

The goal of the North Dakota State University (NDSU) 2021-2026 Strategic Plan for Research and Creative Activity was to advance our stature as a nationally and internationally recognized research university, engage in transformative Research and Creative Activity, and increase the quality and quantity of scholarly activities to generate new insights and knowledge that will benefit the state and address central challenges of our global future (Appendix 1). In support of this goal, the 2023 Faculty Research Council provided 14 recommendations to President Cook that were in alignment with the sub-goals for Research and Creative Activity (Appendix 2). These recommendations, alongside other crucial efforts to advance Research and Creative Activity, have propelled NDSU toward 2021-2026 Strategic Plan goal achievement. Overall, Research and Creative Activity at NDSU have elevated in robustness and vibrancy. Although there has recently been substantial progress in Research and Creative Activity, ongoing changes in the federal research funding landscape present formidable challenges that will need to be acknowledged, understood, and addressed if we are to continue this upward trajectory. Identifying and building key strengths in areas that address local, state, and national priorities will be critical for growing an R1 research culture and enterprise going forward. The 2025 Faculty Research Council is pleased to submit this report, which recognizes our achievements, reaffirms dedication to the 2023 recommendations, provides suggestions for navigating the changing federal research landscape, and underpins new aspirational goals related to Research and Creative Activity for our next Strategic Plan.

Since the development of the NDSU 2021-2026 Strategic Plan for Research and Creative Activity, and recommendations from the 2023 Faculty Research Council to achieve the sub-goals driving the overarching goal, significant research accomplishments should be acknowledged for guiding future strategic planning and continuing to increase our research standards as a nationally and internationally recognized research university.

Strategic Plan 2021-2026 Research and Creative Activity Goal

Advance our stature as a nationally and internationally recognized research university, engage in transformative research and creative activity, and increase the quality and quantity of scholarly activities to generate new insights and knowledge that will benefit the state and address central challenges of our global future.

Major Achievements

- Reaffirmed Carnegie Classification of Institutions of Higher Education R1 designation.
- National Science Foundation Higher Education Research and Development Survey recognition for NDSU as a Top 100 public research university in the United States, rising in rankings from 99 to 97.
- Research expenditures exceeded \$190M in FY2023 (the most recent Fiscal Year (FY) data available), which is a record high for NDSU.

Strategic Plan 2021-2026 Research and Creative Activity Sub-Goals

Increase the commitment of financial resources to support sustainable research growth with public impact.

The Economic Diversification Research Fund (EDRF) was established by the North Dakota Legislature in 2023. This funding aimed to ensure that the state economy generates additional revenue streams to stimulate economic growth by innovating new technology, ideas and products; promote job creation and career and wage growth; enhance healthcare outcomes; address loss of revenue and jobs in communities with economies that depend primarily on the fossil fuel industry; and provide experiential learning opportunities for students.

Specified Achievements

- The NDSU Office of Research and Creative Activity managed the \$2.5M allocated to this initiative and invested into a suite of programs across an “Innovations to Practice Pathway”. In addition, the Office of

Research and Creative Activity invested in campus programs with \$150K of the Office's appropriated operating funds, as well as investments from NDSU EPSCoR state leveraged dollars.

The programs and award information include:

