NCINNOVATION
OPTIMIZING INNOVATION FOR NORTH CAROLINA

NCInnovation Request for Proposals
Revised November 2025

Overview

Introduction

NCInnovation's (NCI's) mission is to unlock the innovative potential of North Carolina's research universities catalyzing inventions to move from the lab to the market and promoting economic development across the state. NCI supports this mission by providing university researchers with grant funding and support services to help commercialize research breakthroughs and accelerate the transition from academia to industry. At its core, NCI is a regional economic development initiative centered on our world-class university system.

NCInnovation provides the necessary investment and coordination to transform research breakthroughs into successful businesses that improve economic opportunities in all regions of North Carolina. Specifically, the organization:

- Provides grant funding for university applied researchers to mature a proof of concept to the point of commercial viability.
- Supports the transition of applied research and new technologies from academia to industry with funding for comprehensive business development and other support services, coupled with ongoing coordination between universities and the private sector.
- Identifies innovation opportunities in key industry sectors, helping guide university research and resource allocation to best position viable projects for commercialization.
- Will forge a new path to unleash North Carolina's innovation potential, supporting economic opportunity in all regions of the state.

NCInnovation's programming and funding will drive lasting economic and technological growth across NC, ensuring that the UNC System universities remain national leaders in innovation.

Purpose of the funding program

In 2023, the North Carolina state budget established a $500 million reserve – split into $250 million allocations over two years – which, in turn, goes into an endowment to support NCI's mission and accelerate the commercialization of university research. A key purpose of the endowment is to fund a grant program for North Carolina public higher education institutions that will help 1) build capacity in applied research; 2) support technology development, start-up support, and licensing; 3) support IP development and patent protection; 4) provide non-dilutive funding to support advance of R&D to the point of commercial viability; and 5)

provide support services after proof of viability. This program seeks to support faculty in building scalable solutions that have broad economic impact either in their region or extending beyond regional boundaries.

Program Description

NCInnovation offers grants to university researchers so they can advance their research breakthroughs to the point of commercial viability. To do this, NCI's grants focus intensely on the middle phase of the R&D process – after proof of concept has been achieved, but before a technology is mature enough to attract private investment. This helps university researchers develop technologies to an inflection point, where a license for the intellectual property or a new startup company can be formed. Focusing on this phase maximizes the probability a promising research initiative can be commercialized.

Government and private investors sometimes use a matrix called Technology Readiness Levels (TRL) to define each phase of a research endeavor, from the very earliest idea generation (TRL 1) to end-stage market entry (TRL 9). NCInnovation assesses research projects using this matrix to gauge their readiness for commercialization. NCInnovation focuses on the middle phase - TRLs 3-6, - often referred to as the 'valley of death.' TRLs 3-6 are often the most challenging and most expensive. It's in this phase that researchers mature their technology, consistently testing and improving such that it can work in more realistic settings. The description of this middle phase as the 'valley of death' captures the fact that without this funding, many promising innovations fail to reach commercialization. At this stage, there's still much work to be done before a technology is commercially viable.

Those steps are expensive. Some universities may have resources for researchers working at TRL-3 or TRL-4, but funding to get through the valley of death is usually the hardest money to come by, especially outside of mature innovation ecosystems like the Research Triangle. NCI focuses exhaustively on the valley of death, supporting North Carolina university researchers at the critical R&D stage where the academic phase begins transitioning through proof of concept toward commercialization.

Award amounts

In this Request for Proposals (RFP), NCI does not currently have a set minimum or maximum award amount. We anticipate that most awards will fall within the range of $200 K - $1 M but amounts may vary depending on the scale of the proposed

project. Grants will be awarded in tranches provided researchers meet defined milestones, rather than in one lump sum.

Award duration

The award duration is two years, and all awardees remain eligible for future rounds of NCI grant funding, depending on the performance from a previous NCI award. Funding will be released in tranches based on completion of milestones as defined in your proposal (see Award Format section below).

Award format

NCI awards are milestone-based, meaning that the proposing team will define a set of milestones as part of the proposal process, and the team will be evaluated against those milestones. Funding will be released based on the completion of milestones as defined in your proposal. The exact funding schedule remains to be determined, but in most cases the funding will be released in annual tranches if milestones are met.

As a condition of funding, NCI requires that companies created to commercialize the resulting IP out of NCI-funded projects maintain a physical presence in North Carolina for a minimum of five years to maximize economic development opportunities within the state. Companies that do not fulfill this request are subject to claw back provisions.

Reporting

Awardees will be asked to report project outcomes annually. Details of the reporting structure, including templates and deadlines, will be communicated to teams at the time of the award. See Section 6 for more detail.

