

DOM RESEARCH STRATEGIC PLAN

Executive Summary

The University of Colorado Department of Medicine (DOM) has a broad base of highly successful research across the T0–T4 research spectrum. In fiscal year 2022, we had 1,132 extramurally funded research awards, including 795 NIH awards, totaling over \$356 million, and 2,482 articles published in peer-reviewed journals. We are ranked #23 in the nation for NIH research funding, based on [Blue Ridge Institute for Medical Research](#) rankings. The goal of this five-year Research Strategic Plan is to advance the success of all DOM research endeavors, increase extramural funding, and earn a top 20 place in the Blue Ridge Institute for Medical Research rankings.

Based on the [DOM Research Listening Tour](#) conducted in November and December 2022, five major areas of focus were identified as priorities for the five-year DOM Research Strategic Plan:

1. Research infrastructure
2. Research funding
3. Connectedness across divisions
4. Concise communication
5. Career development

Vision






To create an integrated research ecosystem for our research teams to make transformative discoveries that improve lives.

Overarching Philosophy

The key elements of the philosophy that encompasses all DOM Research initiatives and lays the foundation for our Vision are:

- Success and satisfaction of all DOM researchers: faculty, research professionals and administrators
- Inclusion of all researchers as stakeholders in the development of DOM Research plans
- Transparency
- Equity
- Organizational excellence, including utilization of existing campus resources and avoidance of duplication
- Responsible stewardship of DOM resources

Plan at Glance

 <p>Enhance Access to Research Resources</p>	 <p>Invest in Our Researchers</p>	 <p>Connect Across Divisions</p>	 <p>Create Concise, Effective Communications</p>	 <p>Develop the Careers of Our Researchers</p>
<ul style="list-style-type: none"> • Provide streamlined access to campus research resources • Revise the DOM Research website to create one-stop shopping • Create DOM post-award administrative support • Advocate for equitable access to campus wet lab space • Create integrated T2-T3 research infrastructure • Bioinformatics Support • Biological sample repository access 	<ul style="list-style-type: none"> • Create inclusive and equitable direct financial support structure • Provide incentives for funding success • Provide matching funds for the SOM Bridge Funding Program • Create funding program for cross-disciplinary, inter-division research • Create transparent policies for provision of DOM supplementary funds 	<ul style="list-style-type: none"> • Include all research faculty, staff and administrators as stakeholders • Reinvigorate DOM Research Innovation Conference • Use DOM Research Day to highlight research across all divisions • Create a process for encouraging multidisciplinary, cross-division research • Introduce awards and recognition for research professionals • Establish a K-Club program 	<ul style="list-style-type: none"> • Develop a formal communication plan • Create a quarterly newsletter to highlight research successes and stories • Provide research content for the DOM Annual Report and informational slides 	<ul style="list-style-type: none"> • Create hands-on grant writing workshops to assist transition from one to two R01s • Provide pre- and post-award support for division administrators • Amplify the impact and reach of campus research professionals' education and training programs • Create library of sample NIH SF424 documents • Partner with DOM Faculty Development team to provide resources for promotion, leadership training, and mentorship

Goals

Goal 1: Enhance and simplify access to research infrastructure and resources.



1a. Partner with other departments and CU Anschutz Medical Campus leadership to catalog and provide streamlined access to campus research resources.

Metrics of success:

- Establishment of a research resource orientation program
- Establishment of a user-friendly web-based navigation system

1b. Overhaul the DOM Research website to provide transparency and one stop information for our research community.

Metrics of success:

- Completion of revised DOM research webpage
- Satisfaction scores and positive comments from user beta testing
- Number of monthly page views (Google analytics) post-update versus pre-update

1c. Create infrastructure that will provide Departmental post-award grant support, which will facilitate more time for pre-award support through Division administrators and, if necessary, the CU Anschutz Medical Campus [PreAward Shared Services](#) (PASS).

Metrics of success:

- Number of Divisions using DOM post-award services
- Number of awards using DOM post-award services

1d. Advocate for adequate and equitable access to campus wet lab space.

Metrics of success:

- Dissemination of new SOM Space Policy rules
- Active DOM participation and representation on the SOM Space Committee that will make future space decisions.

1e. Develop integrated infrastructure for T2-T3 research (Health Service Research, HSR).

Metrics of success:

- Develop a HSR community that supports workshops for sharing ideas, networking, and mentoring
- Developing an attractive platform to recruit and retain physician scientists in HSR
- Developing a hub for shared resources to integrate data science

1f. Provide timely and direct access to Health Data Compass (HDC) and Electronic Health Record (HER)-based research. This will be achieved by working within existing campus

infrastructure to provide dedicated DOM bioinformaticist support within HDC and promoting access to the emerging CCTSI Pragmatic EHR Embedded Trials (PEET) Research Program.

Metrics of success:

- Number of projects using DOM bioinformaticist
- Number of PEET awards to DOM faculty

1g. Create an efficient overarching process for clinical sample collection and use Department- wide.

Metrics of success:

- Develop a DOM system-wide mechanism for streamlining access to leftover samples coupled with deidentified data
- Create a hub in which existing sharable biorepositories are accessed by investigators (i.e. heart tissue sample collection)

Goal 2: Invest in our researchers.

