Game-Changing Research Incentive Program (GRIP)

Purpose:
GRIP is a new, interdisciplinary research initiative launched by the Office of the NC State Vice Chancellor for Research, Innovation and Economic Development (ORIED), with partial support provided by Research Triangle International (RTI) and the Kenan Institute for Engineering, Technology and Science (KIETS). It is intended to seed, incentivize and amplify visionary research that will result in a high return on investment in terms of extramural funding, award-winning research impacts, and first-class interdisciplinary graduate education and training. Proposals should focus on game-changing research ideas that are well-aligned with NC State’s strategic research areas but clearly break new ground. RTI will fund up to one GRIP project that is consistent with RTI’s strategic research objectives and includes comparable research teams comprised of NC State and RTI researchers as co-investigators.

The potential total pool of funds available is $2.3 million, with $1.5 million coming from ORIED, $575,000 coming from RTI and $225,000 coming from KIETS.

Through the initiative, ORIED seeks to encourage researchers from across NC State to collaborate in exploring new ideas and to open up new avenues for research employing the full range of capabilities at NC State and beyond. Projects selected for funding will boast world-class interdisciplinary research teams and faculty with a proven track record and strong potential for success. This initiative is not designed to provide additional resources for projects that are already funded from other internal or external sources.

Funding:
The GRIP initiative will provide up to $575,000 over three years for up to four proposals (i.e., the first year of funding is up to $225,000, the second year of funding is up to $225,000 and the third year of funding is up to $125,000). Support for the second and third years of any given project will be contingent upon the demonstration of satisfactory progress. Funds may be used for any legitimate research-related expense except F&A costs, and may include faculty release time and summer salary support for faculty with 9-month appointments. Limited amounts of funds can be used for administrative support and/or to support workshops/symposia necessary for the success of GRIP awardees.

Key Dates:
Due date for pre-proposals: May 31, 2016
Due date for full proposals: October 3, 2016
Funding begins: December 2016

Requirements:
Proposal writers must describe how they will initiate or promote game-changing research programs at NC State as well as support interdisciplinary graduate student education and training. While GRIP and the Research and Innovation Seed Funding program share the goal of stimulating interdisciplinary research
collaborations that will be competitive for extramural funding, the significantly greater funding provided by GRIP awards comes with an expectation of much larger and more sustained extramural research funding.

Successful proposals will include:

- A PI with a track record of leading a successful multidisciplinary research team (PI's must be NC State faculty). No faculty may be listed as PI on more than one GRIP proposal.
- A clear and compelling statement of work that describes the novelty of the proposed work, and enumerates milestones to be accomplished and deliverables over the three years of funding.
- A rationale for the alignment of the proposed research program with NC State strategic research areas (and RTI strategic research areas, where applicable).
- Evidence that the proposed research program addresses a research area for which there is compelling evidence of sustainable large-scale support (e.g., Center-type grants, graduate and post-doctoral training grants, etc.) from government agencies, corporations, industrial consortia or foundations as well as a time-line for soliciting such support.
- Letters of support from colleges and department heads, including agreements (if necessary) to provide release time, student support, supplies, travel funds and other financial resources to support the PI and other key faculty.
- Letters of support from external partners, including financial support for the effort being proposed.

Process:

Pre-proposals:

Two-page pre-proposals will be submitted electronically to the Research Development Office (research-development@ncsu.edu) on or before 5 PM on May 31, 2016. Please use 1-inch margins and a font size no smaller than 11pt. to ensure readability.

The first pre-proposal page should provide a title and description of the proposed research program as well as a discussion of its game-changing implications for the University (including graduate education and training), and specific sources of extramural funding that will be targeted for future proposals.

The second pre-proposal page should be devoted to a description of the PI and the proposal team. The team must include faculty from more than one college and/or Center/Institute with clear plans indicated for cross-college collaboration. The research description should provide a compelling rationale for success of the proposed program by citing evidence that the PI has current and/or prior leadership experience of a multidisciplinary research team. This description should also provide a rationale for the inclusion of participating key personnel as well as address the question “why should the assembled research team be anticipated to compete successfully for extramural funding?” There is no budget requirement for the pre-proposal.

Collaborative programs with other research institutions and industry are welcome. Indeed, inter-institutional collaborative teams involving RTI staff are particularly encouraged to apply and will be required for any project receiving RTI support.
Research program descriptions must be written such that they can be assimilated and championed by faculty with broad scholarly expertise. Equipment purchases should be kept to a minimum. A hard cap on equipment expenditures will not be enforced, but proposals that include substantial equipment purchases will not be funded unless such equipment is paid for from college, department or other sources.