Section One: Project Eligibility

Who Can Apply for NCI Funding

➢ Applied researchers at all 16 UNC System universities are eligible for grants through NCI. Private companies are not eligible to serve as lead institution.

➢ Institutions in the North Carolina Community Colleges System are eligible for funding. At this stage, we recommend that community colleges participate by partnering with one or more universities to pursue funding, but we anticipate future programs will target community colleges more directly as we build out the granting process.

➢ Proposals must define a technology at a TRL of three or higher. Any proposed projects with a TRL of less than three will not be considered for funding and will not advance past the pre-proposal stage. This ensures that only projects with demonstrable potential for commercialization and scalability are considered.

➢ NCI is committed to remaining industry agnostic and accepts applications from all technology sectors.

➢ NCI prioritizes projects with the highest potential for commercialization and economic impact in NC.

Limited Submissions Policy

NCI may limit the number of pre-application submissions per lead university for a given cycle. Universities that are subject to the limited submission policy will be notified. Faculty can reach out to their respective institutions and/or NCI Regional Director for information on their university policy.

Instructions for Submitting Project Eligibility Request

All proposers must complete the following steps to be considered for funding:
1. Discuss your proposed project with your Regional Director and respond to resulting feedback as appropriate.
2. Submit an eligibility request according to the instructions in this RFP.

Project Eligibility Request Criteria

Criteria	Details	Yes/No
UNC System	Faculty is affiliated/employed by an institution within the UNC System	

NCI Meeting	Faculty has met with their respective Regional Director to discuss project and confirm alignment with NCInnovation's goals and regional needs	
University Disclosure	Faculty has disclosed the project with their OSP and/or technology transfer office	
TRL Three	As indicated in the table	

Information Collected in Project Eligibility Request

Basic Information

Full Name of PI: Title of PI:

Affiliated University of PI: County:

PI Email: PI Phone:

College and Department:

Associated Website:

Disclosures

1. Have you discussed this project with your NCInnovation Regional Director?
   - ❑ Yes
   - ❑ No

2. Have you disclosed this project to your university technology transfer office/staff?
   - ❑ Yes
   - ❑ No

Industry Sector

NCI is committed to remaining industry agnostic and accepts applications from all technology sectors. The purpose of this question is to select and assign reviewers with industry knowledge and expertise.

Please indicate the relevant field or industry in which this research is associated with.

Advanced Manufacturing	AgTech	Biohealth	Computing & Informatics
Defense Innovation	Energy Transition & Electrification	Other:	

If other, please indicate which field/industry your research is associated with if it is not included in the options above (e.g., environmental science, material science, edtech, health tech, or aerospace).

Abstract (up to 100 words)

Provide a high-level overview of your project to include context and the purpose of your research.

Eligibility Request Review Process & Next Steps

NCI Regional Directors review all eligibility requests for applications in their respective regions. Once a Regional Director approves the request, the PI will be automatically notified through the grants management platform and will have access to complete NCI's pre-application. For requests that are not approved, a notification will be sent to inform them of eligibility status.

For an eligibility request to be approved, requests must satisfy all the basic criteria as listed below to ensure that basic requirements are met, and therefore, that the project is eligible for pre application.

*Additional project information does not make a faculty ineligible but rather provides NCI with helpful background information.

Section Two: Pre-Application

Who Can Submit a Pre-Application

Once an eligibility request is approved, PIs have access to complete their pre-application through NCI's online grants management platform. Pre-applications will undergo a first round of evaluation (see Review Process and Criteria section below), and a subset of the pre-proposal submitters will be invited to submit a full proposal. NCI welcomes a wide variety of project proposals and partnership structures, and proposers are strongly encouraged to seek collaborators and partnering organizations both inside and outside the university system. These types of partnerships will almost invariably strengthen your proposal.

Instructions for Submitting Pre-Application

The pre-application is open to all UNC System faculty that have submitted an eligibility request and been approved. Pre-applications can be submitted by the University Sponsored Programs Office and/or the lead PI. Completion of the pre-application does not guarantee program funding. Pre-application information is used to screen applications and those most competitive will be invited for a full application.

To learn more about NCI's grant program visit www.ncinnovation.org/grants or download the RFP to review the guidelines, process and eligibility information.

Information Collected in Pre-Application

Project Information
1. Title of Project (up to 10 words)
2. Project Summary (up to 1,000 words)
    Describe technology and societal problem(s) being addressed. Include a brief description of any industry connections, market validation, value proposition, regional alignment, commercialization pathway(s) and customer discovery work.