- The EDRF Infrastructure Program, which up-scaled the acquisition of research instrumentation and equipment, supported 6 projects at approximately \$574,000.
- Transformative Research Leadership Programming supported 2 full awards at approximately \$150,000 and 2 pre-planning awards at approximately \$30,968 for NDSU Principal Investigators to build capacity and springboard readiness to submit competitive proposals to center-level federal funding opportunities.
- Bison Arts and Humanities Funds supported 7 awards at approximately \$28,250 to stimulate new research and creative endeavors in the humanities and arts with an emphasis on projects that directly support career progression.
- Interdisciplinary Research Planning Grants awarded 8 applications at approximately \$78,852 to initiate early-state project development to help catalyze collaborative, interdisciplinary teams.
- The Conference Development Support Program awarded 2 applications in FY2025 at approximately \$6,000 to help NDSU faculty host academic conferences that enhance professional development, disseminate scholarly activities, provide networking, and generate recognition to our investigators.
- The Equipment Repair Matching Program supported 8 applications in FY2025 at approximately \$73,745 to fix research equipment.
- The Research Development Conference Travel Program supported 41 awards in FY2025 at approximately \$40,942 for presenting research at academic conferences.
- Deployment of Atom Grants, an AI-powered platform which locates grant opportunities that are customized to faculty interests, and listservs that present grant opportunities that target the National Institutes of Health and National Science Foundation.
- Continued commitment to Core Research Facilities personnel has supported such core facilities in the NDSU Research and Technology Park, and fostered progression on creating a full-scale vivarium for further improving research facilities.

Enhance the diversity of undergraduate, graduate, and faculty researchers.

- The EDRF University Collaboration Research Program funded applications involving faculty from NDSU, University of North Dakota, and at least one other North Dakota University System or North Dakota Tribal College System with 9 projects. NDSU contributed approximately \$198K to this program.
- "Women in Research" is an organization at NDSU that routinely meets for providing an ongoing platform for female investigators to exchange research, grant-writing, dissemination, and professional experiences.
- Onboarding of the Director of Tribal Partnerships fosters research collaborations between NDSU investigators and North Dakota Tribal College System institutions.
- Hosting undergraduate student interns in the Biomedical Engineering and Pharmaceutical Sciences programs at NDSU annually since 2022. The students are from the Medical Technology program at Walailak University, Thailand.
- Undergraduate and graduate dissemination of research in conference presentations and peer-reviewed publications demonstrates diverse student groups in research.
- Participation in research grant submissions across academic colleges at NDSU, and diversity in submissions to federal agencies (e.g., NIH, NSF, DoD, DoT) serves as an indicator of our eclectic research portfolio.

Integrate and strengthen centralized administrative and academic support for research and creative activity.

- According to the FY2023 Research and Creative Activity Annual Report, 35 invention disclosures, and multiple patents were issued.

Create an administrative framework to encourage and support multidisciplinary research teams.

- Multiple “Sparking Big Ideas” initiatives brought together investigators to generate and execute cross-disciplinary research activities that also align with our Strategic Research Priorities.
- Administrative and financial support for external consultants provided insights on large interdisciplinary grants.
- Multiple, intensive cross-disciplinary professional development workshops were provided internally and externally to the NDSU faculty (27 total in calendar year 2024) for supporting their Research and Creative Activity, which resulted, for example, in 2 National Science Foundation CAREER awards.

Prioritize high effective mission-relevant research programs through strategic and systematic resource reallocation.

- The EDRF Faculty Development Program provided funding to increase faculty competitiveness for external funding with 13 projects at approximately \$679,000.
- The EDRF Technology Acceleration Program presented resources with the goal of fast-tracking ideas and technologies toward commercialization; supporting 11 projects at approximately \$794,000.
- Big Ideas Research Seed Projects in STEM Fields funded 1 award in FY2025 at approximately \$100,000 to support Principal Investigators in pursuing innovative, ambitious solutions to impactful research questions that fit within NDSU’s strategic STEM priorities, and the North Dakota Science and Technology Plan.
- NASA EPSCoR Pilot Projects awarded 5 projects at approximately \$263,739 to develop research that is in line with NASA’s overall mission and ensuring a future competitive submission to a NASA funding opportunity.
- The North Dakota Water Resources Research Institute supported 3 Fellows at \$10,000 per fellow.
- Initiation of obtaining Innovation and Economic Prosperity Program designation through the Association of Public & Land-Grant Universities.

Support and ensure high-quality research education for postdoctoral fellows, graduate, and undergraduate students.

