

# Grand Challenges

## Request for Proposals 2022

### Level 1: Developing Concept Teams

#### Background:

Since the launch of the UNM Grand Challenges program by President Garnett S. Stokes, Grand Challenges teams have achieved many of the program's goals, including greater cross-discipline collaborations, community engagement, and increased extramural funding. While these initial teams continue to evolve, the Grand Challenges program is now entering a new phase—one that will result in new teams addressing additional problems of global, national, and local significance. This Request for Proposals addresses the first level of the reimagined program, focusing on the development and support of interdisciplinary teams, giving them tools and resources to be competitive for significant funding in the next level of the program. Information about the current Grand Challenges as well as the focus and history of the Grand Challenges program is available on the Grand Challenges website ([grandchallenges.unm.edu](http://grandchallenges.unm.edu)).

Moving forward, the Grand Challenges program will consist of three levels: **Level 1** introduces new Grand Challenge concept teams to structured team building and planning exercises; **Level 2** implements the teams' plans with a focus on answering critical research questions, building capacity for interdisciplinary research, and communicating opportunities and outcomes to the broader public; and **Level 3** moves teams towards large, sustainable research structures such as Centers or Institutes. The process is flexible, allowing for multiple entry and exit points for teams and individuals.

The reimagined Grand Challenges program will engage faculty, researchers, staff, and students more broadly across the University; grow and foster a culture of collaboration and team research; increase team success by providing structured support and training; and continue to build UNM's capacity and reputation for discovery and innovation.

#### Description:

This RFP solicits proposals from interdisciplinary research teams for participation in **Level 1** of the Grand Challenges process. A cohort of 6-10 teams with diverse disciplinary expertise will be competitively selected for the **one-year Level 1** program. Each team will receive \$5,000 for team building, convening, and planning as well as facilitation, mentoring, and program support provided by the Grand Challenges program and other UNM units including the Faculty Research Development Office (FRDO) and the Clinical and Translational Science Center (CTSC). Teams may also be eligible for additional funds during the **Level 1** year, depending on the availability of funds and team progress.

At the end of Level 1, teams are expected to have (1) a shared vision and aspirational goals; (2) a 3- to 5-year roadmap for advancing research and innovation in their chosen area of interest; and (3) identified external partners and resources needed to support the roadmap, including a funding plan to meet those needs. Through training and mentoring, teams are expected to complete Level 1 with an effective, structured process for convening and communicating.

In the Spring of 2023, Level 1 teams and other UNM interdisciplinary research teams will be invited to apply to **Level 2** of the Grand Challenges program. Level 2 will include a significant commitment of internal funding (i.e., projected \$200K across 2 years/team), with additional support structures for selected teams. Strong preference

will be given to teams with a shared, highly aspirational vision, clearly identified goals, and a viable roadmap that identifies near term activities and funding outcomes. Thus, we anticipate *teams that successfully complete Level 1 will be poised to be highly competitive for the Level 2 portion of the reimagined Grand Challenges program.*

#### **Eligibility and Team Requirements:**

- Conveners: Each proposal must designate 2 to 3 lead conveners, who may be any UNM faculty or staff member eligible to serve as a PI according to UNM policies. The conveners serve as the main points of contact for the program and provide communications and logistical support for the team. An individual may be a convener for only one Level 1 proposal.
- Team Members: All UNM faculty, researchers, post-docs, staff, and administrators are eligible to participate as members of Grand Challenge Level 1 teams. Participation of students is encouraged during Level 1 activities, but students are not expected to be part of the named team leadership. Individuals are not limited to participation in a single Level 1 team.
- External Partners: Partnerships with external organizations, including other academic institutions and community organizations are expected and strongly encouraged as part of the research programs that support the team goals. External partners are not required.
- Team Composition: The team composition and size should reflect the scope of the proposed challenge. At the time of application, teams must have at least four team members from at least two academic disciplines. Teams may grow and diversify as part of the Level 1 process. Teaming across UNM campuses is encouraged as well as intentional inclusion of team members from disciplines and perspectives that broaden the research program (e.g., Humanities, Arts, Business, and branch campuses). The team should demonstrate diversity across multiple dimensions including, but not limited to, discipline, faculty rank, and social identity.

#### **Participant Expectations:**

Level 1 team members are expected to:

- Participate constructively in regular cohort and team meetings and trainings. Monthly trainings will be provided by the Grand Challenges program to support the larger aims of the Level 1 cohort. Each team is expected to attend cohort trainings as a team, and to gather as a full team at least once a month, with individual or subgroup activities expected between meetings.
- Participate in team planning exercises that result in the development of a team vision, aspirational goals, key research questions, a 3-5-year roadmap that works toward the aspirational goals, and a funding plan by the completion of the one-year program.
- Be a constructive member of the team and the Level 1 cohort, supporting data collection and reporting requests, as well as participating in presentations or other media about team goals and accomplishments.

Additionally, team conveners are expected to:

- Meet regularly with the Grand Challenges Operations Director and with the conveners from the other Level 1 teams.