Project Status
1. Is this a resubmission of a previous NCInnovation application?
    A resubmission is defined as a pre-application that covers the same technology focus as a previous submission. A change to the lead PI is not considered a new submission if the technology focus is unchanged. Note that at the full application stage, resubmitting applicants will have an opportunity to provide additional documentation to describe progress and

improvements since the previous submission. If you have questions about whether your pre-application is considered a resubmission, reach out to your Regional or Hub Director for assistance.
- ❑ Yes
- ❑ No

If "yes" to the above, please enter the project ID, which can be found in the AkoyaGO application portal.

If "yes" to the above, please provide details on any progress made to date and/or programs completed, particularly in response to reviewer feedback and/or added industry partners. If none, please enter "N/A".

2. Have you or the university filed for IP protection, including a patent application, copyright, or any other IP protections related to this project?
   - ❑ Yes
   - ❑ No

If "No" to the above, is the work completed being treated as a trade secret?

If "yes" to the above, has this IP already been licensed by another entity or is the IP shared with any other university?
   - ❑ Yes
   - ❑ No

3. Is the IP jointly managed? If so, which organization is the lead?
   - ❑ Yes
   - ❑ No

If "yes" to the above, please indicate the name of the organization(s)

4. Have you participated in an NSF I-Corps or other customer discovery program (e.g., NSF Mid-Atlantic Hub, NC Biotech Center)?
   - ❑ Yes
   - ❑ No

If "yes" to the above, please indicate the name of the program(s)

5. Does your project have an identified industry partner?
   - ❑ Yes
   - ❑ No

If "yes" to the above, please indicate the name of the partner(s) and the role of the partners.

6. Does your project have a proposed Project EIR to support the team if funded?

❑ Yes

❑ No

If "yes" to the above, please indicate the name of the candidate(s) and the status of the relationship.

Funding and Resources

1. **Funding Received**

What level of funding (please provide sources and amounts) have you already received for this project over the past three years? Include a brief summary of how the funds were used. If this does not apply, please write "N/A".

2. **NCI Funding Request & Allocation**

What level of funding are you seeking from NCI? Further justification will be requested in the full application.

❑ < $100,000

❑ $100,00 - $250,000

❑ $250,000 - $500,000

❑ $500,000 - $750,000

❑ $750,000 - $1 M

❑ > $ 1M

3. **Resource Needs**

Please select the top three support services relevant to your project.

❑ Grant writing

❑ Legal counsel

❑ Innovation & entrepreneurship programs

❑ Market fit research/customer discovery

❑ Patent landscaping

❑ Technical validation

❑ Grants administration

❑ Project management

❑ Other: (Please specify)

4. **Additional Funding**

What funding opportunities have you considered and/or intend to pursue to further the project outside of or in addition to NCI?

Technology Readiness Level
Please work with your respective NCI Regional Director to categorize the TRL readiness level of the project based on its current status and provide a brief explanation for the ranking as well as the anticipated status at the conclusion of this project (if funded).

Pre-Application Review Process & Next Steps

Pre-applications will undergo a screening/down selection process in which NCI staff, in collaboration with lead institutions, will determine which projects best demonstrate strategic alignment with NCI's regional economic development goals, geographical distribution, and available budget. Teams whose pre-applications are selected during this process will be invited to submit a full application. If the pre-application is not advanced to full application during this cycle, applicants are encouraged to work with their Regional or Hub Director to strengthen it going forward.

Section Three: Full-Application

Who Can Submit a Full Application

PIs who receive an official invitation from NCI to submit a full application following the submission and review of their pre-application are eligible to submit a full application.

Instructions for Submitting a Full Application

PIs work with their respective Offices of Sponsored Programs to submit their full application via NCI's grants management platform. The full application will build upon the information submitted in the pre-application phase and PIs will have the opportunity to update any information as needed.

Information Collected in Full Application

Criterion 1: Significance
1.1. Market Problem and Market Size
Please identify the societal or market need that the project addresses. Include any relevant information/data points that estimate or quantify the potential market size and/or demand. What market is the technology addressing, and what specific problem is the technology solving? To what scale does the proposed technology benefit society if successful (e.g., statewide, globally, etc.) and in what way? How significant is the problem in terms of numbers of people or size of the market?

1.2 Value Proposition
Briefly state the unique value the proposed technology, product, or service provides to its target market, and how it differentiates from existing solutions. What is the customer problem or unmet need? Who is the target customer?

1.3 Innovation
Describe the technical or scientific innovation that is being used to address this problem, including technical details, the type of innovation proposed, and the expected mode of delivery to end users (e.g., new material, chemical, prescription product, consumer product, software, service). Include any proof-of-concept data that has been collected (option to upload materials in the supplemental section). If a prototype exists, describe its state of development and current functionality.

