



RUTGERS UNIVERSITY

Center for Turfgrass Science

New Jersey Agricultural Experiment Station

RESEARCH PROGRAM

FY 2025 CALL FOR PROPOSALS

INTRODUCTION

Turfgrass is one of the few crops that can impact nearly every person's life daily through environmental enhancement, recreation, and aesthetics. As a critical component of urban ecosystems, turf protects and enhances our environment through climate regulation, nutrient and pollution filtration, dust reduction, and other ecosystem services. Turfgrass is a significant component of the economy in New Jersey and nationally. New Jersey has more than 953,000 acres of turfgrass with annual revenues and maintenance costs of \$4.9 billion.

PURPOSE

The program seeks to stimulate new and innovative scientific research in turfgrass science and enable Rutgers Center for Turfgrass Science (CTS) to enhance its premier status among land-grant institutions in the turfgrass sciences. This will be achieved by fostering collaborative research among Rutgers faculty in areas relevant to the CTS strategic research and outreach initiatives in turfgrass science and providing seed money to initiate and conduct projects that could lead to federal- or industry-supported research.

STRATEGIC RESEARCH INITIATIVES

The research program is open to proposals of basic or applied research in turfgrass science with objectives consistent with the two major research initiatives of the CTS.

1. Advance Turfgrass Science and Management:

Create environmentally sound agronomic programs that enhance the persistence of turf and protect the environment. Specifically, proposed research should:

- a. Develop technologies and management strategies that improve resource efficiency and mitigate abiotic/biotic stress.
- b. Optimize maintenance efficiency by reducing inputs and reliance on resources.
- c. Develop best management practices and alternative methods for control of turfgrass pests that reduce pesticide usage.
- d. Improve the understanding of plant response mechanisms to abiotic/biotic stresses and how management practices affect turfgrass growth and abiotic/biotic stress tolerance.

2. Turfgrass Germplasm Improvement:

Improve our understanding of heritable characteristics that enhance the ability of selecting and improving turfgrass germplasm (emphasis on cool-season turfgrass species). Specifically, proposed research should:

- a. Identify mechanisms of abiotic and biotic stress tolerances within turfgrasses adapted to temperate climatic zones.
- b. Understand agronomically important host-pest (disease, insect, weed) interactions.
- c. Identify and understand beneficial organisms and their interaction with turfgrass hosts.
- d. Develop and implement improved breeding and biotechnical methods.
- e. Improve the understanding of genetics, genomics, molecular biology, and physiology of turfgrass growth and stress tolerance to facilitate development of elite turfgrass germplasm and cultivars.

Questions regarding the topic and scope of proposed research under this RFP should be directed to either the Director for the Center for Turfgrass Science, Dr. James Murphy (jamurphy@njaes.rutgers.edu), or the Associate Director, Dr. Stacy Bonos (bonos@sebs.rutgers.edu).

ACTIVITIES SUPPORTED

- The CTS research program considers research activities in all branches of science and technology that offer potential to advance the field of turfgrass science. Multi-disciplinary proposals that forge collaborations with scientists who have demonstrated expertise or experience in turfgrass science are encouraged.
- Projects will be funded for a one-year duration including feasibility studies designed to obtain data for subsequent external submittal as well as studies that leverage support from other sources to supplement CTS support. Efforts to supplement program support should be explained in the proposal background and justification (e.g., current or prospective funding agency, anticipated date of submittal, previous and pending attempts, funding amount, etc.).
- Symposia or workshops held on campus that bring scientists together to exchange information or coordinate research related to turfgrasses are eligible for support, enrich the intellectual life of the University and bring Rutgers faculty and students into contact with new developments that are relevant to the CTS strategic research initiatives.
- Funding is also available for scientific visits for the purpose of developing proposals for external submittal or acquiring new methodologies. Such proposals are limited to \$5,000 per annum.

ELIGIBILITY

Program support is available on a university-wide basis. All full-time faculty of Assistant Professor Rank and above on regular University lines are eligible to participate.

FUNDING GUIDELINES

A total of up to \$450,000 is available for grant funding in FY 2025. An individual PI may receive up to \$70,000 of funding in FY 2025 across one or more proposals; however, if more than one proposal is submitted, each proposal must represent a distinctly unique research topic/activity. Each PI that has received funds from the CTS in the previous year must review that account; budget requests for FY 2025 must account for residual funds from the previous grant award.

- May be used for graduate student research support, graduate student tuition, technician salaries, and other labor costs. Principal investigator salary support is not allowable.
- Shall not be used for capital expenditures or construction costs.

PROPOSAL EVALUATION

A proposal must indicate whether the submission is a new project or a continuation of an existing project. If a continuation, the proposal should clearly indicate the progress of work from the previous year within the background and justification section of the proposal. Continued support of a project will be reviewed on the same competitive basis as new projects and include progress and productivity pertaining to the previous year's funding. Proposals are expected to clearly state how the proposed work will advance turfgrass science. Success in obtaining outside funds for previous and ongoing turfgrass projects by applying faculty will improve the strength of the current application. Proposals with supporting funds from other sources are encouraged.

