Call For Proposals

NJIT Center for Translational Research (CTR)

Funded by the U.S. NSF Accelerating Research Translation (ART) Program

2025 Innovation Pitch Competition

Prize: \$100,000 TITA-Advanced Seed Grant

And

2026 Technology Innovation Translation and Acceleration (TITA) Seed GrantUp to four \$75,000 TITA Seed Grants

TITA Program Proposer Information Session:

Wednesday, September 10, 2025: 11.00.00 AM – 1.00 PM; Eberhardt Hall Room 112 (light lunch will be served)

Please RSVP to attend the information by filling out this form by September 5, 2025.

Total 2026 Available TITA Seed Grant Program Funding: \$400,000

TITA External Advisory Board (EAB)

NJIT Center for Translational Research (CTR) and Technology Innovation Translation Acceleration (TITA) Seed Grant Program

The NJIT Center for Translational Research (CTR) funded by U.S. National Science Foundation (NSF) Accelerating Research Translation (ART) program of the Technology, Innovation and Partnerships (TIP) directorate and institutional strategic investment plan serves as a hub to promote and facilitate translational research through workshops, training and networking opportunities that help students, faculty and other stakeholders develop innovation partnerships for technology validation and commercialization. In alignment with the NJIT 2030 Strategic Plan – Research, Innovation and Entrepreneurship Priority, the NJIT CTR focuses on the following objectives:

- 1. Building institutional capacity and infrastructure for successful translational research and innovation activities.
- 2. Funding and supporting translational research seed projects and developing innovation partnerships and commercialization pathways to further enhance NJIT's Research, Innovation and Technology Entrepreneurship (RITE) ecosystem for tangible societal and economic impact.
- 3. Creating opportunities for undergraduate and graduate students, postdoctoral and faculty researchers to learn roadmaps for technology research and innovation translation through

workshops, internships and mentoring programs towards addressing market and societal needs.

The NJIT Technology Innovation Translation Acceleration (TITA) Seed Grant program continues to increase awareness of the potential commercial benefits at earlier stages of the translation and market validation process and allow researchers and stakeholders to collaborate for entrepreneurial success. It helps faculty innovators to submit competitive translational research proposals to external grant funding opportunities.

Two Funding Opportunities Competitions

There are two paths for seed grant funding opportunities available this year to support technology innovation translation projects.

- 1. Advanced TITA (Technology Innovation Translation Acceleration) Seed Grants with \$100,000 Innovation Pitch Competition Award: This is a direct path to innovation pitch competition for those who are already at TRL 4 or above and have a start-up or tech transfer agreement. This path is open to all previous TITA/CERT seed grant awardees.
 - <u>Application process</u>: Submit 5-page white paper following the required format (please see below for details). After the review by the TITA External Advisory Board, top 5 applicants will be invited to compete for \$100,000 TITA-Advance Grant.
- 2. **Regular TITA Seed Grants of \$75,000 per Project**: The usual path of the TITA seed grant of \$75,000 each with an external partner.

<u>Application process</u>: The applicants should follow a multi-stage submission following the format instructions and review process as outlined below – Stage -1: 2-page Concept Paper, Stage -2: 5-Page White Paper, Stage -3: Full Proposal and Stage -4: Live Pitch Presentation. The path does not require a start-up or tech transfer agreement at the time of proposal submission.

\$100,000 Innovation Pitch Competition Award

The NJIT CTR announces a new strategic initiative \$100,000 Innovation Pitch Competition to promote translational research and innovation validation in use-inspired applications of high societal benefits towards enhancement of the NJIT Research, Innovation and Technology Entrepreneurship (RITE) Ecosystem as part of implementation of the NJIT 2030 strategic plan.

The winner of the Innovation Pitch Competition as judged by the TITA External Advisory Board will receive \$100,000 TITA-Advanced Seed Grant starting January 2, 2026, following all institutional and NSF grant funding requirements, and ending after an 18 month period of

performance. The TITA External Advisory Board and CTR reserve the right to not award any TITA-Advanced Seed Grant in case of lack of a competitive presentation.

