

# Australia's Newest Purpose-Built Facility for Clinical Imaging Research

The Herston Imaging Research Facility (HIRF) is one of only a handful of imaging research facilities in Australia and the first devoted entirely to clinical research.

With its state-of-the-art clinical scanners and prime location in Brisbane, Queensland alongside one of Australia's largest quaternary referral teaching hospitals, HIRF is purpose-built for clinical trials and able to compete with leading imaging research facilities around the world.

Medical imaging is becoming an essential element in the drug discovery pipeline. HIRF offers new opportunities for national and international biotechnology companies to conduct leading clinical trials using the latest medical imaging technology within Australia's largest hospital precinct.



## A paradigm shift in medical imaging technology

HIRF's state-of-the-art scanners set a new benchmark for clinical imaging in Australia.

### The 3-Tesla PRISMA Magnetic Resonance Imaging Scanner.

HIRF houses a 3T PRISMA MRI scanner. The high strength gradients and uniformity of this scanner is unsurpassed for high end 3T research scanning and makes it particularly desirable for neurological imaging.

The scanner is equipped with a full suite of fMRI equipment to facilitate functional MR imaging.

## Positron Emission Tomography/Magnetic Resonance Imaging (PET/MRI).

HIRF was the first site in Australia to install a PET/MRI scanner. This scanner allows simultaneous acquisition of both PET and MR studies. This not only provides absolute registration between the two modalities but provides unique opportunities to simultaneously exploit the benefits of both modalities providing simultaneous anatomical/functional (MRI) and molecular/functional (PET). PET/MR also offers a reduced radiation dose for participants compared with PET/CT.

## Positron Emission Tomography/Computed Tomography Scanner (PET/CT).

The mCT Flow PET/CT is Siemens' current flagship PET/CT scanner. Laser positioning and flat palettes are available for radiotherapy orientated projects. The 128 slice CT scanner is also available for standalone diagnostic CT scanning.











With cutting-edge scanning technology, HIRF has the potential to significantly impact patient care through research in dementia and ageing, mental illness, brain development and cancer.

#### **Positioned For Success**

#### Situated in Australia's largest hospital precinct

HIRF is located at the heart of one our nation's largest research and clinical precincts in close proximity to the Royal Brisbane and Women's Hospital (RBWH), The University of Queensland Centre for Clinical Research, QIMR Berghofer Medical Research Institute, and Queensland University of Technology's Institute of Health and Biomedical Innovation.

#### Access to large patient cohorts for clinical trials

The RBWH is one of Australia's largest quaternary referral teaching hospitals with capacity of more than 900 beds and access to large patient cohorts for clinical trials in many areas of expertise such as dementia and oncology. In addition, the hospital houses a Good Manufacturing Practice (GMP) certified radiochemistry facility supplying the latest PET radiotracers for PET/CT and PET/MR imaging at HIRF.

#### Support for early-phase clinical trials

HIRF is closely aligned to specialised contract research organisations that have extensive experience in supporting early phase clinical trials. Notable local organisations include Q-Pharm Pty Limited, which undertakes a broad range of early

phase clinical trials for clients in the global pharmaceutical and biotechnology industries; and TetraQ, which provides GLP bioanalytical services to support preclinical studies as well as early phase clinical trials and bioequivalence studies in humans.

#### Collaborating for enhanced research translation HIRF is an

alliance between four of Queensland's most influential research and clinical institutions: The University of Queensland, QIMR Berghofer Medical Research Institute, Queensland University of Technology and the Metro North Hospital and Health Service

through the Royal Brisbane and Women's Hospital (RBWH). HIRF is allied with Brisbane Diamantina Health Partners, one of the largest academic health science systems in Australia, aimed at uniting health services, universities and research institutes for excellence in clinical service, research and education.

Leading healthcare company Siemens is HIRF's industry partner.

HIRF was established with funding from the Alliance partners, assisted by grants and donations from Commonwealth Government, the Queensland Government, the Australian Cancer Research Foundation and the RBWH Private Practice Trust Fund.

#### What makes HIRF special?

- HIRF has a fleet of the some of the most desirable human research scanners.
- HIRF is purpose built and separate from the acute hospital imaging facilities, making it a more pleasant environment for participants.
- Being dedicated for research imaging, researchers are provided with greater scheduling flexibility and certainty.
- HIRF staff are experienced with the particular requirements of imaging research, whether that be cutting edge works in progress MR sequences, prolonged dynamic PET imaging, data handling and storage, and advanced image processing.
- With our collaborators and partners we offer the most advanced image analysis capabilities, such as kinetic analyses of PET imaging, deformable registration, motion correction, statistic parametric mapping



HERSTON IMAGING RESEARCH FACILITY

#### Contact us to learn more:

HIRF.com.au

#### **HIRF Operations Manager**

T: (07) 3646 5820

E:HIRFAdministration@health.qld.gov.au







