

Becoming Internationally Known for our Research and Creative Work

April 2023 Board of Regents Meeting



CU Denver is committed to growing our record of excellence in diverse fields of research and creative works. Through advanced, focused research, we learn to see complex issues more clearly and find new, creative ways to solve problems. Our researchers help shape the region and beyond through their research and creativity in areas such as artificial intelligence and data science, biomedical engineering, building democratic communities, cybersecurity, performing arts, and smart cities and sustainable urban infrastructure.

By taking on the challenges affecting society today, our talented, diverse research community—bioengineers, chemists, economists, musicians, policy experts, urban planners, and more—are helping to shape a better future.

We pride ourselves on conducting research that matters. Undergraduate and graduate students participate in ongoing research by contributing to scholarly and creative activities. By working together, we can better understand and improve our world.

CU DENVER RESEARCH BY THE NUMBERS—FY22

237 Proposals Submitted	Requesting \$119.8 Million	\$18.9 Million in Awards	\$19.1 Million in Research Expenditures
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Top Four Federal Funding Sources—NSF: \$3.07 million; NIH and Other DHHS: \$2.76 million; Department of Education: \$1.84 million; Department of Defense: \$1.05 million

CU DENVER RESEARCH BY THE NUMBERS—FY23 YTD*

179 Proposals Submitted ↑ 13% YTD	Requesting \$74.6 Million ↑ 7% YTD	\$20.2 Million in Awards ↑ 56% YTD	\$17.0 Million in Research Expenditures ↑ 28% YTD
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*Figures are year-to-date as of March 31, 2023; Percentages as compared to year-to-date figures for FY22.



Follow the latest announcements from CU Denver Office of Research Services on Twitter at @CUDenResearch

SEED GRANTS PROGRAM

Seed grants are intended to enable research and creative activity that supports proposal development for external funding.

- **Arts and Humanities Seed Grants Program:** 8-12 awards/year of up to \$10,000
- **Convergence Research Seed Grant Program (2024):** Supports planning, team formation, and proposal development around “high impact” research and creative work to sustain the Grand Challenge initiative; one award of up to \$75,000.
- **Open/All-Disciplines Seed Grants Program:** 15-20 awards/year of up to \$10,000

GOAL THREE: Become internationally known for our research and creative work

RESEARCH GRAND CHALLENGES

The complexities of today’s global challenges require approaches that address them head-on with fresh thinking and dynamic, diverse teams. We will elevate our research operations to solve problems that matter. CU Denver will generate additional streams of research funding in strategic areas where it can become a leader. The Grand Challenges initiative encourages a grass-roots approach to identifying strategic areas where CU Denver can stand out. Projects are selected and provided seed funding and targeted research support to lay the foundation for building CU Denver’s reputation as a leader in these identified strategic areas.

GRAND CHALLENGE 1 AWARDS

Infrastructure Informatics: Toward Establishing a Research Center for Preventative, Predictive, and Prescriptive Design, Maintenance and Management of Civil Infrastructures using AI/DATA Science (\$275,000): The Big Data Management and Mining Lab (BDLab) and a team of interdisciplinary faculty focus on Data Science research and applications and will work to materialize the impact of AI and data science in effective design, maintenance, and management of civil infrastructures.

Design & Implementation of a Community Collaboration and Research Center (\$275,000): Uses critical research methods and community-based research to address long-standing environmental injustices and support sustainable partnerships with marginalized communities suffering from climate impacts.

Engineering Better Medicine by Disruptive Technologies and Conceptual Revolution Pitch: A Collaborative Program for Epigenetics (\$150,000): Aims to tackle some of the most complex problems in the epigenetic field, which examines how behaviors and the environment can affect the way genes work, with the goal of bettering human health.

Collaborative for Building Democratic Communities (\$150,000): Facilitates interdisciplinary activities among faculty and students by working with local and global partners to address some of society’s most significant challenges facing democracy.

Technology Research and Innovation for Aging and Disability (\$40,000): A powerful consortium of academic experts, community stakeholders, and local, national and international industry advisors and partners who have joined together to research, develop, and deploy safe, productive, and efficient technologies to support the needs of those living with, or aging into, disability.

Imaginator Academy (\$40,000): Centered around a radical focus on the science of creativity, belonging and collaboration, CU Denver’s Imaginator Academy has its sights set on becoming an influential culture analytics, strategy, and inclusive innovation hub for the future of work.

Research and Insights into the Transformation of Health Systems (\$40,000): provides thought leadership to health systems with insights on current trends and perspectives that impact decision-making around four aspects of health systems: business and strategies, equity and diversity, digital and intelligent health, and talent and leadership development.

GRAND CHALLENGE 2 PROCESS

Our process consists of four phases to encourage an organic development of research areas—engaging our community to solicit and refine ideas as additional grand challenge initiatives. Proposals were submitted in March 2023 and are undergoing stages of internal and external review. We expect to announce Grand Challenge 2 awards in mid-May.