

Call for Proposals

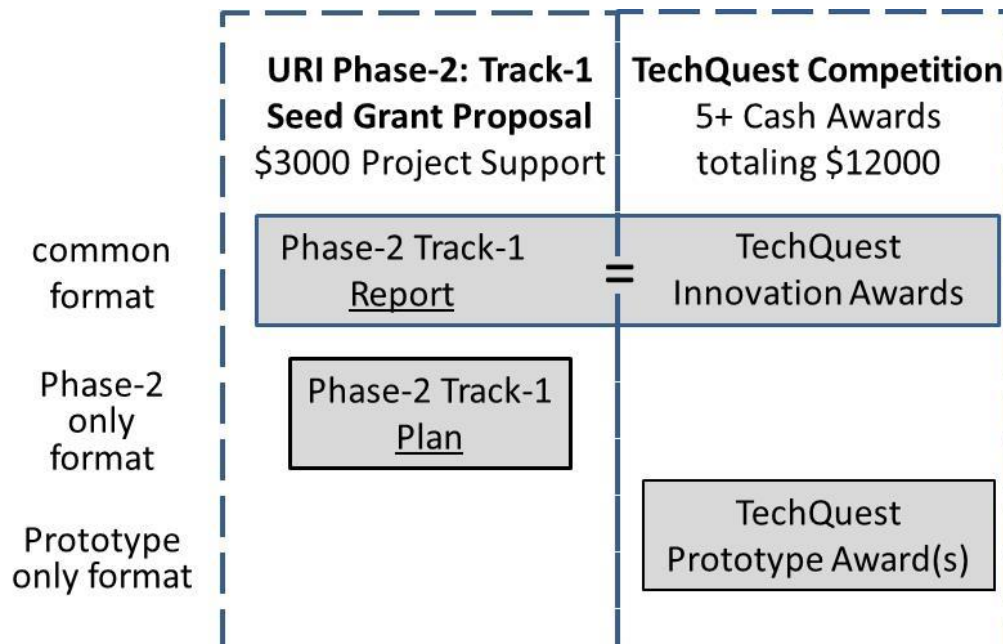
**URI Phase-2 Student Seed Grants (\$3,000 Each Project):
Track-1 ONLY: Technology/Product Development and Innovation
and/or
TechQuest Innovation/Prototype Awards Competition
(\$12,000 in Cash Prizes and \$6,000 in Summer Stipends)**

**For complete information on proposal format, cover sheet and evaluation matrix,
please see the Undergraduate Research and Innovation
<http://centers.njit.edu/uri/programs/index.php>**

Proposals submitted for URI Student Seed Grants Phase-2: Track-1 will be automatically considered for TechQuest Innovation Awards. The Report section (on previous Phase-1 work) of the Phase-2 Track-1 proposal has the same format as the TechQuest Innovation award. The Plan section of Phase-2 Track-1 proposal is not part of TechQuest.

Teams which enter the TechQuest Prototype competition must also enter the TechQuest Innovation competition. Teams may enter the TechQuest Innovation/Prototype competition without submitting a Phase-2 proposal. See diagram below.

Formats for all award proposals are given in Appendix A. To select the competitions you wish to enter, check the appropriate boxes on the cover sheet for proposals (Appendix B).



URI Phase-2: Track-1/ TechQuest

Proposal Submission Deadline: FEBRUARY 23, 2018
Oral presentation by 8-12 finalists: MARCH 22, 2018

Information Session on Proposal Writing and Submission
Hosted by URI External Advisory Board Members (over pizza lunch):
February 8, 2018, 12:00-1:30, Campus Center 240

1. Eligibility

URI Phase-2: Track-1: Technology/Product Development and Innovation

Phase-2 proposals may be submitted by former Phase-1 Student Seed Grant winners who have completed Phase-1 work. Phase 2 proposals consist of a Report on Phase 1 work (same format as TechQuest Innovation Award) and a Plan only for Phase-2. Phase-2 proposals may also be submitted by teams who have not participated in Phase-1, but have done comparable preparation for Phase-2. This preparation must be documented in the same format as sections 1-5 of the evaluation sheet (Appendix A). All proposals are to use the cover page in Appendix B.

