



SSR 2020 RESEARCH SEED GRANT PROGRAM

As a member of the SSR we invite you to participate in the Research Seed Grant Program. This annual grant is intended to stimulate research on certain topics in Musculoskeletal Radiology considered by the SSR Research and Executive Committees to be important, yet under-represented, in the literature.

Award: up to \$4,000.00 to Principal Investigator

Eligibility: All SSR Members in good standing are eligible

DEADLINE FOR APPLICATION: FEBRUARY 24, 2020

The winner will be announced at the 2020 SSR Annual Meeting in March. Results will be presented by a podium presentation at the SSR 2021 Annual Meeting. Progress during the year will be reported in writing to the Research Committee, which will supply advice and mentorship as needed.

Application: Components must be submitted via the SSR website (<https://skeletalrad.org/ssr-2020-research-seed-grant>)

- 1) Specific aims (0.5 page)
- 2) Research plan (1.5 pages' maximum)
- 3) Brief biosketch of PI and collaborators; define roles in project
- 4) Summary statement of the clinical impact/need for this research

Suggested topics:

1. *Imaging pain and functional status*

What is "normal" in young athletes? What is "normal" in the aging population? Sometimes MRI findings do not correlate to the suspected clinical concern, and sometimes a patient has a "normal" MRI, despite debilitating pain. We need to improve our correlation of imaging findings with symptomatology and/or functional status.

2. *Integration of Information from Multiple Imaging Techniques – "Multiparametric"*

Approach to Musculoskeletal Disease

This is most well cited in the world of oncologic imaging, but could apply to such entities as cartilage imaging, rheumatology and musculoskeletal infection. This can be achieved using a combination of MR imaging sequences, or a combination of modalities and techniques.

3. *Gender Differences in Sports Medicine*

Are certain sports injuries more likely in male vs female athletes? Are certain imaging findings (associated with a sports injury) more commonly seen in male vs female athletes? This is a facet of musculoskeletal imaging that has not been adequately researched or reported in the literature.

4. *Demonstrating Added Value of Advanced imaging in Healthcare*

Some of our more advanced imaging techniques in musculoskeletal radiology (particularly MRI) are often classified as “expensive” or “costly.” However, we know that information added from new technologies can help guide appropriate medical decision-making, and may ultimately change patient management. We encourage projects that look at the cost-effectiveness of these advanced imaging techniques.

5. *Fast MR Imaging*

A “hot” topic in musculoskeletal imaging. Fast MRI is a complete MRI examination that can be performed at a faster rate than the typical MRI, but still produce an adequate number of sequences, without sacrificing image quality.

6. *Artificial Intelligence/Deep Learning/Convolutional Neural Networks*

Another “hot” topic in musculoskeletal imaging. Artificial intelligence has great potential to help radiologists more efficiently interpret images, provide computer-aided detection of diagnoses, and perform automated report drafting.

For research specific questions, please contact me at jordan.gross@med.usc.edu. For general questions please contact SSR staff at admin@skeletalrad.org.

Sincerely,

Jordan Gross, MD
SSR Research Committee Chair