

Technical Development Grant Program for MR Studies

Version: 8 June 2022

The Zuckerman Institute's (ZI) *Technical Development Grant Program for MR Studies* funds technical projects that seek to improve MR research for multiple researchers, beyond the scope of the grant-winning project. The program's purpose is to provide a limited number of free scan hours over a limited span of time. By providing this resource, we seek to encourage continued improvements in and expansion of our capabilities.

Each application will be considered on the basis of merit and need, and will be accepted subject to availability of resources (including scan time and staff). Criteria considered in deciding about an application include:

- **Merit:** Will the work yield important tools or techniques that promise to have a substantial impact on local and global MR research?
- **Need:** Does the PI currently have insufficient funding for conducting the technical development? Will their existing funding not cover the project?
- **Local collaborations:** Is the PI committed to a concrete plan to not just develop new techniques, but leverage their power for the research community using the ZI MRI facilities? Is the team collaborating with other local researchers to translate their technical developments into scientific practice?
- **Eligibility:** Is the applicant a PI eligible to apply for an NIH R01? (A tenure-track position is not a requirement, but a postdoc position is not sufficient.) In case the PI previously received a *Technical Development Grant for MR*: Have the techniques been finalized and adopted by other local researchers?

Details on Zuckerman Institute *Technical Development Grant for MR*

- (1) The program will fund Technical Development projects that (a) yield new tools and techniques that could benefit multiple research groups, (b) cannot be funded by grants the PI already holds, and (c) will be translated into scientific practice through collaborations with local researchers using the ZI MRI facilities.
- (2) The program funds only the hourly rate of scanning at the Zuckerman Institute's MR facilities (\$600 or \$675 with MR technologist support). *All other costs associated with the project, including subject payment and the required MR reads for incidental findings, have to be funded independently.*
- (3) There is no guarantee that any given application will be funded, as acceptance depends not only on the quality of the proposal, but also on the availability of resources (including scan time and staff).
- (4) Paid time has priority over unpaid time. Technical Development time is unpaid. In a given week, from M-F 9-5, total unpaid time is limited to 8 hours. Unpaid time can only be booked M-F 9-5 if there will still be 14 hours available M-F 9-5 in that week, after the technical development time is booked. Evenings and weekends are unaffected by these restrictions. You are encouraged to make use of evenings and weekends.
- (5) Publications and patent applications using data acquired in part or entirely on a Technical Development Grant for MR must be reported to the Zuckerman Imaging Center and must acknowledge the Technical Development Grant. Please include a statement such as the following in the Acknowledgements of the publication: "This project was funded [in part] by the Technical Development Grant Program for MR Studies of the Zuckerman Mind Brain Behavior Institute at Columbia University."
- (6) Technical Development grants can be rescinded for noncompliance with MR Core policies (unsafe practices, not booking time in iLab, frequent lateness or overrun, inconveniencing other users, damaging or reconfiguring equipment).

Researchers who intend to be considered for a *Technical Development Grant for MR* from the Zuckerman Institute are requested to fill in the application form (see below) and submit it by email to Nikolaus Kriegeskorte (n.kriegeskorte@columbia.edu), Director of Cognitive Imaging, Zuckerman Mind Brain Behavior Institute.

Zuckerman Institute Technical Development Grant for MR

Application form

Technical Development project name	
PI name, department	
Project description	Provide a brief description of your Technical Development project.
Justification for ZI Technical Development Grant for MR	<p>Why is your Technical Development project important to local researchers outside of your research group?</p> <p>List your current funding sources:</p> <p>Why can't your current funding support the Technical Development project?</p> <p>When will you do your initial presentation to the MR Users group?</p>
Previous Technical Development Grant funding for PI	<p>Has the PI previously received a ZI Technical Development Grant for MR?</p> <p>If so, what was the project name and has the technical development been adopted by other local researchers?</p>
Hourly rate requested	<p>\$0 (no funding available)</p> <p>\$400 (reduced rate, 3T)</p>

Researchers involved	List all researchers involved in scanning, their roles, and MR training level.
Scanner	Which MR scanner do you intend to use?
MR technologist support	Do you require support by an MR technologist for this project?
Peripheral equipment	State coils, stimulus presentation and response devices, physiological monitoring, or anesthesia, ventilator and restraint requirements for animals.
Internal/external	internal user (Zuckerman affiliate) external user (other Columbia University employee)
Population	Does this Technical Development project involve a patient population?
Subjects and hours	How many subjects would be scanned on the ZI Technical Development Grant? How many MR hours in total are to be funded by the ZI Technical Development Grant?
Justification of requested scan time	Provide a brief justification of the amount of time requested.
Time constraints	Will you require specific times on the scan calendar (for example, only weekends, only mornings)? Do you acquire time-sensitive data?
Challenges anticipated	Describe difficulties (if any) you anticipate with the MR component of your project.
Enclosed documentation	IRB CV for PI
Date of submission	
PI signature	