Note, all PIs receiving funding from the CTS are expected to participate and present a progress report on funded projects as an oral or poster presentation during the Annual Rutgers Turfgrass Symposium (March).

Review Panel & Process:

- The review panel will be comprised of a chair, three external scientists, and each PI that has submitted a proposal.
- All review panel members will independently review all proposals for relevance to the CTS strategic research initiatives (25 points), scientific merit (20 points), methodology (25 points), feasibility (20 points), and budget (10 points).
- After the independent review, the review panel will meet to discuss and prioritize each proposal. The chair will present the average review scores and comments from the independent reviews and will moderate panel discussion of each proposal.
- After discussion, all review panel members will prioritize (blind vote) each proposal as high (priority for funding), medium, or low (not a priority for funding).

- Pre-meeting ratings and prioritizations from the review panel for all proposals will be forwarded to the CTS Executive Committee for final recommendations on funding.

GUIDELINES FOR PROPOSAL SUBMITTAL

When and Where to Submit: Applications are evaluated once a year. Proposals for fiscal year 2025 are **due September 6, 2024**. Late applications cannot be accepted. An electronic version (PDF or WORD document) should be uploaded at this link: [CTS FY 2025 Proposal Submission](#)

What to Submit: Proposals that do not meet the following guidelines will not be considered.

RESEARCH PROPOSAL FORMAT (maximum 6-pages)

Page 1: Use the accompanying "[FY 2025 CTS Research Program CFP Executive Summary Template](#)" to provide a one-page summary of the full proposal. Address the following:

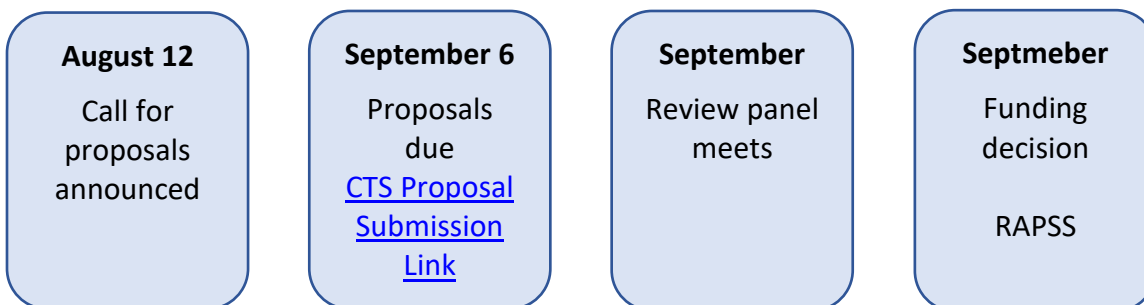
- **Project Description.** Introduce the research problem, rationale for the research, and a summary of the research objectives and methodology/approach for the proposal. For a project being continued, highlight progress.
- **Potential Outcomes.** Summarize the scientific knowledge this research will produce and how you think results will affect the Center's strategic research initiatives 1 a.-e. and/or 2 a.-e.
- **Budget Summary.** Complete the annual funding request for the research project. Indicate the status (i.e., requested or secured) and level of support the project will receive from other organizations.

Pages 2 through 6: Format up to five pages with one-inch margins and minimum font size of 12 points. Include the following:

- A description of the research question and scope of the problem, including a brief literature cited section for relevant previous research.
- The objectives of the project, research methodology, available research and field facilities, reasonably expected results by the end of the project, and a brief timeline.
 - a. Proposals for symposia and workshops should delete the methods section, but include the agenda, proposed participants, dissemination of information, and meeting site. Proposals for scientific visits should include the participants, institutions, benefits to Rutgers, and schedule of activities.
- A table that contains the project budget. Note specific requirements in the 'Funding Guidelines' section above.
- A brief, one-paragraph biographical description of the principal investigator and cooperating researchers.

RESEARCH PROPOSAL TIMETABLE

Final funding decisions will be communicated during September 2024 from the NJAES Director of Research, Dr. Wendie Cohick. Approved projects will be funded for one year (fiscal year 2025).



GRANT ADMINISTRATION

Funds disbursement – Rutgers NJAES policy on internal awards requires each proposal approved for funding from the Center for Turfgrass Science to be submitted as a funding proposal (FP) in the RAPSS system before funds can be distributed.

Reports – all PIs receiving funding from the CTS are expected to participate and present a progress report on funded projects as an oral or poster presentation during the Annual Rutgers Turfgrass Symposium (March after funding approval).

No-cost Extensions – If additional time is needed to complete proposed research, a no-cost extension may be requested. An extension request must explain the need for an extension, provide an estimate of unobligated funds, and be received by the CTS Director at least 30 days before the grant expires. The presence of unobligated funds at the expiration of a grant is insufficient justification for an extension. Unused funds will be returned to the CTS Research Program when the grant expires.

Acknowledgment of Support – Each paper, book or other publication resulting from CTS Research Program support must contain appropriate acknowledgment of the CTS. The CTS Research Program must be informed prior to engagement in activities related to income (royalty) generating products.