Eligibility

- Full-time Faculty member (tenure or tenure track) at NJIT
- Issued U.S. Patent or Non-Provisional U.S. Patent Application Filed
- Has Industry Partner, External User-Domain Partner or Start-up Company Affiliation
- Technology Reediness Level: 4 or Beyond (Please see the TRL chart <u>here</u>)

Previous recipients of CERT and TITA seed grants with successful ongoing or completion of translational research and market validation are eligible to apply for new translational projects.

Submission Process

NJIT faculty are invited to submit 5-Page White Paper (with up to 5 pages of Appendices) following the <u>Innovation Pitch Competition Whaite Paper Format</u> by October 1, 2025. The White Papers will be reviewed by the <u>CTR-TITA External Advisory Board</u> to select up to 5 finalists to present their innovation pitch to the board on November 10, 2025.

Evaluation Criterion

- Market/Societal Need: The significance, size, and potential growth of the unmet need
- **Innovation** Creativity and Originality: Novelty, strength, acceptability, and scalability of the innovative technology solution in the target market
- Competition: The competitive advantage and value proposition of the innovation
- Commercialization Readiness, Feasibility and Scalability: Work done on the proof of concept, early assessment for use in the market, and IP protection
- **Proposed Plan**: Translational research plan, product development, and advanced market validation
- Business Case: Enterprise pre-commercialization, and financial plans
- Market Potential and Overall Impact: Potential impact if the TITA grant and product commercialization plans are successful
- Relevance to the NJIT 2030 strategic plan: The potential impact toward the goals of the research, innovation, and entrepreneurship priority area.
- Presentation Skills and Clarity

Due Dates

- White Paper Submission Due Date: October 1, 2025
- Notification of Finalists for Live Pitch Presentation: October 15, 2025
- Live Pitch Presentation to CTR-TITA Advisory Board: November 10, 2025

TITA Seed Grant Awards (Up to \$75,000 per project)

NJIT Technology Innovation Translation and Acceleration program will award \$75,000 TITA Seed Grants to pursue translational research through the following phases:

Phase-1: Technology Innovation Translation Research and Proof of Validation: The Phase-1 proposal must incorporate collaborative research and partnership with at least one external stakeholder from industry, academia, community or local government organizations, federal labs, or professional user groups (such as physicians in hospital or private practice for medical devices). The objectives of the Phase-1 proposal must include market research for unmet need(s), developing prototype devices/technology, translational research for application validation, and assessment of all risks associated with bringing the application to market, especially with respect to competition and future growth.

Phase-2: Technology Innovation Acceleration to Entrepreneurship: The Phase-2 funding will focus on the development of pre-commercial prototypes of devices or technology, scalable validation, and business plans and technology transfer to an existing company or forming a new start-up company establishing market channels. This phase, often called the early incubation stage, will include advanced market validation studies (such as early clinical trials for validation of potential medical devices). The Phase-2 goals must also include development of collaborative partnership-based business models and strategies to attract interest from external entrepreneurs, investors or a commercial entity for licensing and commercialization.

Phase-3: Advanced Technology Innovation Acceleration to Commercialization: The collaborative partnership-based Phase-3 proposal will focus on developing commercialization plans with advanced commercialization-ready technology or product(s) and additional regulatory, business, marketing, and risk management. This phase will also include larger scalable technology validation, market trials (such as early clinical trials for medical devices) and user-acceptance studies towards submission of investment proposal and grants to secure future funding for commercialization from the NJIT Investment Fund, an angel investment fund, NSF TIP or similar grant program.

Eligibility

NJIT faculty members pursuing research addressing a significant unmet market need with an innovative potential solution of high impact are encouraged to apply for TITA seed grants. The following requirements must be met for submissions:

- 1. Proof of concept of the innovative solution to the unmet market need of high significance has been demonstrated in laboratory settings with the ongoing research work.
- 2. At the time of the submission of the final proposal, a provisional or non-provisional patent application should have been filed by NJIT or a patent has been awarded to NJIT

- on the proposed technology. If you have submitted an invention disclosure or are planning to submit one, you may submit the 2-page IDEA Concept paper to start the proposal process.
- 3. A tenured or tenure-track faculty member at NJIT should be the PI and the applicant team must have an external industry partner for translational research validation and/or a stakeholder with entrepreneurial activity.
- 4. The PI, if funded, must submit a proposal to NSF TIP directorate, NIH BRP, or a similar program focused on collaborative technology innovation validation and partnership towards translation to market, or follow up with proposals for NJIT Investment Fund or similar avenues.
- 5. The PI, if funded, must send students and/or postdocs to audit classes targeting translation, and attend CTR seminars, workshops, and other events.

