FUNDING OPPORTUNITY: The Musculoskeletal Research Center’s Pilot Project Program is available to support currently unfunded, novel, particularly innovative, disease-oriented musculoskeletal imaging projects that align with the strategic priorities (see below) of Program of Advanced Musculoskeletal Imaging (PAMI). Funding will be available to support projects along the entire continuum of biomedical investigation, including discovery/development, translation, and direct patient-involved research.

AMOUNTS AND DURATION OF FUNDING: Awards up to $25,000 will be available for one year duration. Up to two Established and two Junior Investigator imaging awards will be given annually.

ELIGIBILITY:
- Members of the Cleveland Clinic’s Professional Staff and trainees who are also members of PAMI are eligible to apply. For people who are not PAMI members but are interested in joining, please email your CV and a short research statement to Dr. Xiaojuan Li at li6@ccf.org.
- The PI of Established Investigator awards will be at the rank of Assistant, Associate or Full Staff.
- The PI of Junior Investigator awards will be at the rank of post-doc, Research Fellow, Research Associate, Staff Scientist or Project Staff. Junior Investigators are required to have a Senior Investigator serve as a mentor (and optionally a co-investigator) for the project.
- All applicants must be compliant in all research requirements of Cleveland Clinic.

APPLICATION: (4 pages maximum; 11 point Arial font; margins > 0.5"). The content should utilize the following headings and include:
1. Type of Principal Investigator (Established or Junior)
2. Specific Aims / Hypothesis
3. Significance-- Why is this project important? How will it advance the discipline beyond what is already known?
4. Innovation-- How is the proposed research new and unique? e.g., explores new scientific avenues, has a novel hypothesis, creates new knowledge, challenges current research or clinical practice paradigms
5. Research Plan – Preliminary data not required but encouraged, if available; include data analysis plan
6. Investigators— Primary appointment, pertinent expertise and contribution from each investigator; emphasize if the project involves collaborations between investigators who have not worked together in a significant capacity in the past.
7. Environment— Where will the research be performed and what pertinent resources are available?
8. Future Funding—Plan for future follow-on funding, including anticipated source, timing, etc.
9. Literature Cited -- not included in 4 page limitation
10. Signature Page – not included in 4 page limitation, only required for Junior Investigators. A signature page from the Senior Investigator who will serve as a mentor is required, even if the Senior Investigator is also a co-investigator (see Appendix A for template).
BUDGET and JUSTIFICATION (1 page maximum; 11 point font; see Appendix B for template).

Itemize and justify all proposed expenses, providing enough detail so reasonableness of the request can be assessed. Salary/fringe for any personnel is allowed, if justified.

Expenses not fundable:
- Travel
- Routine patient care costs, such as hospitalization, physician fees and diagnostic testing of the type normally required for conventional treatment of the patient’s condition
- Capital (equipment)
- Sub-awards to other institutions
- Usual institutional operating and overhead expenses

BIOGRAPHICAL SKETCHES: Applications should include NIH-style biographical sketches of the Principal and co-Investigators (no more than 5 pages for each investigator). Letters of Support are not required but are welcomed if particularly appropriate.

REVIEW CRITERIA: The MSRC Pilot Projects Review Committee will assign the applications an Overall Impact Score based on the following criteria:
- Significance and Innovation: novelty and significance of the science
- Research Plan: scientific strength of the proposal
- Investigators: expertise and collaboration history (or potential) of the participating investigators
- Environment: availability of pertinent resources
- Future Funding Potential: have high potential for follow-on extramural grant funding

The PAMI Directors (Xiaojuan Li, PhD and Carl Winalski, MD) and an ad hoc subcommittee of the MRSC Steering Committee will make final award decisions for medical imaging research projects, based on the Overall Impact Scores provided by the Pilot Projects Review Committee. Higher priority will be given to meritorious projects that:
- Include investigators from multiple Cleveland Clinic institutes
- Propose collaboration between two investigators who have not worked together in a significant capacity in the past
- Align with PAMI’s strategic priorities. The current priorities are (a) technical development of clinical applications of 7 Tesla human MRI or (b) Ultra Short TE and other novel MRI technologies under clinical development.

PROGRESS PRESENTATION/REPORT: Funding will be distributed in two equal, six-month installments. A 15-minute progress presentation will be required at six-months, and release of the second half of funds is contingent upon adequate progress in the initial period. A final progress report will be due within three-months following the end of the award period. The final progress report should include a summary of accomplishments, including a list of all abstracts and publications that have resulted or will result from the work, a list of related extramural grant proposals submitted/awarded, and a list of any intellectual property generated by the work (including invention disclosures, submitted and received patents, licenses, and any new companies formed).

ETHICS: All grant requests must conform to prevailing ethical standards for medical research and must be approved by the IRB or IACUC, as applicable, before beginning the research.

OTHER FUNDING: This grant may not be used to replace funding for projects that are already funded from other sources, but can be used to leverage / expand ongoing research that is already funded.

SUBMISSION: Applications including the budget and bio-sketches should be submitted as a single PDF file to owingtst@ccf.org.

TIMELINE: Two annual funding cycles; applications are due by midnight on:
- March 15 (funding begins June 1)
- Sept 15 (funding begins Dec 1)
Appendix A: Signature Page

PI Name: 

Title of Project: 

This proposal is being submitted for consideration for MSRC Pilot Project funding. I have reviewed this proposal in its entirety and am willing to serve as a mentor to the Junior Investigator PI listed above.

Printed name of Senior Investigator

Signature of Senior Investigator

Date
## Appendix B: Budget and Justification

<table>
<thead>
<tr>
<th>Budget Items</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Personnel (Salary + Fringe)</strong></td>
<td></td>
</tr>
<tr>
<td>Sample Person 1 (role, %effort)</td>
<td></td>
</tr>
<tr>
<td>Sample Person 2 (role, %effort)</td>
<td></td>
</tr>
<tr>
<td><strong>B. Patient Care (research-related)</strong></td>
<td></td>
</tr>
<tr>
<td>C. Supplies</td>
<td></td>
</tr>
<tr>
<td>D. Other</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL BUDGET</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Budget Justification**

- **A. Personnel**
- **B. Patient Care**
- **C. Supplies**
- **D. Other**