

High-Resolution peripheral Quantitative Computed Tomography (HR-pQCT) 2026 Seed Grant Call for Applications

Device Background and Funding Opportunity Summary

High-Resolution peripheral Quantitative Computed Tomography (**HR-pQCT**) is available in the outpatient Adult CTRC to obtain non-invasive 3D images at the distal tibia and distal radius of humans for clinical in vivo assessments of volumetric bone mineral density and parameters of bone quality (e.g., microarchitecture, geometry, porosity, and biomechanics). XtremeCT II HR-pQCT scanner images have a very small isotropic voxel size (60.7 μm) and very low radiation dose ($\leq 5 \mu\text{Sv}$ per scan/anatomical site) so the device can be used for studies performed in adult, adolescent, and pediatric populations.

These seed grants are intended to increase utilization of this new instrument and **can only be used for HR-pQCT scanning/analysis**. They are supported by the CCTSI, the Vice Chancellor of Research, and Pediatric Endocrinology at Children's Hospital Colorado. Award recipients may be eligible for CCTSI microgrants to assist with other costs related to the project (see *CCTSI website for details*).

Seed Grant Award Information

Up to four seed grants in the amount of \$10,000 each are available through this competitive application process. One of the four awards is specifically for investigators performing child health related research. The duration of the award is 1 year (April 2026 – March 2027) with up to one no-cost-extension considered based on progress.

Important Dates

11.3.2025	Release of Call for Applications
1.5.2026	Intent to Submit due (required)
2.2.2026	Applications due by midnight
3.2026	Applications Reviewed
4.2026	Notifications and Start of Seed Grant Award Funding

Eligibility

Applicants must hold a faculty or postdoctoral/postgraduate appointment on the CU Anschutz Medical Campus or its affiliates (e.g., Veterans Administration, Children's Hospital of Colorado, CU Denver). Faculty at any academic rank are eligible (e.g., Instructor, Assistant Professor, Associate Professor, Professor). Each applicant is only eligible for one award per cycle. Prior recipients will be considered for additional awards if adequate funding is available and requirements of the prior award are met. All funded projects must have approval from COMIRB, or other relevant administrative agency. Seed grant recipients are required to submit a 1-page progress report at the end of the funding period and present their initial research plan and final results at a monthly Bone Think Tank meeting.

Intent to Submit

Investigators interested in submitting an application are required to fill out an intent to submit REDCap survey by the above deadline to the following website:

<https://redcap.ucdenver.edu/surveys/?s=8C34TX78TWAYH843>

Application Components

All applications must contain the following items. Incomplete applications will not be reviewed.

- **Cover Page** (1 page): Must include the following
Project Title
Investigators: name, title, affiliation, contact information (please provide this information for the PI and all co-investigators)
Sample size and anticipated number of scans
Anticipated timeline
Project Overview (2-3 sentences): use laymen's terms to describe the overall goal, anticipated outcomes
Abstract (250 word limit): concise summary of the project
Statement certifying that the study team will present at Bone Think Tank meetings, submit the required progress report at the end of the funding period, and cite HR-pQCT NIGMS funding in publications reporting HR-pQCT data.
- **Research Plan** (2 pages):
Specific aim(s)
Background, significance and innovation of the project
Approach including experimental design, sample size with data/statistical analysis, and timeline. Please address feasibility, including resources available to successfully complete the project outside of HR-pQCT seed grant funding (e.g., salary effort, staff, statistical analysis, ancillary measures, etc).
- **Progress Report** (1 page), if applicable
Prior recipients of HR-pQCT seed grant(s) are required to submit a progress report detailing the status of their prior award/project, including a list of any publications.
- **Mentor's Letter of Support** (1 page), if applicable
Junior investigators must submit a letter of support from their mentor indicating that the necessary resources are in place to complete the proposed project.
- **References** (no page limit)
- **NIH Biosketch of principal investigator and all co-investigators** (each 5 pages max)
- **Budget with budget justification** (1 page each): Clearly define one-year seed grant expenses and source(s) of additional outside support. Please note that the \$10,000 seed grant funding can only be used for costs related to HR-pQCT scan acquisition and analysis.

Application Submission Information

Please upload all application components in 1 combined PDF on the following website:
<https://redcap.ucdenver.edu/surveys/?s=878T8P9EDPXKKMLC>

Contacts

The HR-pQCT Leadership Team is here to help you with any questions regarding the device and application process. If you have any questions, please contact the HR-pQCT Leadership Team:

- Faculty Director: Julio Carballido-Gamio, PhD
- Core Director: Wendy M. Kohrt, PhD
- Technical Director: R. Dana Carpenter, PhD
- Medical Director: Christine M. Swanson, MD, MCR

HR-pQCT Device Funding Information

The HR-pQCT device was acquired via successful grant applications to the NIGMS (S10 OD028453) and the University of Colorado's Strategic Infrastructure for Research Committee (SIRC) in 2019. Awardees must cite this grant (S10 OD028453) in any publication that utilized the HR-pQCT device.