- The Undergraduate Research Director facilitated several professional development workshops, research opportunities, and dissemination platforms for student research.
- Continued workshops and programming for both undergraduate and graduate research.
- The EDRF Experiential Learning Program, which directly supported students through internships, undergraduate research opportunities, trainings, workshops, and other relevant activities awarded 4 projects at approximately \$256,000.

Although we celebrate the milestones, advancements, and efforts related to the goals of the NDSU 2021-2026 Strategic Plan for Research and Creative Activity, we would also like to renew our strong support for maintaining and increasing such successes. Despite listing several achievements in this regard, we encourage continued support for all recommendations from the 2023 Faculty Research Council, particularly those recommendations that were not noted with an achievement herein. For example, **protecting and increasing faculty time to conduct research in workload agreements** as appropriate is necessary for a robust R1 culture.

Administrative and financial support is critical to growing and sustaining research with public impact, and **allocating 16% of indirect costs from awarded grants to the Office of Research and Creative Activity** is strongly encouraged for maintaining this commitment. Moreover, **ongoing devotion to front facing reward structures for faculty that are deeply engaged in Research and Creative Activity** will help in promoting R1 as a clear and unrelenting institutional priority. Positioning our faculty to succeed in research is crucial for further cementing NDSU as a powerhouse research institution.

Although positioning our faculty to excel in research is integral for R1, changes in the federal research landscape will almost certainly present significant barriers and headwinds. Such barriers and headwinds may create a downward inflection in our research achievements, diminish faculty morale and motivation to engage in research, and erode our overall research enterprise. **The changing federal landscape for research is a direct threat to our NDSU R1 Presidential Strategic Priority.** Accordingly, we recommend the following actions to continue supporting faculty in their research endeavors during these changing times:

- Maintain multiple modes of communication to faculty for preserving awareness of significant happenings related to federal changes in research.
- Emphasize faculty participation in live didactic sessions and townhalls that provide guidance for understanding changes in policies, priorities, and likely restructuring within federal research organizations.
- Prioritize alternative and sustainable intramural sources of funding to support faculty research that focuses on state and federal needs.
- Work with Faculty Affairs to adjust for hardship related to these sudden changes in federal research funding in promotion and tenure evaluations, and post-tenure reviews.

Apart from the changing federal research landscape, renewing our commitment to research remains primary in prioritizing NDSU's status as an R1 institution. However, Research and Creative Activity continues to evolve. As such, we are proposing new goals and recommendations for Research and Creative Activity.

- **Sub-goal:** Establish a focused vision that generates research paradigms within our strategic research priorities of food, energy, and water security; cybersecurity, computer science and software engineering; life sciences; and entrepreneurship and innovation.
 - Identify thematic research areas within and between colleges that leverage current faculty strengths and address funding priorities.
 - Develop a research mission statement and define success metrics that align with the established focused vision.
 - Invest in research support personnel and new faculty hires that have a research portfolio which aligns with an established research vision.
 - Incorporate evaluation criteria from the Office of Research and Creative Activity for new faculty hiring that includes thematic research areas for search committees, Chairs/Heads, and Deans.
 - Plan an external funding strategy and timeline to execute our focused vision.
 - Utilize faculty feedback for vision and use of newly established physical infrastructure that is considered mission critical with support from administration, industry sponsors, donors, and the state legislator.
- **Sub-goal:** Create novel Research and Creative Activity to align with New Horizon: NDSU 2035.
 - Up-scale opportunities that enable human subjects research to be performed with special populations on-campus, and in community and clinical settings for advancing our land-grant mission to improve health and quality-of-life for our citizens.