Pre-proposals will be reviewed and ranked by a panel including faculty on the University Research Committee (URC), with the Assistant Vice Chancellor for Research Infrastructure providing guidance and oversight of the review process. Up to 10 pre-proposals will be selected for solicitation of full proposals on or before June 30, 2016.

Pre-proposals will be selected based on the following criteria:

**Intellectual merit of the proposed activity:**
- Impact of the proposed research program on the advancement of interdisciplinary research
- Originality and game-changing implications of the proposed research program for NC State, North Carolina, the nation and the world
- Qualifications and track record of the PI and project faculty
- Likelihood that the proposed research program will lead to large-scale research support by government agencies, corporations, industrial consortia or foundations
- The degree to which the proposed research program builds on existing NC State strengths

**Project fit and feasibility:**
- How well the proposed research program advances NC State’s strategic research areas
- Likelihood that the proposed research program will be successful

**Full proposals:**

Full proposals must be submitted via (i) PINS for administrative approvals and proposal tracking purposes and (ii) CompetitionSpace for review purposes.

- **PINS Submission:** Full proposals must include a PINS number indicating proper routing through college research offices [https://research.ncsu.edu/sparcs/systems-portal/pins/](https://research.ncsu.edu/sparcs/systems-portal/pins/). PINS routing does not have to be completed at the time of submission to CompetitionSpace, however, PINS routing must have been initiated and the PINS number assigned to the proposal must appear on the proposal cover page to be accepted for review.
- **Submission through CompetitionSpace:** All full proposals must be submitted for review by the PI via CompetitionSpace [https://ncsu.infoready4.com](https://ncsu.infoready4.com). Follow the link for the GRIP opportunity under “Internal Funding Programs” and click “Apply.” Before uploading a proposal, users must log-in using an NC State unity ID. The system only allows one proposal submission per user. In the case of errors in a submitted proposal, contact research-development@ncsu.edu for instructions on submitting a revision.

Full proposals must be organized as follows:

**Proposal Cover Page (1 page):** Please use the template page found [here](https://research.ncsu.edu/sparcs/systems-portal/pins/). Include the title of the project, a list of 5 key words, principal investigator contact information, list of other key personnel and their college
and/or Center/Institute affiliation, a 200-word (maximum) synopsis of the proposed research program that is appropriate for a broad faculty readership, and total amount of funding requested.

**Project description (8 pages):** The project description must address how the proposed research program is consistent with the goals of GRIP, emphasizing the game-changing implications and interdisciplinarity of the proposed research program, its impact on the University (including graduate education and training) and the potential for large-scale extramural funding. Also describe how the proposed program complements existing research efforts at NC State. The description should include sufficient detail such that reviewers can evaluate the appropriateness and feasibility of the proposed plans. Please keep in mind that not all reviewers will be experts in every proposed field of study, and thus project descriptions should be written for a broad audience. The project description must outline a clear set of goals that are aspirational yet attainable, an outline of the plan of work with milestones to be achieved in the first year of funding, metrics to gauge success throughout the course of the three-years of funding, and a detailed plan for sustainability of the proposed research program via the attraction of extramural support. Plans for extramural funding should be as specific as possible, including agency or source names, programs that would be the source of funding, timelines for proposal submissions and potential amounts of funding.

**Budget (1-2 pages):** A single three-year budget with justifications for specific expenditures, if necessary. Please use the budget template form found here. Funds may be used for any legitimate research-related expense except F&A costs, and may include faculty release time and summer salary support for 9-month appointments. Limited amounts of funds can be used for administrative or secretarial support and/or to support workshops/symposia necessary for the success of GRIP awardees. As for pre-proposals, collaborative programs with other research institutions and industry are welcome and inter-institutional collaborative teams involving RTI staff are particularly encouraged. Cost sharing is allowed. Internal cost share amounts are capped at $100,000 total. There is no limit on external cost share amounts.

**Biosketches:** Please use the template found here. One- to two-page biosketches (each) of the PI and all key personnel that includes relevant publications and research funding to date. PIs should not assume that reviewers will search for additional information elsewhere; biosketches should provide complete, compelling arguments that the included faculty are both required and sufficient to accomplish the proposal’s stated goals.

