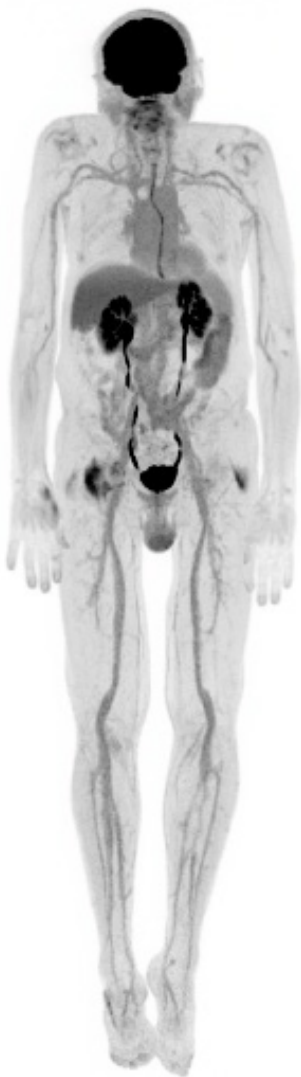




THE UNIVERSITY OF  
SYDNEY

# Australian National Total Body PET Facility

A new open-access imaging capability for  
biomedical and clinical research



# Australian National Total Body PET Facility

Established and operated in partnership  
with:



National  
Imaging  
Facility



Health  
Northern Sydney  
Local Health District



## Contact

Project enquiries

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NIF Total Body PET Fellow, Sydney Imaging

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General enquiries

Sydney Imaging

[sydney-imaging.admin@sydney.edu.au](mailto:sydney-imaging.admin@sydney.edu.au)

02 8627 0955

Location

Australian National Total Body PET Facility

Nuclear Medicine Department

Royal North Shore Hospital

Reserve Rd, St Leonards NSW 2065

[sydney.edu.au/total-body-pet](http://sydney.edu.au/total-body-pet)

# Image whole-body processes through Australia's first research-dedicated Total Body PET facility

The Australian National Total Body PET Facility is a \$15 million partnership between the University of Sydney, Northern Sydney Local Health District (NSLHD) and the National Imaging Facility (NIF) to develop nationally significant Total Body Positron Emission Tomography (PET) imaging capability.

The Facility is located in the Nuclear Medicine department at Royal North Shore Hospital and operates under equal time-share for clinical use and academic research.

## Research access

Research access is managed by the University of Sydney through Sydney Imaging, the University's core research facility for biomedical imaging. NSLHD technical staff operate the scanner, and the University and NIF jointly fund additional staff to assist with research operations and provide technical support and advice to researchers.

The Australian National Total Body PET Facility is an open-access facility, with projects assessed based on scientific merit according to NIF principles. NIF is Australia's advanced imaging network, and is part of the Australian government's National Research Infrastructure for Australia (NCRIS) initiative.

Cover image: Male melanoma patient injected with 150MBq of [18F]FDG (50min uptake, 5min scan, flow motion)

# Capture pharmacokinetics and whole-body dynamics

## Imaging capability

The Facility is equipped with a Siemens Biograph Vision Quadra, a recent innovation which offers a 106cm axial field of view and enables the spatiotemporal distribution of radiopharmaceuticals throughout all organs and tissues of the body to be imaged simultaneously. The long axial field of view, coupled with best-in-class time-of-flight performance leads to an extremely high effective sensitivity, which can have profound implications in neuroscience, oncology, cardiology, inflammation, drug discovery and paediatric imaging.



Australian National Total Body PET Facility

## Services

Sydney Imaging, in collaboration with Royal North Shore Hospital and NIF, offers these services for research at the Australian National Total Body PET Facility:

- Access to routinely available radiotracers
- Human and large animal PET/CT imaging
- Clinical phase I-IV imaging studies
- Study design and image analysis
- Pharmacokinetic modelling
- Synthesis and development of novel radiotracers and radiopharmaceuticals (available soon)

# Accessing the Facility



## Discuss project feasibility

Contact the NIF Total Body PET Fellow at Sydney Imaging to discuss the feasibility, timeline and requirements of your project.



## Submit project for endorsement

Submit a brief project description via the Facility webpage for review by a Scientific Research Panel.



## Regulatory and compliance

Obtain ethics and other regulatory approvals for your project.



## Project registration

Project details are registered on the facility management booking system.



## Planning and scheduling

Confirm and implement acquisition protocols. Schedule imaging and radiopharmaceutical deliveries.



## Imaging

Patient reception and briefing.  
Radiopharmaceutical administration and imaging on the Total Body PET system.



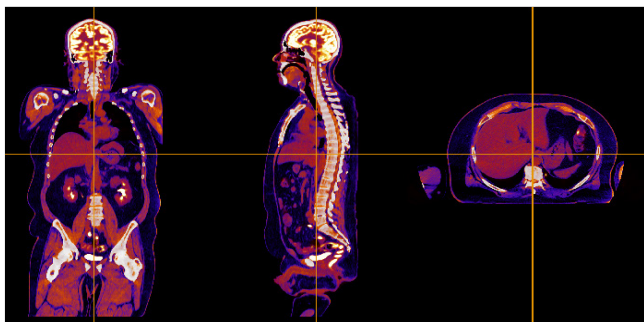
## Data analysis

Image reconstruction and data analysis.  
Data transfer and management.



## Research outputs

Report research findings as appropriate (e.g. publications, patents, etc).



150MBq of [18F]FDG, 50min uptake, 5min total scan time

## Booking research scans

The Facility can be booked for research scans in 15-minute blocks, typically in the afternoon, based on the following default schedule:

**Clinical:** 9:00am to 1:30pm

**Research:** 1:30pm to 6:00pm

## Fees

- \$600 for first 15 minutes
- \$150 per 15-min block thereafter
- Radiotracers and reporting incur additional fees.

## Pilot study seed funding

### Aim

Enable a small pilot study sufficient to acquire compelling evidence of feasibility in support of future competitive grant applications.

### Funding

Covers radiopharmaceutical costs and waives imaging fees for a small number of scans.

### Eligibility

Open to all academics, with strong preference given to early- and mid-career researchers.

### Apply

Apply online when you submit your project description for review.