

William Paterson gets \$1M grant to fund STEM scholarships for underserved communities

By **ROI-NJ Staff** (Wayne) - September 23, 2020



(<https://d3f1hgx3lfk57q.cloudfront.net/wp-content/uploads/2019/10/William-Paterson-FB-crop.jpg>)

William Paterson University received a five-year, \$1 million scholarship grant from the National Science Foundation. - *File photo*

There has been a push to get more people from underserved communities in STEM fields. William Paterson University (<https://www.wpunj.edu/>) just got \$1 million dollars' worth of help to do so.

The school announced this week that it has been awarded a five-year, \$1 million Scholarships-in-STEM grant from the National Science Foundation (<https://www.nsf.gov/>), which will support WP students majoring in mathematics and computer science through scholarships and mentoring.

Over the five-year duration, the project will support 26 first-year and transfer students who are pursuing bachelor's degrees in mathematics, computer science or computer information technology.

First-year students will receive scholarship support for up to four years, and transfer students will receive up to two years of scholarship support.

With this grant award, William Paterson intends to enroll three cohorts of low-income, academically talented students as mathematics and computer science (MaCS) scholars and support them with scholarships.

The university also will work to improve year-over-year retention rates for MaCS scholars who are first-time, full-time, first-year or transfer students, and improve graduation rates for all MaCS scholars.

The funds also will support a research study that investigates the relationship between college retention for low-income students and strength-based, culturally responsive mentoring. The proposed project will also refine the recruitment pipeline of females into the target STEM majors, which will increase enrollment and consequentially increase the number of underrepresented STEM graduates entering the workforce.

The grant award also will allow the university to develop leadership programs at its seven partner schools, which include:

- Bergen Community College;
- Passaic County Community College;
- Passaic County Technical-Vocational Schools;
- Manchester Regional High School;
- Paterson Charter School for Science & Technology;
- The School of STEM, Paterson Public Schools JFK Educational Complex;
- School of Information Technology, Paterson Public Schools.

Venkat Sharma, the dean of the College of Science and Health, who serves as the team's STEM administrator, said the scholarships match the school's long tradition of educating first-generation college students, many of whom are children of immigrant parents.

The project is funded by NSF's Scholarships in Science, Technology, Engineering and Mathematics program, which seeks to increase the number of low-income, academically talented students with demonstrated financial need who earn degrees in STEM fields.

This project has the potential to broaden participation in STEM fields and to learn how culturally responsive mentoring and individual development plans support retention and graduation of this student population.

The William Paterson team that worked on obtaining the grant project includes: principal investigator Jyoti A. Champanerkar, professor, mathematics; along with co-principal investigators Paul von Dohlen, professor, mathematics; Cyril S. Ku, professor, computer science; Weihus (Daisy) Liu, assistant professor, computer science; Djanna Hill, chairperson, Department of Community and Social Justice Studies, and professor, teacher education.

"The overall goal of this project is to increase STEM degree completion of low-income, high-achieving undergraduates with demonstrated financial need," Sharma said. "I congratulate all of our colleagues for their hard work in obtaining this highly competitive and transformative grant."

ROI-NJ Staff (<https://www.roi-nj.com/author/roi-nj-staff/>)

editorial@roi-nj.com (<mailto:http://editorial@roi-nj.com>)

[@roinjnews](https://twitter.com/roinjnews) (<https://twitter.com/roinjnews>)