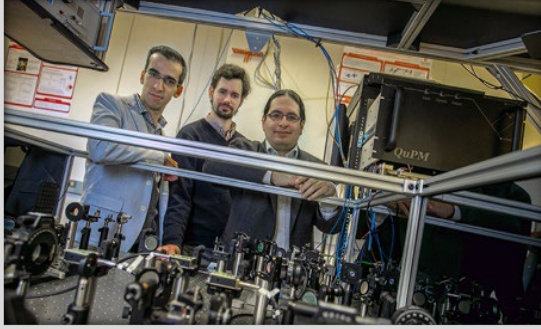




Qunnect - Executive Summary

MISSION

Founded in 2017 by a team of quantum physicists from Stony Brook University, Qunnect's mission is to commercialize a first-in-class product suite to enable real-world, scalable, quantum networking.



LICENSING

Qunnect has exclusive licensing rights to innovations generated by the parent lab through July 2023.

STRUCTURE

Delaware C-corporation (Feb 2020)

FINANCIAL SUPPORT

- \$800k Seed Round closed Q4 2019
- \$3.5M Federal Grants (USDOE, USAF, NSF)

MANAGEMENT TEAM

- Noel Goddard, PhD - CEO
- Mehdi Namazi, PhD - CSO
- Mael Flament, MS - CTO & Eng. Lead

DIRECTORS

- Robert Brill, PhD - Chairman; Seasoned Technology Investor & CEO
- Mark Tolbert, MBA
President Toptica Photonics, USA
- Eden Figueroa, PhD
Director of Quantum Information Labs at Stony Brook Univ. & Brookhaven National Lab

RESIDENCE

- Bldg 77, Brooklyn Navy Yard, NYC
- CEWIT Incubator at Stony Brook Univ.

CONTACT INFORMATION

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www.linkedin.com/company/qunnectllc

PROBLEM

- Quantum communications technologies are no longer science fiction, but the full promise cannot be realized without addressing the challenges of field deployment, infrastructure compatibility, and scalability.
- First generation fiber-based quantum communications technologies are inherently distance-limited.

QUNNECT'S SOLUTION

- Qunnect is building a first-in-class product suite of quantum devices and quantum-support devices engineered to operate at room temperature, with compatibility to existing telecom fibers, and minimal maintenance.
- The product suite, called a Quantum Repeater, will enable a new type of communication protocol, based on entanglement swapping, supporting long distance quantum-secure communication.

OPPORTUNITY

- Quantum communications is an emerging industry. Securing early adopters is an opportunity to become a standard in the field, assuring market traction.

MARKETS

- Despite the early stage of the industry, quantum communication annual revenue surpassed \$280M in 2017 and is projected to **grow at a CAGR 37.0%+** due to its long-term cyber-security advantages
- Early Adopters will be defense, government and academic researchers developing communication protocols and defining standards.
- Downstream markets include financial institutions, energy sectors, telecommunications, and other critical infrastructures.

COMPETITIVE ADVANTAGE

- Qunnect is building robust devices that can be deployed on real-world infrastructure, without requiring complex cooling or vacuum.
- Devices are seamlessly compatible and populate server racks within a communication node, facilitating adoption.
- First Mover - Qunnect will be the first company, globally, to commercialize a quantum memory, the keystone to enabling the next generation of quantum communication protocols.

PRODUCT SUITE

Quantum Devices

- Quantum Memory (**Qu-Mem**) - critical to next-gen quantum networks, enabling precise synchronization of photons within the network
- Quantum Source (**Qu-Source**) - creates entangled photons for transmission
- Quantum Swapping Station (**Qu-Swap**) - performs entanglement swapping protocol

Quantum Support Devices

- Auto Polarization Compensator (**Qu-APC**)
- Universal Frequency (**Qu-Lock**) and Timing (**Qu-Sync**) standards

FIELD TESTING

- Brookhaven Nation Labs and ESNnet have established a 70km fiber test bed in eastern Long Island where Qunnect is performing field testing.