- Establish an industry-academic pipeline for industry partners to collaborate on research, streamline research to practice/market, and elevate student preparedness to enter the workforce.
- Integrate research practicums for student credit hours, when possible, in newly developed programs of study.
- **Sub-goal:** Broaden the footprint of Research and Creative Activity at North Dakota State University within our community, state, region, and nation.
 - Reestablish and expand agreements to conduct Research and Creative Activity with strategic partnerships in the Fargo-Moorhead area that serve as hubs locally and regionally.
 - Reach rural communities and greater North Dakota with awareness, involvement, and dissemination of Research and Creative Activity through Extension and related platforms.
 - Emphasize pursuit of student-centered research opportunities (e.g., National Science Foundation Graduate Research Fellowships Program) to enrich their educational experience, present opportunities for graduate studies, increase workforce readiness, and underscore NDSU as a student focused, land-grant, research university.
 - Increase dissemination of Research and Creative Activity so that they may become more visible to local and mainstream media, and state legislators.

In conclusion, the Faculty Research Council would like to thank President Cook, VP Fitzgerald, and appropriate personnel, especially from the Office of Research and Creative Activity for their unwavering and unquestioned support in improving the research enterprise and culture at NDSU. The Faculty Research Council strongly encourages NDSU to remain steadfast and resilient in elevating research excellence for moving R1 beyond just an institutional goal, but instead as an institutional expectation. Members of the Faculty Research Council remain committed to being research ambassadors for NDSU, and are willing to help steer our research vision. While new challenges may emerge, exciting opportunities to increase our research stature remain robust.

Sincerely,

The 2025 North Dakota State University Faculty Research Council

Dan Hsu, Ranjit Godavarthy, Jeffrey Johnson, Mila Kryjevskaia, Juan Li, Phillip McClean, Ryan McGrath, Julie Pasche, Annie Tangpong, Sathish Venkatachalem

Go Bison!

Approved May 23, 2025

Appendix 1

STRATEGIC PLAN 2021-2026

Aspirational Implementation Plan Year 1

GOAL: DIVERSITY, INCLUSIVITY, AND RESPECT

Create and maintain an open and collegial environment to promote inclusivity and diversity as a cornerstone of education, research, and outreach.

SUB-GOAL: Continuously improve the university climate for students, faculty, staff, and all stakeholders, with additional consideration of underrepresented groups as evidenced by regular assessment.

ACTIONS ITEMS

- Facilitate conversations among students, faculty, and staff about the campus climate and ways to better support student success. For example, SPARK, where students write letters to faculty about their experiences on campus and faculty discuss them and ways to address them.
- Disseminate trainings for new staff and faculty that includes content about the unique experiences of diverse students on campus.
- Make Campus Climate Survey data more accessible to campus; increase communication about Campus Climate survey results.
- Make institutional Diversity data available to units.

SUB-GOAL: Strengthen and secure an accessible and equitable university for our diverse body of students, faculty, staff, and administration.

ACTIONS ITEMS

- Clarify roles and responsibilities on campus in regard to diversity and inclusion efforts and monitoring the progress toward identified metrics.
- Communicate these roles and responsibilities with campus and regularly share progress on efforts to increase diversity and inclusivity.
- Explore alternative recruitment practices for diverse hires across departments.
- Examine student admission process to maximize inclusivity.
- Develop content and processes for delivering training in best practices for recruitment of diverse students.
- Explore funding and sustainability mechanisms for supporting diversity and inclusion initiatives.
- Ensure offices that support Diversity, Equity, Inclusion and Respect have adequate staff and resources to support multi-cultural students and for providing programming in DIR areas.

SUB-GOAL: Design and implement additional programming, curriculum, outreach opportunities, and policies that uphold inclusivity, diversity, respect, and connection.

ACTIONS ITEMS

- Embed DIR concepts into curriculum at various levels including service learning opportunities.
- Examine the need and feasibility of implementing a required DIR course or other training during the first semester.
- Communicate regularly about DIR activities and progress towards strategic goals.
- Offer inclusive opportunities to build relationships with others of diverse backgrounds.
- Summarize and highlight existing and new inclusive excellence initiatives and employee trainings on the website and through social media.
- Encourage learning and exposure to DIR values beginning with admission, orientation, and welcome week, and continuing through their academic career.
- Encourage learning and exposure to DIR values beginning with the search process for employees.
- Make DIR and collegiality a required component of faculty and staff annual evaluations.
- Create DIR Ambassador program for faculty and staff with campus recognition for ambassadors.