1.4 IP Protection
Describe the current state of any patents filed for this innovation. If an application has been filed or issued, provide a brief summary of the patent or application. Include a copy of the issued patent or application or issued patent in supplemental materials. If no patent has been filed, provide a brief description of what would be included in a patent application.

Supporting Documents (optional – up to three files and six pages max)
This section could include such documents as:
- Abstracts and/or links to publications relevant to the innovation
- Proof of concept data
- A figure illustrating the technology
- A schematic, picture, diagram, or molecular structure of the innovation.
- A compelling chart or graph or other type of data that demonstrates both the current state of the innovation as well as the value of this technology to solve the customer problem.
- IP and licensing agreements

Criterion 2: Research Team and University Infrastructure

2.1 Project-Associated Researchers and Collaborators
Please use the three worksheets in the provided Excel template to complete the sections below:
- **University-Associated Researchers ("University Researchers" Worksheet)**: Please use the template provided to share information on university-associated researchers, both at the lead university and any partnering universities.
- **Economic Development and Community Partners ("Econ Dev and Community Partners" Worksheet)**: Applicants are encouraged to engage with non-university collaborators, including government agencies, community partners, and industry experts, to strengthen their project proposal. Please include a list of key personnel (name, title, affiliation, email) for individuals your project is currently collaborating with outside of the university (e.g., consultants, etc.). Industry partners should be addressed in the Industry Participation Criterion (Criterion 5).
- **Potential Collaborators ("Potential Collaborators" Worksheet):** Include potential opportunities or interest for collaboration from other NC system universities, organizations, government agencies and/or military/defense organizations, etc.

2.2 Resources
Describe the support and infrastructure that is available to the team through the lead university, partners, or other sources. Identify support that could potentially be leveraged from other regions of the state if needed, if that support is necessary but prohibitively expensive or unavailable currently.

2.3 Letters of Support
Please include up to three single-page letters of support in pdf format from university partners and/or economic development partners. Industry participation letters should be uploaded to Criterion 5.

Criterion 3: Regional Alignment and Impact

3.1 Regional Alignment

Please discuss ways the region is advantageous for this project and how the project aligns with the capabilities, strengths, and goals of the university, community, and region. Describe any resources in your region you will be using as part of this proposal or potentially using subsequent to this proposal, as part of your commercialization activities

3.2 Potential Benefits to and Impact on Region

Indicate the potential impact of your project to include the socioeconomic potential and value added to the region. Include the anticipated regional economic development outcomes (e.g., IP development, company creation, job creation, etc.) and other regional benefits (e.g., research advances, societal benefits) of the project? Include details on how this project could benefit the lead university.

Criterion 4: Commercialization Potential

4.1 Market Fit and Customer Discovery

Who is the target customer? Describe any market research activities (e.g. I-Corps) done to date to validate the customer problem and feedback received on the proposed solution. This can include primary market research (customer interviews) or secondary market research (industry reports). For any customer interviews, provide specific feedback received. If none, please enter "NA". Results of customer discovery programs can be uploaded in the supplemental documents section as needed.

4.2 Competitive Landscape

What are the alternatives today for solving that problem? What are the deficiencies of those alternatives? How will the proposed technology compete with alternatives in the market?

4.3 Commercialization Pathway

Describe the key steps in your pathway to market, potential of the project for commercialization, and any foreseeable technical or market challenges and how you plan to address them. Please include all compliance and/or regulations that would require third-party or governmental approval. Describe any startup activities or plans for a startup, including incorporation, licensing,

or fundraising. If a company has been formed, describe the relationship between anyone listed on the team and the startup.

Criterion 5: Industry Engagement

5.1 Industry Partner(s)
Please use the space below to list any current and/or identified potential industry partner(s) regarding the research and its commercial applicability and state the anticipated role the partner(s) will play. Please also state whether there has been any engagement to date and if so, in what capacity.

5.2 Industry Letter(s) of Support
Please include up to three single-page letters of support in pdf format from industry partners. Whenever possible, letters of support should indicate how the partner will engage with the project team and/or what value the partner brings to the project.

Criterion 6: Approach and Milestones

6.1 Approach, Milestones and Associated Funding
Please use the template provided to highlight focus areas, milestones, commercialization activities and associated funding for each year. Note that the milestones will be discussed and agreed upon with NCI and all funding will be released in one-year tranches when milestones are met.

6.2 Anticipated Challenges
Describe any significant scientific and/or commercial challenges that you anticipate may arise for your idea and mitigation plans for how the team will address them. Please include all compliance and/or regulations that would require third-party or governmental approval.

