## **Translational Imaging Research Facility**



### **New Study Request Form**

The Translational Imaging Research Facility (TIRF) represents an unparalleled resource for state-of-the-art MR imaging. Major infrastructure includes: a multi-nuclear-capable clinical MRI system (GE 3T MR750) with an insertable high-performance gradient system for micro-imaging of preclinical models. The facility is a valuable resource for multi-nuclear (non-hydrogen), conventional (hydrogen), and other advanced MR imaging methods.

#### Clinical MRI Research

The focus of TIRFs clinical research includes multi-nuclear MR imaging of patients with lung diseases using hyperpolarized (3He & 129Xe) gases, as well as evaluation of endogenous 23Na storage in human tissue of patients with kidney disease. Other supported clinical research projects at the TIRF focus on neuro-microvascular and neurodegenerative diseases, neuropsychiatric disorders, MSK disorders, liver disease, and several industry sponsored clinical trials.

#### Non-Clinical MRI Research

Non-clinical MR imaging studies include cellular and molecular imaging of tumours with novel contrast media (19F, 13C, and iron oxide nanoparticles) and development of MRI reporter gene systems for tracking cell and immunotherapies.

The New Study Request form is intended to ensure that each proposal is aligned with the strategic institutional and scientific priorities set out by TIRF and to help guide the process to start a study.

Please submit this form to TIRFmri@uwo.ca

| Contact Information  |                                  |  |
|--|----------------------------------|--|
| Principal Investigator (PI):   | Email:                           |  |
| Faculty/Department:  | Phone #/Ext.:                    |  |
|  |                                  |  |
| Please indicate the following:   |                                  |  |
| Project Name:  |                                  |  |
| HSREB (or ACC) approval number:  |                                  |  |
| Please list all researchers to be involved with the proposed study, and indicate if they have previous |                                  |  |
| MRI experience: Click or tap here to enter text.   |                                  |  |
|  |                                  |  |
|  |                                  |  |
|  |                                  |  |
| Please indicate if: Peer Reviewed Study ☐ Multi-   | Centred Trial □ Contract Study □ |  |
| If this study has been peer reviewed by a funding agency, please indicate agency name:                 |                                  |  |
|  |                                  |  |
| Was it funded? Yes $\square$ No $\square$  |                                  |  |
| (Please include any relevant reviews in the event the grant was not funded to help with study design)  |                                  |  |
| UWO Speed code (for invoicing):  |                                  |  |
| Date: 2025-09-30   |                                  |  |

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| Please describe your imaging project, including total number of proposed participants/animals, anticipated total hours (annual), hardware considerations (RF coil, peripheral devices), MR outcomes and preferred scientific approach – Relevant or previously published scientific articles or preferred imaging protocols (temporal and spatial resolutions, anatomical areas of interest, etc.) may be of assistance when configuring the setup: Click or tap here to enter text. |  |  |
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Once the new study request form has been reviewed you will be notified by TIRF personnel on how to proceed. It may be advised to organize a meeting with the TIRF MRI facility manager and/or directors, along with Veterinary Technologists to further discuss details and objectives.

Please note that the "Methods" section in publications, abstracts and presentations must include a statement that MRI scanning was performed at Robarts Research Institute Translational Imaging Research Facility (TIRF).

| For Internal Use Only |       |  |
|-----------------------|-------|--|
| Reviewed by:          | Date: |  |