GOAL: STUDENT SUCCESS AND ACHIEVEMENT

Provide transformational experiences for students from diverse backgrounds through high-quality education and opportunities for personal and professional development.

SUB-GOAL: Provide inclusive and collaborative opportunities to prepare them to be successful in a diverse and globally connected world.

ACTIONS ITEMS

- Increase faculty and staff training to provide more inclusive and collaborative learning activities.
- Establish campus-wide services for key underrepresented groups (e.g., religious and ethnic minorities, women in STEM majors, international students, Indigenous and Native American students, LGBTQ+ students, first-generation students, veterans, etc.).

SUB-GOAL: Improve our students' academic success with outcome-based, experiential learning opportunities and vital student-support services.

ACTIONS ITEMS

- Systematically use student outcome data to inform changes across programs, colleges, and the university.
- Encourage and provide training to increase use of active and experiential learning opportunities.
- Invest in classroom renovations and learning assistants to support active learning pedagogy.

SUB-GOAL: Provide students opportunities for personal and professional development to support their life and career goals.

ACTIONS ITEMS

- Increase study abroad and international experiences through global internships, and instructor-led or independent abroad programs, as well as integration of study abroad within curricula.
- Integrate career development opportunities within program curricula.

SUB-GOAL: Foster a supportive environment focused on all students' well-being.

ACTIONS ITEMS

- Develop and enhance support for students under academic warning and probation.
- Enhance referral and support capacity for campus mental health services.
- Establish expectations and training for inclusive, effective and consistent outcome-based student advising.

GOAL: RESEARCH AND CREATIVE ACTIVITIES

Advance NDSU's stature as a nationally and internationally recognized research university, engage in transformative research and creative activity, and increase the quality and quantity of scholarly activities to generate new insights and knowledge that will benefit the state and address central challenges of our global future.

RESEARCH

SUB-GOAL: Increase the commitment of financial resources to support sustainable research growth with public impact.

SUB-GOAL: Enhance the diversity of undergraduate, graduate, and faculty researchers.

SUB-GOAL: Integrate and strengthen centralized administrative and academic support for research and creative activity.

SUB-GOAL: Create an administrative framework to encourage and support multidisciplinary research teams.

SUB-GOAL: Prioritize highly effective mission-relevant research programs through strategic and systematic resource reallocation.

SUB-GOAL: Support and ensure high-quality research education for postdoctoral fellows, graduate, and undergraduate students.

ACTIONS ITEMS

- Identify areas of sustainable research growth with public impact and provide the financial resources they might need.
- Investigate and recommend options available for the University to encourage graduate student participation in research with enhanced financial support.
- Strengthen connections with local and regional high schools to demonstrate NDSU's commitment to an inclusive higher education/research experience.
- Evaluate current administrative and academic support for research and creative activity and create a framework to support key areas.
- Compile a comprehensive list of research projects to understand the effectiveness of current and past multidisciplinary research teams.
- Break down the siloed academic structure to work on big ideas.
- Identify and prioritize existing mission-relevant research programs.

GOAL: EDUCATION, EXTENSION AND OUTREACH

Provide innovative, student-centered education and conduct transformative research that impacts the state through meaningful outreach.

PEDAGOGY

SUB-GOAL: Increase educational achievement and improvement through ongoing assessment of student learning outcomes across the University.

SUB-GOAL: Increase the use of innovative instructional methods and delivery options for career-ready students.

ACTIONS ITEMS

- Support and incentivize the use of innovative teaching methods.
- Assess general education goals and outcomes and programs for HLC accreditation.
- Invest in academic support services for diverse learners.

TECHNOLOGY/DELIVERY

SUB-GOAL: Establish a university-wide infrastructure and support for cutting-edge technology and digital tools to meet the needs for education, research, and outreach.