6.3 Measuring Success
Describe key project goals and what success at the end of the funding period looks like for your project. Describe the anticipated output of the project (start-up, license, etc.) and the required next steps to commercialize the technology following the grant.

6.4 Itemized Budget (qualitatively assessed)
Please use the template provided to prepare your budget request following the instructions provided on the "instructions" tab. NCI funds are subject to limitations based on state regulations. Note that NCI funds cannot be used to cover facilities and administration (F&A) expenses and cannot be used to cover out-of-state travel.

6.5 Budget Justification (qualitatively assessed)
Using the template provided, please upload a brief budget justification describing how you intend to use the requested funds.

Supplemental Documents
Faculty may submit up to three additional supplemental documents (no more than 10 pages in total).

If an applicant wishes to provide additional information not specifically requested in the application forms, supplemental materials may be submitted. However, this section is intended to provide necessary information only and should not be used to sidestep the length limits in other sections of the application. Reviewers will be given access to all supplemental materials, but NCI cannot guarantee that they will read them in their entirety.

For resubmitted applications, please include a summary of your responses to feedback on your previous submission, using the template provided. This summary should not exceed two pages and should be attached in the Supplemental Documents section. The summary of response to feedback does not count toward the page limit of the Supplemental Documents section.

Full Application Review Process & Next Steps

Full proposals will be reviewed simultaneously by two different groups. The first is a set of external reviewers that will consist of four core reviewers that will score all the proposals received and two regional reviewers that will be specific to each NCI hub region. The second is a third-party review panel that will score the proposals according to market fit and the results of the statewide asset mapping exercise that NCI has been leading, in coordination with RTI. The NCI team will convene the reviewers at the end of these simultaneous scoring processes to come to consensus on a prioritization of proposals.

Submitters of full proposals may receive questions from the review panel during the review process and should be prepared to provide written responses within a week of receiving these questions.

The prioritized proposals will undergo an additional internal screening to balance NCI's funding portfolio according to geographical location, amount of funding available, and other considerations. The NCI Programs Committee will review final scores and submit a prioritized set of funding recommendations to the full NCI

Board of Directors, which will have the opportunity to approve the funding recommendations. Once Board approval is complete, awardees will be notified.

Criterion	Relevant Information	Top scores would include:
Quantitatively Assessed		
Significance	• Market Problem and Market Size • Value Proposition • Innovation • IP Protection • Supporting Documents	• Project addresses a clearly stated market need • The proposed solution is well differentiated from other alternatives on the market • Project is expected to have a significant positive economic and/or technology development impact. • The solution has a well-identified sustainable competitive advantage (e.g. IP)
Research Team and University Infrastructure	• Project Associated Researchers and Collaborators • Resources • Letters of Support	• The team is extremely well-qualified with the experience, bandwidth, and expertise to effectively implement the project. • The project environment provides the needed infrastructure and support for the team to be successful. • The project has explored and/or employed relationships and expertise from partner NC universities and/or has the potential for collaboration across universities • The team is already working with or has identified partners in the ecosystem and/or community that validate the need for and support the technology
Regional Alignment and Impact	• Regional Alignment • Potential Benefits to and Impact on Region	• Project provides direct benefit to region/local community and the expected regional economic development benefits and other outcomes are positive and impactful. • Project aligns with regional strengths and areas of opportunity and offers potential to generate cluster-based growth • Project is beneficial to the lead university and leverages and/or strengthens its core capabilities
Commercialization Potential	• Market Fit and Customer Discovery • Competitive Landscape • Commercialization Pathway	• Project addresses a clear market need with substantial market size • Project has clear target audience with a clear pathway to market and excellent potential for commercialization • Team has identified associated risks, addressed mitigation plans and planned for possible challenges • The Team has significant customer discovery data/insights
Industry Engagement	• Industry Partners • Letters of Support	• Team has identified potential industry partners with interest in the research and its commercial applicability • Team has clear industry support through letters of support
Approach and Milestones	• Approach, Milestones and Associated Funding • Anticipated Challenges • Measuring Success	• The proposed approach or methodology is sound and well-reasoned • Milestones and deliverables are clearly defined and reasonable
Qualitatively Assessed		
Use of Funds	• Itemized Budget • Budget Justification	• Reviewers are asked to provide feedback on whether the budget appears appropriate for the scope of the project, if it contains the required information and is linked to project goals. Additionally, reviewers are asked to consider whether there are areas that seem over- or under-resourced.
Potential Barrier(s)	• Pertains to entire application, not specific question(s)	• Reviewers are asked to consider potential barriers to success, including geographical barriers and/or access to resources.