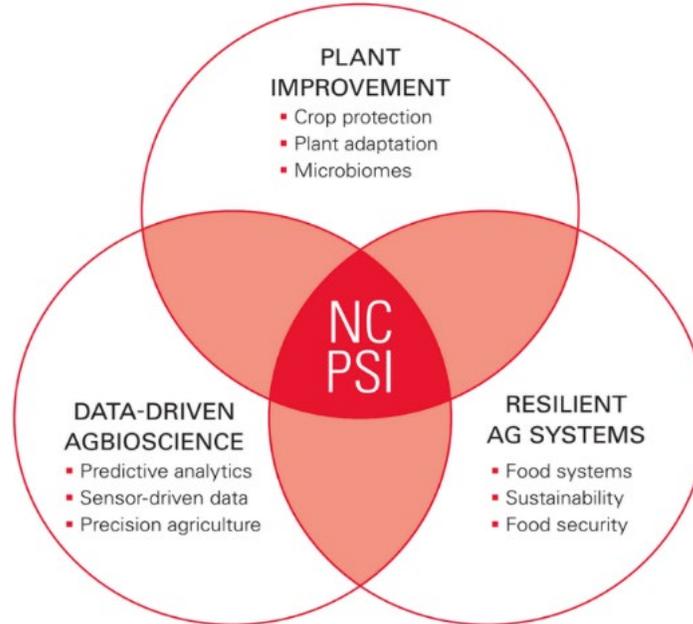


GRIP4PSI: Ethos, Intentions and Key Components

NC PSI's research platforms...



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Game-Changing Research Incentive Program (GRIP)

- The Office of Research and Innovation (ORI) announced the initial GRIP large-scale seed-funding program in 2016. Stakeholders: ORI, RTI, and Kenan Institute for Engineering, Technology and Science.
- The overarching goal of the program was to catalyze new, interdisciplinary research programs focused on societal grand challenges.
- This large-scale seed-funding program was expected 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”.
- The GRIP ethos is one of fairness and transparency:
 - Barriers to proposal submission were reduced wherever possible
 - Proposal submissions were managed and reviewed in an unbiased manner (projects not “wired”)
 - Pre-award process was documented online, including submission metrics and abstracts of full proposal team finalists

Game-Changing Research Incentive Program (GRIP)

- Five teams were eventually funded (four fully, one partially): \$2.3M investment over three years. Year three is about to begin (\$1.5M spent thus far).
- The return on investment thus far has been significant (4:1; in addition to students trained, publications, presentations, societal impact):
 - >\$6M in extramural funding
 - Three patents
 - One start-up company (has attracted millions in initial funding round)
- Many additional proposals are submitted, or soon will be, including Center grants and other large-scale funding proposals.

GRIP4PSI

- Our intention is to extend the GRIP ethos and large-scale seed-funding mechanism to the NC PSI.
- Stakeholders: ORI, the Provost's Office, the Kenan Institute for Engineering, Technology and Science, and the NC State Colleges of Agriculture and Life Sciences (CALS), Engineering (COE), Natural Resources (CNR), Sciences (COS), Management (PCOM) and Textiles (WCOT).
- The overarching goal of the initiative is to attract a wide-breadth of disciplinary faculty to the field of plant sciences that will then form effective, collaborative interdisciplinary teams that will challenge conventions, explore new ideas and open-up new avenues for sustainable research funding.
- GRIP4PSI project teams will span multiple NC State colleges, may include external partners, develop from the full range of technical capabilities at NC State and beyond, and will boast world-class junior and senior faculty with clear potential for sustained success.