ACTIONS ITEMS

- Increase digital scholarship and technology for research and creative activities.
- Increase technology support for online courses, degree programs, and micro-credentials.

PROGRAMS

SUB-GOAL: Optimize resource allocation to enhance existing programs targeted at meeting labor force demands regionally and nationally.

ACTIONS ITEMS

- Increase enrollment in accelerated master's programs.
- Define baseline cost, demand, and productivity data points to evaluate programs
- Prioritize academic programs and redesign, consolidate, or phase out programs based on current and evolving needs.

EXTENSION AND OUTREACH

SUB-GOAL: Broaden partnerships with citizens, communities, and businesses to address the educational, cultural, and technical needs of North Dakota and the region.

SUB-GOAL: Increase public awareness of innovative education and disseminate research to benefit North Dakota and the region.

ACTIONS ITEMS

- Invest in instructional technologies for University and Extension outreach.
- Officially partner with the CORE Project open-access platform to enhance economics curriculum delivery at the undergraduate and graduate levels. Become a "CORE University" (necessary to partner with specific business such as Cargill).
- Improve access to extension and outreach programs through digital technologies
- Cultivate media partnerships locally and nationally (reach out to regional, national, international news outlets and publications of university educational and research activities).
- Focus on supporting marketing and branding needs of campus units to advertise and promote their programs and activities and capitalize on the university's strengths and successes.

GOAL: RESOURCE PLANNING AND DEVELOPMENT

Support and enhance innovation and excellence through strategic investments in sustainable infrastructure.

SUB-GOAL: Prioritize resources for institutional effectiveness based on strategic plan initiatives.

ACTIONS ITEMS

- Develop a reinvestment and reallocation model that emphasizes and prioritizes inter-department collaboration to meet strategic plan initiatives.
- Increase collaboration and partnerships that lead to the development of a diverse and skilled workforce for the state and region.

SUB-GOAL: Provide support and incentives for units to innovate and be entrepreneurial.

ACTIONS ITEMS

- Develop and implement a budget model that provides incentives based on outcomes that are well-defined and transparent.
- Perform market research to identify areas of opportunity for programmatic development and growth that supports strategic plan initiatives.
- Assure faculty tenure criteria provide flexibility to meet strategic plan initiatives.

SUB-GOAL: Develop and implement an institution-wide strategy for technology, data, and information use that improves student education and experiences, enhances research capabilities and supports organizational decision-making.

ACTIONS ITEMS

- Access to institutional data through web services to improve the student experience and institutional decision making.
- Provide ongoing professional development training for digital technology.
- Continuous improvement in utilization of the high-flex model with expanded program delivery.

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The action plan was prepared by the NDSU Strategic Planning Committee with facilitated support from the Collaborative Brain Trust in support of the *North Dakota State University Strategic Plan 2020-2025 – Our Future Today: Innovation, Outreach and Education*.



The Faculty Research Council has 14 recommendations for President Cook to support his priority of maintaining our Carnegie R1 classification and helping nurture a thriving and mature R1 research culture at NDSU. NDSU's Strategic Plan for 2021-2026 outlined the goal for Research and Creative Activities as to: Advance NDSU's stature as a nationally and internationally recognized research university, engage in transformative research and creative activity, and increase the quality and quantity of scholarly activities to generate new insights and knowledge that will benefit the state and address central challenges of our global future. The Council's recommendations, dated August 9, 2023, align to the sub-goals for Research and Creative Activities in the Strategic Plan 2021-2026: Aspirational Implementation Plan Year 1.

Research and Creative Activities Sub-Goal: Increase the commitment of financial resources to support sustainable research growth with public impact.