- Prepare a brief mid-point and a final report for the Steering Committee, providing data and progress reports. There will also be an opportunity for the team to publicly present their team's goals, accomplishments, challenges, etc.
- Manage the team's Level 1 budget and provide periodic updates.

## **REVIEW PROCESS**

Each Level 1 proposal will be evaluated by a team of reviewers, who will make recommendations to UNM Leadership.

### **Review Criteria**

#### **1. Relevance and Timeliness of the Grand Challenge Concept**

The proposed challenge area is relevant to the state of New Mexico and its residents. The topic is a high priority research and innovation area that leverages existing expertise and resources. The challenge is of sufficient size and scope to benefit from interdisciplinary research approaches and to excite the imagination. Although specific goals may not be fully fleshed out for this team, the overall concept and general approach is creative and has the potential for significant impact. Now is the right time to pursue this challenge.

#### **2. Interdisciplinary Nature of the Grand Challenge Concept and Team Qualifications**

The nature of the challenge to be pursued requires an interdisciplinary, team approach. An appropriate team has been assembled, with highly qualified conveners and team members with expertise in relevant areas. In addition, missing expertise, personnel, or disciplines have been identified. The team's membership intentionally broadens participation and includes representatives from multiple academic disciplines and multiple segments of the University.

#### **3. Concept Fit to the Level 1 Grand Challenge Program**

The team is expected to benefit from the activities, services, resources, and support that will be provided during the **Level 1** Grand Challenge program. Participation in the program is likely to move the team and their research forward beyond where it would be otherwise. The team demonstrates sufficient background and experience within the selected research areas and includes members with a track record of securing research funding. The proposal supports the broader goals of the UNM Grand Challenges program and is aligned with UNM strategic priorities and plans.

### **Key Dates**

Release of RFP:	Wednesday, March 30, 2022
Program Information Session:	Tuesday, April 19, 2022, Team Research Symposium
Application Deadline:	Tuesday, May 10, 2022, at 5:00pm MDT
Decisions no later than:	Tuesday, May 31, 2022

## **ADDITIONAL RESOURCES AND INFORMATION**

An information session will be held on April 19<sup>th</sup>, 2022 from 11-11:45 am as part of the Team Research Symposium: [Interdisciplinary Science Co-op | The University of New Mexico \(unm.edu\)](https://www.unm.edu/interdisciplinary-science-co-op). Submit questions to: [grandchallenges@unm.edu](mailto:grandchallenges@unm.edu). Please visit [grandchallenges.unm.edu](https://grandchallenges.unm.edu) for additional information.

**Application:** The following application materials should be submitted through UNM's InfoReady System

**Title** – Title or keywords describing the Concept Team's Challenge

**Conveners** – Identify the name, rank/title, department, and email of the 2-3 leads who will serve as the team conveners.

**Team members** – Identify team members who will support the program (name, rank/title, department and email). It is expected that the team will comprise at least four faculty, staff, administrators from at least two disciplines or areas of expertise. Cross-campus collaborations are encouraged. If the team will benefit from inclusion of community partners, list the individual or organization that will participate and their role on the team. Note: the team does not need to be complete at the time of application; identify additional expertise needed in the self-assessment portion (see below).

**Attach a document (3-pages maximum) with the following items:**

**Description (2 pages):** Brief description of the Challenge to be pursued by the concept team, including:

(1) The topic's timeliness and relevance to the State of New Mexico and beyond; to whom are the proposed outcomes relevant? Describe why an interdisciplinary, team research approach is appropriate, the ways in which the expertise of the team members and resources at UNM will contribute to the anticipated outcomes, and why now is the right time to pursue this opportunity.

(2) How the proposed research aligns with UNM, local, state, federal and/or global strategic priorities. If this area is not currently identified as a priority by UNM, provide background for why it should be considered a priority area for future research and innovation.

(3) Aspirational goals that will be pursued. If you are successful, what outcomes will be achieved? What is the scale of the research and the problems to be addressed? Note: Although the stated goals should indicate the breadth and depth of the area the team will research, the team goals and research questions are not expected to be fully formed at this time, nor are they expected to be achieved during the Level 1 timeframe. The scale should match the size and composition of the team.

**Funding (0.5-page):** Where appropriate, list identified or potential future funding opportunities for the team. [Note: This is not meant to be a comprehensive listing nor does every team member need to have a track record of funding.] How would participation in the Grand Challenges program assist the team in securing future funding?

**Self-Assessment (0.5-page):** How does your team hope to benefit from participating in the Grand Challenges? Is your team complete? If selected to participate, what additional areas of expertise or additional resources are required to make your team successful?

#### **Additional Attachments**

2-page biosketch for each of the team conveners (NSF format preferred, but not required)

**Deadline:** The Level 1 Grand Challenge application is due on **Tuesday, May 10<sup>th</sup>, 5 p.m.** Decisions will be made as soon as possible and no later than **May 31, 2022.**