GRIP4PSI

- GRIP4PSI funding will be provided to successful project teams with the expectation that their success will attract significant and sustained extramural follow-on research funding.
- Proposals should focus on game-changing research ideas that are well-aligned with the NC PSI and go beyond traditional plant disciplinary sciences to break new ground.
- The program will provide up to \$650,000 over 3.5 years to up to three project teams (each team will receive \$50,000 for the first half-year for planning purposes, and \$200,000 per year for a 3-year period to complete research and outreach objectives).
- Teams must be led by co-PIs from distinct NC State colleges that are GRIP4PSI stakeholders.
- Teams (in whole or in part) awarded GRIP4PSI funding will be considered as occupants of the new Plant Sciences Building.

GRIP4PSI: Key Dates

- Pre-planning proposal due date: **March 4, 2019**
 - The intention of this proposal stage is two-fold:
 1. To “lower the barrier of entry” for plant and non-plant scientists, and maximize the number of novel and creative proposals for consideration.
 2. To ensure that proposals are well-aligned with the mission of the NC PSI.
- Planning proposal due date: **May 15, 2019**
 - The intention of the planning proposal stage is to provide emerging GRIP4PSI teams time to ideate, solidify research and outreach strategies, potentially attract additional research team members and develop a proposal that will convey the novelty and impact of the proposed project, as well as its alignment with NC PSI research platforms.

GRIP4PSI: Key Dates

- Full proposal due date: **September 16, 2019**
 - The intention of the full proposal stage is to produce a compelling, mature research proposal that will facilitate the selection of teams for awards.
- Funding anticipated to commence: **January 6, 2020**

GRIP4PSI: Reviewers

- Full roster of reviewers will be dictated, in part, by the content of the proposals received.
- Reviewers under consideration for inclusion:
 - Senior NC State faculty without conflicts of interest
 - Representatives from the funders of the program
 - External domain experts
- Extensive list of review criteria can be found in the RFP.

Social and Humanistic Aspects of Plant Science (SHAPS)

- The GRIP initiative catalyzed significant “buzz” in the global research community. In particular, social scientists expressed interest in studying such interdisciplinary initiatives to better understand how research teams form as well as the attributes that underlie effective teams.
- On the heels of the GRIP4PSI RFP, we plan to announce a call for proposals to fund a team that will study the “science of the science” (logology) that underlies GRIP4PSI teams as they form, mature and progress.
- A single team will be funded, and an expectation of GRIP4PSI teams is that they will interact productively with the SHAPS team throughout the pre-award and post-award process.
- The SHAPS RFP is being finalized and is anticipated to be released within the next month.

Speed-Networking Meeting

- On Friday January 25th at 3-5 PM, a speed-networking meeting will be held at the University Club.
- The intent of this meeting is to facilitate faculty discussions that lead to the identification of research problems and the formation of interdisciplinary teams.
- To facilitate such discussions, we will require that attendees fill-out and submit a simple quad chart that provides basic information about your interests and the capabilities that you seek in collaborators.
- Be brief, this is an elevator pitch not a thesis.
- Quad charts will be compiled and then returned to the attendees as “homework” prior to the speed-networking event.
- Please review the quad chart compilation and identify those faculty that you wish to engage at the speed-networking event and subsequent meetings.

Who You Are

Name, College, Research Areas of Interest

PSI Research Platform(s) of Interest

Indicate the PSI Platforms in which you are most interested [see the GRIP4PSI RFP and Appendix for more detailed information on these platforms].

- Plant Improvement Platform
- Data-Driven Agricultural Bioscience Platform
- Resilient Agricultural Systems Platform

Your Research*

Briefly describe your research program and the capabilities you seek in collaborators to advance one or more of the PSI Research Platforms

**Do not include proprietary or confidential information as these slides will be shared with session participants.*

Speed-Networking Meeting

- On Friday January 25th at 3-5 PM, a speed-networking meeting will be held at the University Club that will be led by the Proposal Development Unit.
- The intent of this meeting is to facilitate faculty discussions that lead to the identification of scientific problems and the formation of interdisciplinary research teams.
- To facilitate such discussions, we will require that attendees fill-out and submit a simple quad chart that provides basic information about your interests and the capabilities that you seek in collaborators.
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