1. **Recommendation:** Invest internal funds sustainably into campus research for the following top priorities: 1) reassigned time for research (competitive funding awards); 2) "proof of concept" seed/pilot grants; 3) expanded support of research travel including for presenting at conferences; 4) bridge funds; 5) graduate student and postdoctoral fellow support; 6) funds to support large-scale center initiatives; 7) multi-/transdisciplinary funding competitions; and 8) faculty retention. As funding allows, secondary priorities for investment include: i); grant writers ii) research talks or luncheons; iii) cost-sharing; iv) research enhancement funding; v) physical infrastructure (core facility support; instrumentation and equipment purchase and repair; facility modification); and vi) a small animal vivarium core facility.
2. **Recommendation:** Prioritize a small animal vivarium core facility on the 2025-2027 Legislative agenda.

Research and Creative Activities Sub-Goal: Enhance the diversity of undergraduate, graduate, and faculty researchers.

1. **Recommendation:** Strengthen the campus research community in terms of needed cross-cultural knowledge and infrastructure to strengthen our collective ability to advance nation to nation ethical research collaborations with sovereign tribal nations, including North Dakota's five Tribal Nations and the nation's only tribal college system, the five college North Dakota Tribal College System.
2. **Recommendation:** Build resources to support enhancement of the diversity of undergraduate, graduate, and faculty researchers.

Research and Creative Activities Sub-Goal: Integrate and strengthen centralized administrative and academic support for research and creative activity.

1. **Recommendation:** Ensure that of the indirect costs drawn, per NDSU policy 818, 16% is allocated back to the Office of Research and Creative Activity. This will provide needed administrative and academic support for research and creative activities and financial resources to support areas of sustainable research growth with public impact.

2. **Recommendation:** Develop mechanisms and accountability for academic unit heads (Chairs/Heads and Deans) such that units administer regular reassigned time for research, particularly when funds have been secured to support faculty release time for research. One possible metric might be reporting on number/proportion of tenured/tenure-track faculty by unit with time released for research purposes; another might be to ensure academic unit heads include this information on annual reports.
3. **Recommendation:** Ensure units have reward structures, including merit/raises and PTE policies including promotion, that recognize, reward, and incentivize grant activity.
4. **Recommendation:** Increase the number of research-active faculty members by hiring more research-oriented faculty in priority areas. Ensure adequate staffing in units where the service and teaching loads are time-intensive and time-sensitive thus serving as barriers to research productivity.

Research and Creative Activities Sub-Goal: Create an administrative framework to encourage and support multidisciplinary research teams.

1. **Recommendation:** Pilot a researcher mentor program involving advanced/mid-career faculty that supports the development of 1) grant skills for researchers that are productive but lack grants; and 2) new collaborative, multidisciplinary projects.
2. **Recommendation:** Build research leadership capacity among faculty, especially mid- and senior career faculty, to expand NDSU's capabilities to lead for cross-college research teams of faculty.
3. **Recommendation:** Strategically leverage campus social scientists to increase grant success rates.

Research and Creative Activities Sub-Goal: Prioritize highly effective mission-relevant research programs through strategic and systematic resource reallocation.

1. **Recommendation:** In Fall 2023, launch a big idea, future facing collaborative research initiative promoting NDSU's key [4 strategic priority areas](#) during the AY24-25 year to develop internal proposals, competitively selected and funded in part by the FY 2025 Economic Diversification Research Grants and potentially other internal funds. Initiative will leverage **all** of the strengths of our campus research community and foster off-campus partnerships (government, private sector – use-inspired research).
2. **Recommendation:** Accelerate the implementation ("just in time program") of the FY 2024 [Economic Diversification Research Funds](#) Grants program through the office of the Vice President of Research and Creative Activities to quickly identify and fund high return on investment for FY2024, with an eye to inclusive campus participation responsive to the approved SBHE guidelines.

Research and Creative Activities Sub-Goal: Support and ensure high- quality research education for postdoctoral fellows, graduate, and undergraduate students.

1. **Recommendation:** Identify funding mechanisms to establish campus-wide competitive stipend levels, health insurance support, and tuition waivers for graduate students. This will support maintaining Carnegie R1 status and enhance NDSU's competitiveness by attracting excellent graduate students.