2a. Restructure the existing Research Intensive Faculty Program (RIFP) to be more inclusive and equitable. This will create a new program, [Research Investment in the Scientific Enterprise](#) (RISE) which will provide a fixed dollar amount of unrestricted research funds that can be used per the investigator's individual needs (salary support, travel, publication costs, post-doctoral salary support, preliminary data generation, statistical analyses, etc). All NIH R- (excluding R21, R03), P-, and U-level contact Principal Investigators (PIs) who have less than \$50,000 in unrestricted funds available to them are eligible. All R-, P- and U-equivalent grants from other funders are also eligible, including those from the Department of Defense (DoD), Veteran's Affairs (VA), professional societies and foundations.



Metrics of success:

- Number of faculty receiving RISE versus the number that were receiving RIFP funding in the year prior to RISE-implementation
- Return on Investment (ROI) from follow-on awards
- Average RISE award amount per PI

2b. Provide incentives for research success. Small, fixed dollar amount incentive funding will be provided for each additional qualifying award after the first that is eligible for RISE funding.

Metric of success:

- Number of awards per faculty that qualify for incentive funding

2c. Promote cross-divisional and -departmental multidisciplinary research through creation of a [team formation and pilot funding program](#) (intersects with Goal 3 objectives).

Metrics of success:

- Number of new multi-disciplinary teams created per year
- Return on Investment (ROI) from follow-on awards
- Number of publications by new teams within 5 years of formation

2d. Provide matching funds for those receiving SOM Bridge Funding. For those whose division matches funds for the RISE program, DOM Research will directly match SOM Bridge Funding for one year.

Metrics of success:

- Number of faculty receiving matching funds per year
- Number of faculty receiving extramural grant funding within one year of funding

2e. Create transparent policies and application processes to obtain DOM contributions for large grants (e.g. NIH P and U mechanisms) and for Core [equipment/infrastructure purchases](#).

Metric of success:

- Creation of clear policy and a user-friendly web-based application process

Goal 3: *Connect researchers across divisions.*

3a. Ensure that all researchers, faculty, staff and administrators are included as key stakeholders in DOM Research planning and program development initiatives.



Metrics of success:

- Introduction of yearly town halls with opportunity for in person and online, anonymous feedback and suggestions
- Satisfaction scores on annual DOM WellDOM surveys from researchers

3b. Reinvigorate Research Innovation Conference (RIC) to provide monthly exposure to research highlights in novel presentation formats that facilitate interaction, including content across the whole research spectrum (T0–T4).

Metrics of success:

- Attendance at monthly **R**esearch **A**chievement **H**ighlights (REACH) forums
- Representation of all divisions for REACH presentations

3c. Restructure the annual DOM Research Day to include presentations by every division, across the entire research spectrum (T0–T4), and time for interaction.

Metrics of success:

- Attendance at DOM Research Day
- Satisfaction scores from Research Day online evaluation survey

3d. Create a process for [encouraging multidisciplinary, cross-divisional research teams](#).

Metrics of success:

- Number of divisions/departments represented in new teams
- Faculty rank and terminal degree of team members
- Number of extramural grants submitted from new teams within 5 years of formation

3e. Introduce DOM research professional recognition awards for those in the lab, clinical and informatics Research Professional series.

Metric of success:

- Establishment of research professional awards to be presented at DOM Research Day

3f. Establish a K-Club program for junior investigators

Metrics of success:

- Attendance at K-Club events
- Transition to independence of K-level faculty

Goal 4: *Create concise, effective communications.*

4a. Create a formal Research Communication Plan that focuses on highly visible, high-value communications highlighting the value of our research and limits redundancy, which can lead to email/communication inundation. The optimization of this plan will create trust in “DOM Research” email and calendar distributions to reduce overcommunication and reliance on multiple reminder messages.



Metrics of success:

- Development of a Research communications plan
- Reduction in the overall number of emails sent by “DOM Research”

4b. Create a quarterly DOM Research newsletter that highlights success stories from researchers at all stages of their careers, including stories about their career journeys.

Metrics of success:

- Quarterly newsletter distribution
- Response to suggestions on content
- Number of stories picked up by campus or network communication teams

4c. Provide research content for the DOM Annual Report and Year in Review slides that can be used to summarize our research achievements, which will be helpful in conveying value to partners, including University Hospital, and during faculty recruitment.

Metric of success:

- Production and distribution of data and yearly reports

Goal 5: Develop the full potential of our researchers through career development and educational programs.



5a. Create a hands-on grant writing workshop series for DOM researchers

- Number of faculty participating in workshops
- Funding success rate of resulting applications
- ROI three years after participation

5b. Provide ongoing support and monthly training sessions for division administrators regarding pre- and post-award processes.

Metrics of success:

- Attendance at monthly training sessions
- Number of questions received pertaining directly to covered topics

5c. Partner with the Vice Chancellor's Office to amplify the reach and impact of their professional development program for clinical research professionals and establish a similar program for laboratory research professionals.

Metrics of success:

- Establishment of professional development series for laboratory research professionals
- Education for all DOM researchers on the CU research professionals career ladder

5d. Create a library of sample attachments per NIH SF424 guidelines for all DOM research faculty.

Metric of success:

- Development of easily accessible samples to reduce applicant burden during grant applications

5e. Partner with the DOM Faculty Development team to provide resources relating to promotion, campus career development programs, leadership training and resources to ensure adequate mentorship for both scientific content and career advancement.

Metric of success:

- Provision of career development resources in an easy to access web-based format