Note: Seniors are only eligible if they are a rising senior at the time of the application or have at least two full semesters to work on the project. Students are required to present the progress report and the final presentation to the board during the following semesters.

TechQuest Innovation Award Competition:

This competition is to promote and reward innovation among NJIT undergraduates. TechQuest fosters innovation as a bridge between an inventive idea and commercialization of that idea. Participants in TechQuest must be in good academic standing and be enrolled full-time during the fall and spring semesters of their year of entry. Students may form teams consisting of undergraduates from any NJIT department. Teams may have as an advisor a NJIT faculty member or other person associated with NJIT. NSF-sponsored projects, Capstone and other technology projects by NJIT undergraduates may be entered in TechQuest. Projects entered in TechQuest may build on prior work, but the presenting team **must identify its unique contribution** to the presented work.

The innovative idea must originate within the team and/or team advisor as documented in the written report. Ideas which originate outside NJIT, e.g. a co-worker at a place of employment, are not eligible.

Selection of Finalists:

In the preliminary round of judging, eight to twelve finalists will be selected based on the written report due on FEBRUARY 23, 2018. The finalists will be chosen in two pools based on the highest scores for the URI Seed Grant Proposal (Report and Plan) and the TechQuest documents (Innovation and optional Prototype). Scores for teams entering the Prototype competition (additional 25%) will be added to the TechQuest Innovation score which will then be scaled to 100%. The finalists compete in an oral presentation on MARCH 22, 2018.

URI Phase-2 Student Seed Grants will be announced by APRIL 3, 2018. TechQuest winners will be announced on Innovation Day, APRIL 10, 2018.

Questions on these competitions should be directed to Dr. Atam Dhawan Dhawan@njit.edu.

2. Intellectual Property

To obtain information on patent opportunities and prior art issues, students are encouraged to attend a meeting addressing intellectual property on FEBRUARY 12, 2018, 1:00-2:30, Campus Center Ballroom B or to view the presentation online [here](#). Sanjiv Chokshi, Esq., Assistant General Counsel for Patents and Intellectual Property at NJIT will conduct the session which addresses patent opportunities and patentability requirements. He is available to answer questions on the invention disclosure process (Chokshi@njit.edu). General information on patents is available [here](#). Mr. Chokshi will receive all submitted proposals and be notified of the finalists. At his discretion, he may ask a team to submit an invention disclosure prior to the oral presentations on MARCH 22, 2018

Participants are encouraged to record the origin of ideas and safeguard data in a written or electronic laboratory notebook or by other means. Records are essential to clarify the origin of patentable ideas.

3. Grants and Awards

URI Phase-2: Track-1: Technology/Product Development and Innovation

URI Phase-2 Seed Grants provide up to \$3,000 per project to pursue research further or to develop a prototype. Funds can only be used to order project and prototyping supplies through the Office of Undergraduate Research and Innovation. Awarding of the Phase-2 grants will be based on the Phase-2 proposal ([Report](#) and [Plan](#)) as shown in the Evaluation Sheets (Appendix A).

TechQuest Awards

The TechQuest awards for 2018 consist of three parts: (1) Innovation Awards in cash for the winning teams, (2) one or more Prototype Award(s) in cash for the best prototype(s) built by presenting team(s) and (3) two stipends of \$3000 to be used by winning team members to continue work during the summer at NJIT on their projects.

The five plus TechQuest cash awards for 2018 are:

	Innovation Awards				Prototype
Cash Recognition Awards	First Place (1 st Time)	First Place (All Entrants)	Second Place (All Entrants)	Third Place (All Entrants)	Awards (1st Time)
	\$3000	\$3000	\$2000	\$1000	\$3000

The First Prize (1st Time) Innovation Award will be given for projects and for teams that have not won a TechQuest prize previously. There will also be First, Second and Third place Innovation Awards without restrictions (all entrants).