Please use 1-inch margins and a font size no smaller than 11pt. to ensure readability. The deadline for submission of full proposals will be on or before 5 PM on October 3, 2016. Full proposals will be reviewed and ranked by a panel that includes Associate Deans for Research and representatives of the Kenan Institute and RTI. The Assistant Vice Chancellor for Research Infrastructure will provide guidance and oversight of the review process.

Rankings of full proposals will be based on the following criteria:

**Intellectual merit of the proposed activity:**

- Impact of the proposed research program on the advancement of interdisciplinary research
- Originality and game-changing implications of the proposed research program for NC State, North Carolina, the nation and the world
- Qualifications and track record of the PI and project faculty
Likelihood that the proposed research program will lead to large-scale research support by government agencies, corporations, industrial consortia or foundations

The project’s potential to enhance the team’s competitiveness in securing external funding

The degree to which the proposed research program builds on existing NC State strengths

**Project fit and feasibility:**

- How well the proposed research program advances NC State’s strategic research areas
- Synergy among team members to enable research of a scope and complexity commensurate with the scale of GRIP support
- Likelihood that the proposed research program will be successful
- Clear description and feasibility of the milestones and metrics
- A coherent management plan detailing how the project will be executed as a team effort
- Reasonableness of the budget
- Likelihood for long-term sustainability of the research program via extramural funding

Rankings of full proposals will be completed on or before November 1, 2016. All or a subset of the proposal teams will be required to make an oral presentation to the review panel and guest reviewers that are experts in the field prior to the finalization of rankings. Ranked proposals will be considered by the Vice Chancellor for Research, Innovation and Economic Development and other NC State Executive Officers and final selections will be made. PIs of proposals selected for funding will be notified on or before December 1st 2016 with funds made available immediately thereafter.

**Decision Regarding Years Two and Three of Funding:**

Eleven months after funds are made available, a two-page report describing accomplishments to date as well as a complete financial accounting of GRIP fund expenditures will be due to the Research Development Office (research-development@ncsu.edu). A decision regarding the release of funds for the second year of funding will be made by the Vice Chancellor for Research, Innovation and Economic Development within two weeks. Criteria to be employed to review accomplishments to date and assess research program progress include:

- Are the accomplishments to date consistent with the timeline and metrics presented in the full proposal? If not, do reasonable extenuating circumstances explain lack of progress?
- Are project expenditures to date consistent with progress of the research program and the budget accompanying the full proposal?
- Have there been any changes to the timeline for research or plans for the solicitation of extramural funding?

Similarly, eleven months after the second year of funds have been made available, a two-page report describing accomplishments to date as well as a complete financial accounting of GRIP fund expenditures will be due to the Research Development Office (research-development@ncsu.edu). A decision regarding the release of funds for the third year of funding will be made within two weeks.

**Assistance From the Proposal Development Unit for GRIP-Assisted Large-Scale Proposals:**

GRIP awardees are guaranteed assistance from the NC State Proposal Development Unit (PDU) for large-scale follow-on awards (e.g., Center-type grants, training grants, etc) that spring from GRIP funding. Please
be aware that it is the PI’s responsibility to contact the PDU well in advance of the due date to ensure that your proposal can be prioritized.

**Final Report:**

On or before two months after the end of the third year of GRIP funding, a two-page final report will be due to the Research Development Office (research-development@ncsu.edu) that details accomplishments to date. This report should describe research accomplishments as well as tangible results, such as publications, presentations, symposia, patents, grant submissions/awards, which were produced/obtained as a consequence of funding by the GRIP program. Plans for the submission of proposals for extramural funding should be included, and the Research Development Office should be notified of all subsequent awards. Failure to submit in a timely manner a final report on research facilitated by this seed-funding program will preclude the PI from receiving future awards from any ORIED internal seed-funding program.

**Research Retreat:**

An annual university-wide research retreat will be hosted by ORIED to enable winning GRIP teams to share their accomplishments and findings with the NC State community. The retreat will also include presentations on new grant funding opportunities and facilitated brainstorming sessions to identify additional new and innovative ideas for future interdisciplinary research projects.

**Inquiries:**

FAQ’s and relevant documents can be found on the [RDO website](http://www.ncsu.edu). Questions regarding this funding opportunity may be directed to:

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Assistant Vice Chancellor for Research Infrastructure  
Office of Research, Innovation and Economic Development  
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Office: 919-515-4479  
E-mail: jon_horowitz@ncsu.edu

Questions about collaborating with RTI can be directed to:

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