**Request for proposal for pilot projects using the 9.4T MRI-PET system at UR CABIN**

The Center for Advanced Brain Imaging and Neurophysiology (UR CABIN) is pleased to announce the availability of funding to support pilot projects using the ultra-high field 9.4T MRI-PET system, which can range from discovery-oriented research to dissemination and implementation science. The maximum allowed budget is $7,500 for a 12-month period. Grants with smaller budgets are encouraged, as this will enable us to fund more projects. These awards are open to all faculty members, postdocs and graduate students (will have to list a faculty mentor) across both the Medical School and the River Campus. Faculty members may be the lead or co-PI on only one proposal but may serve as a collaborator on up to two proposals. Applications from interdisciplinary collaborative teams will be given priority.

The awarded funds are intended to enable both new and established investigators to generate preliminary data that will lead to competitive applications for extramural funding. These awards will support all costs directly associated with scanning on the pre-clinical MRI and/or PET systems at CABIN such as: laboratory supplies, vivarium transportation charges, use of animal prep rooms, protocol consultation and set-up, scanning, and data analysis. Funds are not intended to use for student/ postdoc/faculty stipend/salary.

**Application Process**

Applications should be submitted via email to UR CABIN Administrator, Zach Miller (Zachary\_Miller@URMC.Rochester.edu), as **a single pdf application file.**

Items that must be submitted:

In addition to the questionnaire on the next page, the application should include:

1. **Cover letter** with title, list of the leading and collaborating investigators (name, title, department and email), brief description of any experience with MRI, and how the funding would extend research objectives that will lead to a competitive extramural grant application (*one page limit*).
2. **Research proposal** (*3-page limit, references not included*) – title, 3-5 keywords, abstract providing a succinct overview of the proposal, Specific Aims and Objectives, Background and Significance, Preliminary Studies, Research Design (including the justifications for animal experimentation) and Methods, Anticipated Outcomes, Timeline for data collection and analysis.
3. **Budget** (detailed) with justification
4. **Bio-sketches** of all Co-Investigators and all relevant personnel.
5. UCAR approval will be necessary prior to release of funds.

The application deadline is **5:00 pm on Friday November 1st, 2024**.

**Review and notification:** Proposals will be reviewed by an internal UR CABIN Committee and PIs will be notified of Committee decisions as soon as possible.

**Questionnaire**

**Type of Imaging:**

* Resting-state functional MRI (BOLD)
* Functional MRI (fMRI) with stimulation
* Structural MRI
* Diffusion tensor imaging (DTI)
* MR Spectroscopy
* MR Angiography
* Simultaneous PET and MR imaging
* PET only
* Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Animal and Body part to be scanned:**

* Mouse Head
* Mouse body (specify) \_\_\_\_
* Rat Head
* Rat body (specify) \_\_\_\_
* Other (specify)

**Small Animal Monitoring System**:

* Physiological Monitoring (ECG, Respiration and Body Temperature) and Gating
* Small Animal Anesthesia System
* Harvard Apparatus Syringe Pump
* Animal Temperature Conditioning System

**Supplies needed:**

* Isoflurane
* Ketamine
* Gadolinium
* PET isotopes (specify)
* Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**CABIN support needed:**

* Imaging protocol consultation and setup
* Tech support for MR experiments
* Data analysis consultation