

Radiochemistry Core

About Us

The principle focus of the Radiochemistry Core (RADCHEM) is to provide investigators access to new and existing molecular imaging agents, which can be detected by Positron Emission Tomography (PET) or Single Photon Emission Computed Tomography (SPECT), for their research programs.

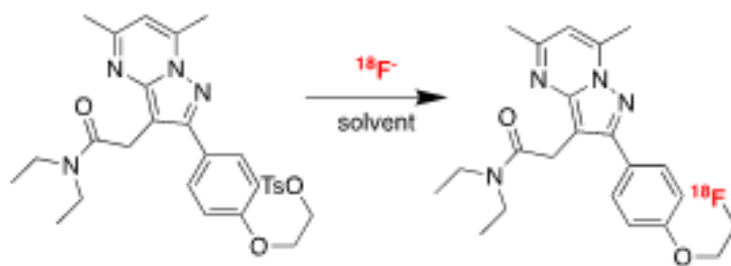
In addition to providing these services to investigators, we are happy to offer training on any of our instrumentation for investigators to use on a fee-for-service basis.

We are a full-scale service program. We are happy to assist investigators with study planning, regulatory submissions (IND, RDRC, etc), data analysis, and any other study need.



Instrumentation

- **Hidex AMG** - fully automated gamma counter capable of detecting radioisotopes with emission energies ranging from 100 – 4,000 keV. The AMG will tare and weigh empty or full vials and will decay-correct to specified time. Practical uses include:
 - in vitro radiopharmaceutical binding assays
 - in vitro radiopharmaceutical accumulation assays
 - ex vivo tissue biodistribution assays



Our Services

Custom Chemical Synthesis

- Custom small molecules
- Identity Standards
- Radiochemical Precursors

RADCHEM - Preclinical

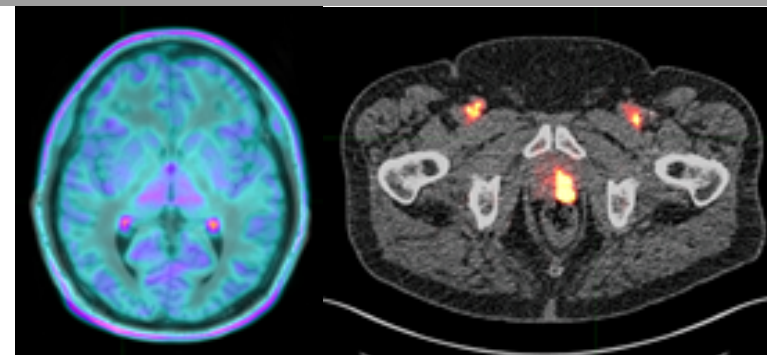
- Custom radiochemical synthesis of a variety of radiopharmaceuticals for PET or SPECT imaging.
- [18F]FDG – glucose transport
- [18F]DPA-714 – TSPO expression
- [11C]Carfentanil – Mu (μ) opioid receptor
- [18F]FET – primary brain tumors
- [11C]Methionine – primary brain tumors – low-grade glioma
- [18F]DCFPyl – prostate cancer – PSMA
- [18F]Fcholine – metastatic prostate cancer, hepatocellular carcinoma
- [18F]FDOPA – LAT1-overexpressing tumors; CNS tumors.
- [18F]FLT – head-and-neck tumors, cell proliferation
- [18F]FMISO – tumor hypoxia status

RADCHEM - Human

- The Radiochemistry Core is a USP <823> production facility and can produce PET imaging agents for clinical research studies. Please contact Shivashankar Khanapur to discuss your project.



*Enhancing Research,
Rigor and Reliability*



Our Team

Shivashankar Khanapur, PhD - Director
Assistant Professor of Radiology Research and Medical Imaging

Damodara Naidu Kommi, PhD - Lab
Specialist Senior



The RADCHEM provides access to
**molecular
imaging agents**

Contact

Dr. Shivashankar Khanapur - krs5xf@virginia.edu
Phone: 434-243-4969

Dr. Damodara Naidu Kommi - sqf4ft@virginia.edu

Radiochemistry Website:
med.virginia.edu/radiochemistry-core/

Request services on:
uva.corefacilities.org/account/login

UVA Radiochemistry Core
Fontaine Research Park
Snyder Translational Sciences Bldg
480 Ray C. Hunt Dr.
Charlottesville, VA 22908



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