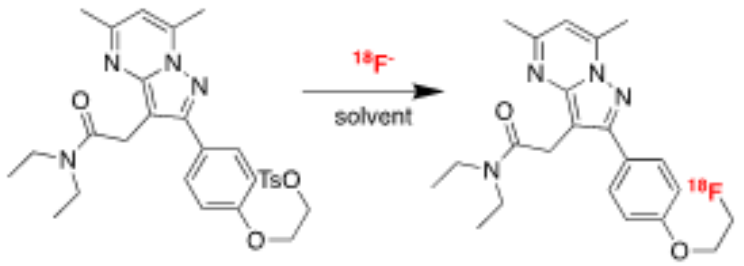
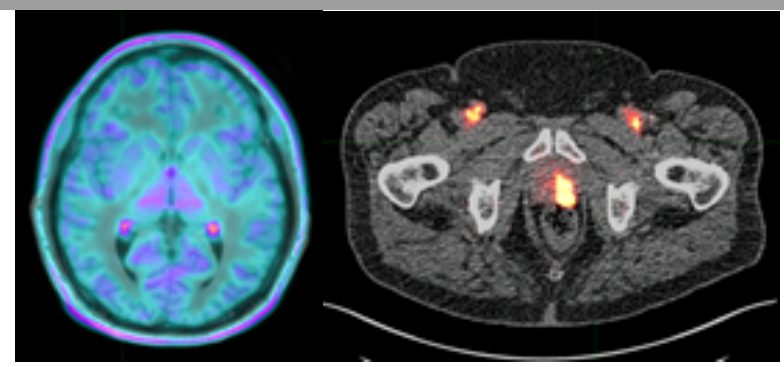
Radiochemistry Core





About Us

The key focus of the University of Virginia's Radiochemistry Core Facility (UVARCF) is to provide investigators access to high-quality novel and existing radiopharmaceuticals (radiolabeled small molecules, peptides, proteins, and antibodies), that can be imaged by Positron Emission Tomography (PET) method, to meet their preclinical and clinical needs.

The radiochemistry core is Good Manufacturing Practices (cGMP) certified facility as required by the U.S.Pharmacopeia Chapter 823 and 21CFR part 212 and is BSL-2 certified facility to conduct research.

We foster an environment of learning, collaboration, innovation, services, tools, and technologies that spur excellence within the Radiochemistry Core and for the UVA community.

Instrumentation

- **Hidex AMG -** fully automated gamma counter capable of detecting radioisotopes with emission energies
- **Elixys Flex/Chem** - system is an open research platform capable of producing a variety of preclinical and clinical research imaging agents.
- **Trasis All-in-One** - automated radiosynthesizer for preclinical or clinical radiopharmaceuticals
- **Eckert & Ziegler (E&Z) Modular Lab** - a completely automated synthesis system for routine production of wide variety of [11C]carbon-labeled compounds

Our Services

- **Radiochemical Synthesis -** Preparation of precursor and reference standards, radiolabeled compounds for various applications, such as PET imaging, radioligand binding assays, and radiometabolite analysis.
- **Radiochemical Analysis -** Precise quantification and analysis of radiolabeled compounds for radiochemical purity, specific activity, and stability.
- **Radiopharmaceutical Production -**Manufacturing of radiopharmaceuticals for clinical or research purposes, adhering to regulatory guidelines
- **Custom Radiolabeling -** Tailored radiolabeling of molecules, peptides, or proteins for specific research needs.
- **Radiotracer Development -** Research and development of novel radiotracers for advancing scientific understanding and medical diagnostics.
- **Quality Control -** Rigorous quality control testing to ensure the safety and effectiveness of radiopharmaceuticals.
- **Consultation Services -** Expert advice and consultation on radiochemistry-related research, experiments, and project planning.
- **Isotope Supply -** Procurement and distribution of various radioactive isotopes and chemicals used in radiochemistry.
- **Regulatory Compliance** - Assistance with regulatory approvals and compliance, including licensing and radiation safety protocols.

Enhancing Research, Rigor and Reliability

Our Team

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

The RADCHEM provides access to

molecular imaging agents

Contact

Dr. Shivashankar Khanapur - krs5xf@virginia.edu

Phone: **434-243-4969**

AMF 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

UVA Health
SCHOOL OF MEDICINE