TITA Seed Grant Proposal Submission Process

Please submit Stage-1 2-page TITA Idea Concept Paper, Stage-2 5-Page TITA White Paper and TITA Full Proposal following the <u>Multi-Stage TITA Seed Grant Proposal Format and Guidelines</u> to InfoReady.

The multi--stage proposal submission process is as follows:

Stage-1: Submit a simple 2-page TITA Idea Concept Paper

All Idea Concept papers will be reviewed by the <u>TITA External Advisory Board (EAB)</u> who will invite selected applicants for Stage-2 submission. Comments and feedback on the evaluation will be provided.

The faculty who successfully completed the CTR Badge Workshop held on June 17-18, 2025 can skip the Stage-1 to proceed to Stage-2 and submit 5-page White Papers directly. These faculty should fill out the Stage 1 InfoReady application indicating so, and they will be automatically moved onto Stage 2.

Stage-2: If invited, submit a 5-page (with optional self-made video) **TITA White Paper** All TITA White Papers will be reviewed by the TITA external advisory board who will invite selected applicants for Stage-3 submission. If invited, a mentor from the TITA board will be assigned to the applicant team. Comments and feedback on the evaluation will be provided.

In addition to the white paper, a compliance supplement and the full 3 phase budget will be reviewed internally, feedback will be provided if necessary. The compliance supplement will include a list of all project personnel, conflict of interest, export control, research security training, and conflict of commitment.

Stage-3: If invited, submit a full TITA proposal following the proposal format and guidelines. A mentor will be assigned to the applicant team to help with the submission of a full TITA proposal.

All TITA full proposals will be reviewed by the <u>TITA External Advisory Board (EAB)</u> who will invite selected applicants for a live pitch presentation to the board and other potential inventors. The TITA board will make the final decision of awarding TITA Seed Grants endorsing the overall goals, milestones, and assessment on the funded projects with applicant team and mentors. Comments and feedback on the evaluation will be provided.

Stage-4: If invited, present a live pitch on your TITA full proposal to the <u>TITA External Advisory Board (EAB)</u> for the final selection of TITA Seed Grant awards. If awarded with a **TITA Seed Grant**, the applicant team will work with the assigned mentors and pursue translational and market research with enterprise development

All TITA full proposals will be reviewed by the <u>TITA External Advisory Board (EAB)</u> who will invite selected applicants for a live pitch presentation to the board and other potential inventors. The TITA board will make the final decision of awarding TITA Seed Grants endorsing the overall goals, milestones, and assessment on the funded projects with applicant team and mentors. Comments and feedback on the evaluation will be provided.

Evaluation Criterion

- Market/Societal Need: The significance, size, and potential growth of the unmet need
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- Relevance to the NJIT 2030 strategic plan: The potential impact toward the goals of the research, innovation, and entrepreneurship priority area.
- Presentation Skills and Clarity

TITA Seed Grant Proposal Submission: Due Dates

- TITA Seed Grant Announcement: August 21, 2025
- Stage-1: TITA 2-Page IDEA Concept Paper Submission: September 19, 2025
- Faculty with CTR 2025 Badge Workshop Certificate do not need to submit 2-Page IDEA Concept Paper, only indicate an intent to submit Stage 2
- Invitation to Submit TITA White Papers: September 23, 2025
- Stage-2: TITA 5-Page White Paper Submission: October 2, 2025
- Invitation to Submit Full TITA Proposal and Mentor Assignment: October 7, 2025
- Stage-3: TITA Full Proposal Submission: October 22, 2025
- Invitation to Live Pitch Presentation: October 27, 2025

- Stage-4: TITA Full Proposal Live Pitch Presentation to the EAB Board: Nov. 10, 2025
- Announcement of Innovation Pitch Competition: November 24, 2025
- Announcement of TITA-2026 Seed Grant Awards: November 24, 2025
- TITA-2026 Seed Grant Start Date: January 2, 2026

All proposals and documents will be submitted on InfoReady.