One or more Prototype Award(s) (1st Time) will be given for the best prototype(s) representing the innovations and made by the presenting teams. A prototype that has received a Prototype Award previously is not eligible.

Judges may award the Prototype Prize(s) to more than one team and distribute the \$3000 prize among winners at their discretion. The Prototype Award may be won by teams that have won Innovation Awards in the same or previous years. The prototype may include commercial devices or software if they will be incorporated into the product. Teams may show prototypes but choose not to enter the prototype competition.

Teams must indicate the competitions they wish to enter by checking the appropriate boxes on the Cover Page (Appendix B).

Written reports of prior TechQuest winners can be viewed at https://1drv.ms/f/s!Agp_t-xJXoOvgs905GPilmyxQ9NaSg.

Cash recognition awards are to be divided equally among team members. Team advisors are not eligible to share in the awards. Teams are encouraged to use prize money to further their projects.

TechQuest summer stipends will be provided to two winning team members who continue working on their projects in the NJIT Summer Innovation Accelerator Program (prepares students to launch businesses). The stipends for summer programs will be awarded, in order of preference, to the Prototype, First (1st Time), First, Second, and then Third place Innovation Award team members. Any remaining stipends will go to TechQuest participants who did not win awards. Other sources of funding are available to support summer work. Total summer support to an individual from TechQuest, university funds or grant/foundation funds is capped at \$3,000.

All TechQuest awards are given at the discretion of the judges. Interpretation of the competition rules, including disqualification of individuals or teams, will be made by the judges. Decisions of the judges are final. Advisors to TechQuest teams may not serve as judges.

4. Judging Criteria

Eight to twelve individual or team projects will qualify as finalists on the basis of the written proposals which will be treated as confidential.

Phase-2: Track-1 Seed Grant recipients and TechQuest award winners will be decided at a closed oral presentation on MARCH 22, 2018 at 9:00-12:00, BALLROOM B. Ratings for the Innovation Awards will be weighted one-half on the report and one-half on the oral presentation. Ratings for the Prototype Awards will be weighted one-quarter on the written report and three-quarters on the demonstration at the oral presentation. In the rankings of the written reports for TechQuest to select finalists, scores for teams competing for the Prototype Award will be scaled to 4/5 of their total score to account proportionally for additional points (25%) available to them. Students entering the Prototype Award competition must also compete in the five TechQuest Innovation Award categories (Appendix A). Teams should enter the prototype competition only if they have a well-developed prototype; otherwise the prototype score may bring down their overall score.

Both written proposals and presentations may contain intellectual property and other confidential information that will not be disclosed publically. Students are encouraged to provide sufficient technical detail so judges can assess the feasibility of their project. A requirement for judging is to maintain the confidentiality of the written report and the oral presentations.

It is very important that **written reports and oral presentations follow the format of the Evaluation Sheets** (Appendix A) used by the judges. Judges may (and do) award 0 (zero) for missing categories.

Written Proposal. The body of the written proposal for TechQuest will be no more than 5 pages or 6 pages for Prototype Award entrants. The Phase-2 Plan has no page limit. Content exceeding page limits may be disregarded by the judges. The report is to be submitted in digital format, preferably PDF, to techquest@njit.edu no later than midnight FEBRUARY 23, 2018. Drawings, photos, references and internet links in the report are encouraged to facilitate evaluation of the report.

The cover page for the report, not included in the page limitation, is given in Appendix B. One team member (first entry) should be designated as the contact person. Pages are to be numbered.

Oral Presentation: Each individual or team finalist will make an oral presentation to the judges on MARCH 22, 2018, 9:00-12:00, BALLROOM B. The oral presentation is closed to the public and may contain proprietary information. All members of the team are expected to attend the presentation and be available to answer questions. The presentations for TechQuest Innovation Awards will be a maximum of 6 minutes and will be followed with questions by the judges for up to 8 minutes. Phase-2 presentations will be allowed an additional 3 minutes for the oral presentation. An additional 3 minutes for presentation and an additional 4 minutes for questions will be allowed for the prototype entrants. The question period does not have a separate judging category; answers to questions will influence judging of the other categories.

