



# Research, Scholarship & Creative Activity

*Nebraska is a global leader in solving real-world challenges and promoting humanity through research discoveries, creative activities, and transformative innovations.*



# Strategies

- Recruit, Retain, Develop Diverse World-class Researchers and Scholars
- Shape the Research Agenda for Tackling Global Grand Challenges
- Transform and Strengthen Structures to Stimulate Interdisciplinary, Synergistic Research and Creative Activity
- Create and Incubate Emerging Areas of Strength in Research and Creative Activity
- Establish Collaborations with Local, National and International Partners
- Embrace and Elevate the Role and Identity of Research and Creative Activity Across the Entire Institution



# Initial Action Steps

## Recruit, Retain, Develop Diverse World-class Researchers and Scholars

### Action Steps:

- a. Establish and execute an aggressive recruitment plan that is competitive but accountable.
- b. Assess what research investments/supports are in place that can be messaged to recruit, hire, and retain excellent researchers, scholars, and contributors to the creative enterprise of UNL.
- c. Prioritize the valuing of diversity as a strategy towards inclusive excellence in recruitment and retention as a means to strengthen our commitment to excellence.
- d. Allocate funds for interdisciplinary cluster hires in grand challenge and emerging or existing areas of strength. Include both senior and early career scholars in hiring plans.
- e. Commit financial resources to support the research needs of diverse researchers, scholars, and contributors (e.g., support staff, lab equipment, database/library).
- f. Utilize innovative, flexible approaches to hiring and working (e.g., less place-based; less siloed, more cross-cutting; tenure homes in centers as well as departments; greater capacity for spousal/partner and opportunity hires).
- g. Fully engage and support financially post-doctoral and graduate students in research and creative activities.



# Initial Action Steps

## Shape the Research Agenda for Tackling Global Grand Challenges

### Action Steps:

- a. Establish a process for identifying 2-3 grand challenges (defined as broad, global and significant problems facing all societies and countries) that require interdisciplinary efforts, capitalize on Nebraska's strengths, and grow exponentially in scope and impact over 25 years.
- b. Identify a diverse range of UNL researchers, creative scholars and programs that will work collaboratively on grand challenges using an agreed upon metric-based system.
- c. Commit to growing grand challenge areas through targeted financial, human, capital and other investments.

# Initial Action Steps

## Transform and Strengthen Interdisciplinary Structures to Stimulate Synergistic Research and Creative Activity

### Action Steps:

- a. Identify successful interdisciplinary research centers and organized units based on agreed upon metrics (e.g., federal grants/contracts, cross-disciplinary faculty affiliation, stable infrastructure and service functions).
  - Examine structure, function, and composition of successful interdisciplinary research centers and organized units; create exemplars.
  - Create consistent and systematic ways to evaluate interdisciplinary research centers and organized units to ensure they are productive and current; focus on performance and not simply investments.
  - Establish method to reorganize or reinvent centers and units every 5-7 years, based on evaluation data.
  - Establish method to discontinue unproductive centers.
  - Integrate and significantly strengthen existing interdisciplinary research centers and organized units for maximal impact, efficiency, and return. Ensure distinctiveness and minimize overlap, duplication, and inefficiencies.
- b. Re-work university policies and practices to encourage interdisciplinary collaboration. Identify structures/barriers that interfere with collaboration (e.g., appointments/apportionments; F&A distribution; east campus/city campus/cross-campus divisions).
- c. Redefine financial/budget models to dissolve silos, facilitate flexibility, allow innovation and interdisciplinary collaboration.
  - Create flexible, nimble business operations that understand and collaborate with research/funding structures and need for significant interdisciplinary activity.



# Initial Action Steps

## Create and Incubate Emerging Areas of Strength in Research and Creative Activity

### Action Steps:

- a. Determine highly competitive areas where there will be significant funding, social attention, and opportunity for the future.
- b. Develop a procedure for identifying areas of interdisciplinary strength/excellence and, therefore, opportunity for growth, especially in areas where many sectors across campus can contribute in meaningful roles.
  - Explore different metrics in use across sciences and humanities.
- c. Invest in/allocate significant resources (i.e., financial, human, physical, infrastructure) to incubate new interdisciplinary areas of strength.
- d. Identify a process for creating, building, and populating emerging or existing areas of strength necessary to compete for interdisciplinary or grand challenge programs.

# Initial Action Steps

## **Establish Collaborations with Local, National and International Partners**

### Action Steps:

- a. Establish relationships between UNL researchers/scholars and relevant stakeholder groups (government, education, arts) that have capacity to execute UNL's translational innovations, facilitate economic growth, and impact and improve lives.
- b. Create mechanisms to link UNL's basic and applied researchers to advance and use fundamental knowledge in ways that lead to innovative applications to solve high priority problems.
- c. Leverage interdisciplinary collaborations in community based research-practice partnerships.
- d. Prioritize principles of diversity and inclusion in all disciplines as a means to expand our global pool of collaborations and recruitment to engage demographic realities in the 21st century.
- e. Identify 3-5 international research universities with whom we can engage in joint, collaborative endeavors. Commit to growing and investing in these collaborations for 25 years.
- f. Serve as a hub for national research and scholarly collaboration, sharing, and dissemination.



# Initial Action Steps

## Embrace and Elevate the Role and Identity of Research and Creative Activity Across the Entire Institution

### Action Steps:

- a. Develop a plan to integrate research experiences for all students. Ensure that all students participate in a dedicated research or creative activity experience as part of their undergraduate or graduate education.
- b. Launch a multi-pronged campaign (media, education) to make information about UNL research highly accessible to faculty, staff, students and communities.
- c. Create a brand for UNL research and creative activity that exploits UNL's stature as a major (R1, Big 10) research institution.





# Measures

- Funding metrics
  - Research (and other relevant) rankings among Big 10 and peer institutions
  - Externally funded research expenditures
  - Percent of research-apportioned faculty who are federally funded
  - External funding among collaborative teams within interdisciplinary Centers in grand challenge areas and areas of strength
- Impact of research in advancing knowledge and solving grand challenge/high priority problems
  - Patent applications
  - High impact publications based on (but not limited to) metrics such as h-index
- Impact of research and creative activity on society
  - Number of solutions to grand challenges and major societal problems
  - Number of improved practices
  - Number and diversity of people and communities helped
- National/international awards and citations of faculty
  - Number of external, authoritative reviews denoting national/international impact
  - Invited talks in grand challenge, high profile areas and areas of significant strength
- Numbers of new faculty hires and high quality graduate students in grand challenge areas and areas of strength
- New collaborations
  - Numbers of national and international research and scholarly collaborations in grand challenge/strength areas
  - Partnerships between university and industry, governmental agencies, community stakeholders (e.g., arts, education, public/private)