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## RIT awarded NSF funding to conceptualize Quantum Photonic Institute

RIT will develop plan for open-access Quantum Foundry for quantum photonic circuits



A. Sue Weisler

Don Figer, director of RIT's Future Photon Initiative, led leaders in quantum science and technology on a tour of RIT's photonics research facilities during the Photonics for Quantum Workshop earlier this year.

The National Science Foundation awarded Rochester Institute of Technology a grant to conceptualize a new institute that would be at the forefront of quantum science and technology. RIT received \$150,000 in funding from the NSF's Quantum Leap Challenge Institutes program to create a plan for an institute that would expand quantum science and technology capabilities through quantum photonic integrated circuits.

"Quantum technologies are on the verge of transitioning from fundamental research to applied technology, forming a quantum industry," said Don Figer, director of RIT's [Future Photon Initiative](#). "This field will have broad impact on computing, artificial intelligence, biosensors, positioning systems, navigation, machine learning and cryptography. The new funding will help us develop a proposal for a Quantum Photonic Institute that would create and use the only U.S.-based open-access Quantum Foundry for quantum photonic circuits, positioning RIT at the forefront of this emerging industry."

The U.S. government boosted efforts to accelerate quantum technology in December when it signed the National Quantum Initiative Act into law, providing \$1.2 billion in funding for quantum technology research over five years. The act will create new multidisciplinary research centers aimed at transitioning quantum technologies from laboratory experiment to deployable technologies. These centers and their partners will train the future quantum workforce.

"RIT has always been a leader in innovative technologies, and I am pleased that this grant will allow them to continue that legacy by solidifying their position in the quantum science field," said U.S. Congressman Joe Morelle. "Quantum-photonic technologies have broad applications that will strengthen our economy and create new job opportunities. I am grateful to NSF for this investment and look forward to RIT's growth and success in this important industry."

Earlier this year, RIT brought hundreds of leaders in quantum science and technology to campus for the Photonics for Quantum Workshop.

RIT's Future Photon Initiative develops photonic devices in pursuit of answers to grand questions, leveraging efforts of existing RIT research groups who develop technology for the generation, transmission, manipulation, absorption, and detection of photons. For more information, go to <https://www.rit.edu/fpi/>.