For Prototype Award entrants, the prototype device or software should be demonstrated as part of the oral presentation. A video may be used if indoor demonstration is not feasible.

The Phase-2: Track-1 Seed Grants Award winners will be selected based on ranking in the Phase-2 only portions of the written proposals (50% weighting) and the oral presentations (50% weighting). TechQuest Innovation Award winners will be selected based on ranking in the TechQuest Innovation only sections of the written proposals (50% weighting) and the oral presentations (50% weighting). The Prototype Award winners will be ranked on the basis of the Prototype only score on the written (weighted 25%) and oral (weighted 75%) Evaluation Sheets.

Poster Presentation: Finalists are required and other entrants are encouraged to participate in the poster session on Innovation Day APRIL 10, 2018. The poster session is open to the public. If a team wishes to preserve patent rights to its project, the poster must not contain enabling disclosures of its invention. The team may contact Sanjiv Chokshi, Esq. with questions about intellectual property and what constitutes an enabling disclosure. Mr. Chokshi may contact the team on patent issues based on information in the written report.

URI Phase-2: Track-1 Student Seed Grants and TechQuest Awards Timeline

FEBRUARY 12, 2018	Intellectual Property Presentation 1:00-2:30 at <i>Campus Center Ballroom B</i>
FEBRUARY 23, 2018	Submit written proposal to techquest@njit.edu
MARCH 9, 2018	Deadline for disclosures if requested by Sanjiv Chokshi, Esq.
MARCH 22, 2018	Oral presentation by finalists
APRIL 3, 2018	URI Phase-2: Track-1 Seed Grants winners announced
APRIL 10, 2018	Innovation Day Poster Session - TechQuest winners announced

Any questions about the URI Student Seed Grants and TechQuest Innovation/Prototype Awards Competition should be directed to

Ms. Angela Retino at aretino@njit.edu

Appendix A

Evaluation Sheet: Written Proposal/Report

Project Title	Judge					
	Highest				Lowest	Missing
Score of 0 for no information in category.	5	4	3	2	1	0
1. Problem Statement, Significance, and Goals: 15% What problem are you trying to address? Why is the problem important (scope, need, urgency)? State the project goals; explain how achieving them will help solve the problem.						
2. Innovation and Patentability: 20% What is the origin of your inventive idea? What is novel and insightful in your approach? What prior art, including patents, may limit your freedom to practice or ability to seek a patent?						
3. Market Needs: 20% Provide evidence there is a market demand or unmet need addressed by your problem solution. Describe how your product or service is better than existing alternatives.						
4. Bridge to Commercialization: 10% What are possible business strategies (including exit strategies) for your problem solution?						
5. Accomplishments and Challenges: 35% Describe the accomplishments and the challenges overcome by your team to date. What future issues do you foresee and how will you deal with them? Describe previous work related to your project and identify your team's unique contributions.						
Phase-2 Specific Goals: 10% Describe clearly your Phase-2 goals for further prototype development. Phase-1 Participants: How have your Phase-2 goals evolved based on your experience and the lessons learned from Phase-1.						
Phase-2 Work Plan and Methods: 10% Layout your Phase-2 work plan and indicate updates from Phase-1. What capabilities do you expect your prototype to demonstrate? Describe procedures for your Phase-2 work.						
Phase-2 Expected Outcomes and Deliverables: 20% What do you expect as the deliverables for your Phase-2 work? Provide a timeline.						
Phase-2 Resources and Budget Needed: 10% Provide a budget and justification for supplies to pursue Phase-2 market research and development of a prototype. Budget is not to exceed \$3,000.						
TQ Prototype: additional 25% Is the prototype effective in demonstrating the innovation and for gaining acceptance by potential backers? Does the prototype show creativity and skill by the team members? Has the team made effective use of available technology for the prototype?						
Judges' comments to be given to authors.						

Proposal Submission Instructions:

For Phase 2 Track 1 Seed Grants, Complete items 1-5 (Report on Phase 1 or comparable preparation work) and the next four items (Plan for Phase 2) as shown in the above table (Evaluation Sheet: Written Proposal/Report). Completing items 1-5 allows your team to enter TechQuest Innovation competition with no additional work.

