship Aims

- Improve understanding of imaging in cancer.
- Explore the potential of molecular imaging.
- Understand the need and utilising correlative imaging.
- Learn the complete spectrum of routine and advanced radioisotope therapy.
- Learn the application of Molecular Imaging in radiotherapy planning.
- Participate in advanced therapeutic applications e.g. Y-90 SIRT radioembolisation.
- Develop understanding of structured preclinical and clinical research.

Number of Fellowship Positions: 1

Fellowship Duration:

1 year (2-3 years possible with a view to possible higher degree)

Eligibility Criteria

Essential:

- FRACP in Nuclear Medicine or Dual FAANMS/FRANZCR
- Membership of AANMS
- AHPRA registration with appropriate specialist recognition
- Eligible for WA radiation licence
- Hold relevant specialist recognition with the Health Insurance Commission and Medicare Australia to obtain a provider numbers at the appropriate Perth Radiological Clinic sites.
- Eligibility to obtain Hospital Accreditation at the appropriate Perth Radiological Clinic sites.

Desirable:

- Rotations or working in an oncology or radiation oncology setting
- Subspecialty FRACP in Oncology or other medical specialty
- Publications in peer reviewed journals
- Prior participation in clinical, pre-clinical or basic sciences research
- Previous chemistry or physics experience/qualifications

Clinical Responsibilities

Fellows are expected to participate in:

- Assessment of new patients.
- Design the investigations ---Planar, SPECT-CT or PET-CT imaging and perform the study as appropriate.
- Plan and deliver treatment under different levels of supervision, as appropriate and agreed between the supervisor and the fellow.
- Report nuclear medicine, molecular imaging and radiology studies under appropriate supervision
- Follow-up and assessment of outcome.
- Organise and present cases in multidisciplinary meetings.
- Discuss service development.
- Become involved in preclinical and clinical trials projects including formulating hypotheses, recording data for the purposes of preclinical research as well as clinical audit and clinical trials and submitting research for publication presentation.

Academic Responsibilities

Teaching:

PRC/TA are keen to lead the training and development of undergraduate, postgraduate doctors, nurses and paramedical staff. The fellow is therefore required to develop a keen interest in teaching junior doctors, nurses and paramedical staff to enable us to provide the

best standards of medical education in the region. Seminars and workshops will be actively encouraged by the department and in future a point based CME will be devised to ensure continued professional development.

Audit and Clinical Research:

Active participation in clinical trials, clinical research and audit will be encouraged and publication of innovative and quality literature will be promoted by PRC/TA

Pre-Clinical Research:

The fellow will also be encouraged to take up the PRC Clinical Associate position at the Harry Perkins Small Animal Imaging Facility established by the PerthRadClinic Foundation. This position involves aiding other researchers in small animal imaging and also developing independent preclinical research.

Expected Work Schema:

During the fellowship the doctor will gain in-depth clinical experience of many types of cancer at different clinical sites. They will be involved in reporting of medical imaging studies with a predominant focus on cancer imaging. Radiologists will have the opportunity to report CT, MRI, ultrasound and perform image guided procedures with a focus on oncology patients. Nuclear medicine physicians and nuclear medicine radiologists will be involved in reporting SPECT/CT and PET-CT studies. Physicians with a subspecialty interest will have the opportunity to continue subspecialty clinic work in their area of expertise.

They will be actively involved in outpatient radio-isotope therapies. Nuclear Medicine fellows will assist as appropriate the consultants in their hospital clinics. The fellow will be expected to prepare for, attend and present at various oncology MDT's.

The expected time commitments are:

Clinical Imaging:

- 1 day Hollywood Hospital site (Oceanic Molecular Hollywood)
- 1 day Shenton House site (PRC Joondalup)
- 1 day PRC Nuc Med sites (Mount Hospital, Joondalup Health Campus, Midland health Campus) Attendance at multidisciplinary meetings

Therapy/Research:

- 1 day a fortnight at Harry Perkins Small Animal Imaging Facility
- 3 days a fortnight at Hollywood Hospital/Theranostics offices including patient clinic reviews Attendance at multidisciplinary meetings

Evaluation:

To ensure that the fellow has had adequate exposure to different treatment sites and planning processes the fellow will be required to maintain an up to date “Fellowship Logbook”; which will contain records of the experience of the fellow in the different treatment site rotations. This record will have to be successfully presented to the supervising consultant on a 3 monthly basis and the record book has to be signed by the fellow and the supervising consultant. A successful combined PRC/TA fellowship certificate will be issued to the fellow who successfully achieves the required training experience and documents the completion of the agreed training in the log book.

The Organisations and Facilities

Perth Radiological Clinic (PRC) was established in 1948 making it the oldest established private radiology practice in Western Australia. It is now one of the largest independent medical imaging practices in Australia with 20 sites housed in suburban, public hospital and private hospital facilities. PRC has over 70 imaging specialists and offer the whole gamut of radiology services from digital x-ray to 3T MRI and imaging guided intervention. It has a comprehensive nuclear medicine practice with the latest in PET-CT and SPECT-CT technology in 5 sites around Perth. It was the first company, through their subsidiary Oceanic Molecular at Hollywood Hospital, to set up a private PET-CT in Perth in 2010. They were the first company to offer Gallium-68 PET and brain amyloid PET in Perth and one of the first to do these types of molecular imaging in Australia. They are heavily involved in oncological and dementia related clinical trials and its doctors are integral members of various MDT's in Perth hospitals.

Theranostics Australia was established in 2015 to capitalise on the growing demand for targeted radionuclide therapy services. It is involved in developing new diagnostic and therapeutic agents. It has facilities in Perth at Hollywood Hospital where it provides Radium-223, Y-90 SIRT therapy, Lu-177 octreotate, Sm-153 EDTMP and Lu-177 PSMA. It is currently developing several new therapeutic agents and is involved in several clinical trials. It has expertise in radiochemistry, clinical trials and clinical management of oncological patients. Through the PRC initiative at the Harry Perkins Research Institute there is access to preclinical research capabilities with small animal imaging including small animal PET-CT, SPECT-CT, and MRI.

Other:

- Position advertised: 14th August to 15th September 2017
- Interviews: 18th-29th September 2017
- Appointment Date: 2nd October 2017
- Commencement Date: 15th January 2018
- Completion Date: 13th January 2019
- 4 weeks annual leave and 2 weeks conference leave included.

- The fellow will be encouraged and supported to present research and clinical audit work at national and international meetings.
- Salary negotiable and dependent on experience and training. Additional paid after-hours and weekend work in radiology, nuclear medicine or a medical subspecialty is possible.

For further information: contact Clin A/Prof Nat Lenzo - nat.lenzo@theranostics.com.au