For the TechQuest Innovation awards only, complete items 1-5. To be considered for the TechQuest Prototype award in addition to the Innovation Awards, complete the last item on the page.

Evaluation Sheet: Oral Presentation

	Project Title	Judge					
		Highest				Lowest	Missing
	Score of 0 for no information in category.	5	4	3	2	1	0
Phase-2 Track-1 Report = TQ Innovation Entry	1. Problem Statement, Significance, and Goals: 15% What problem are you trying to address? Why is the problem important (scope, need, urgency)? State the project goals; explain how achieving them will help solve the problem.						
	2. Innovation and Patentability: 20% What is the origin of your inventive idea? What is novel and insightful in your approach? What prior art, including patents, may limit your freedom to practice or ability to seek a patent?						
	3. Market Needs: 20% Provide evidence there is a market demand or unmet need addressed by your problem solution. Describe how your product or service is better than existing alternatives.						
	4. Bridge to Commercialization: 10% What are possible business strategies (including exit strategies) for your problem solution?						
	5. Accomplishments and Challenges: 25% Describe the accomplishments and the challenges overcome by your team to date. What future issues do you foresee and how will you deal with them? Describe previous work related to your project and identify your team's unique contributions.						
	6. Oral Presentation: 10% Evaluate the quality of the presentation including technical coherence and marketing effectiveness.						
Phase-2 Track-1 Plan	Phase-2 Specific Goals: 10% Describe clearly your Phase-2 goals for further prototype development. Phase-1 Participants: How have your Phase-2 goals evolved based on your experience and the lessons learned from Phase-1.						
	Phase-2 Work Plan and Methods: 20% Layout your Phase-2 work plan and indicate updates from Phase-1. What capabilities do you expect your prototype to demonstrate? Describe procedures for your Phase-2 work.						
	Phase-2 Expected Outcomes and Deliverables: 10% What do you expect as the deliverables for your Phase-2 work? Provide a timeline.						
	Phase-2 Resources and Budget Needed: 10% Provide a budget and justification for supplies to pursue Phase-2 market research and development of a prototype. Budget is not to exceed \$3,000.						
Prototype	TQ Prototype: additional 25% Is the prototype effective in demonstrating the innovation and for gaining support by potential funders? Does the prototype show creativity and skill by the team members? Has the team made effective use of available technology in the prototype?						
Judges' comments to be given to authors.							

Cover Page

Undergraduate Research and Innovation Phase-2: Track-1 Student Seed Grant and TechQuest Innovation/Prototype Awards

Deadline: February 23, 2018

TechQuest Written Report: Maximum 5 pages plus 1 page for Prototype entrants.

Phase 2: Track 1 Report/Proposal: no page limit.

(Submit the report(s)/proposal to techquest@njit.edu)

Oral Presentation, March 22, 2018; 9.00 AM to 12.30 PM

Title of Project

Please check all categories that apply to your proposal:

- | | |
|--|--|
| <input type="checkbox"/> URI Phase-2 Track-1: (Technology/Product Development) | |
| <input type="checkbox"/> TechQuest Innovation Awards | <input type="checkbox"/> First Time Entry# |
| <input type="checkbox"/> TechQuest Prototype Award | <input type="checkbox"/> First Time Entry# |

Date Submitted: _____

Proposal Team

Student Name	Major	Academic Year (E.g. Junior...Senior*)	Email
_____	_____	_____	_____ Lead member
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Team Advisor

Name _____ Department _____ Phone/Email _____

Signature of the Advisor _____

*Note for Phase-2 Student Seed Grant Competition: Seniors are only eligible if they have at least two additional full semesters to work on the project. Students are required to present the progress report and the final presentation to the board in the following semester(s).

*Note for TechQuest Innovation/Prototype Competition: Seniors are eligible for all TechQuest Awards. Seniors must be registered for fall 2018 semester to receive a summer stipend to pursue their project.

#Neither the project nor any team member has won in this category of TechQuest Awards previously.