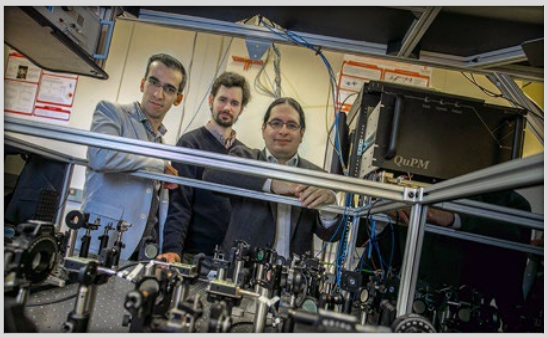
Qunnect – Executive Summary

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 an exclusive option to license innovations generated by the parent lab through July 2023.

STRUCTURE
Delaware C-corporation (Feb 2020)

FINANCIAL SUPPORT
-$800k Seed Round closed Q4 2019
-$3.78M Federal Grants to date
-$685k+ Bridge Round (open now)

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

CONTACT INFORMATION
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PROBLEM
- Quantum communications technologies are transitioning from lab to market, 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 early exclusivity through strong intellectual property filings.

MARKETS
- Commercial 1st generation technologies supporting key distribution protocols (QKD) amassed revenue >$200M in 2020 and are projected to grow to $4B by 2029.
- The early market will be dominated by defense, government, and telecom researchers developing communication protocols and defining standards.
- Downstream markets include finance, data storage and critical infrastructures.

COMPETITIVE ADVANTAGE
- Qunnect is building devices engineered for deployment on existing fiber infrastructure, housed in standard server rack encasements, with no requirements for extreme cooling or vacuum.
- 1st Mover – Qunnect is the first company, globally, to commercialize a quantum memory (Q2 2021), the key to enabling the next generation of quantum communication protocols.

PRODUCT SUITE

Quantum Devices
- Quantum Memory (Qu-Mem) – enables on-demand qubit storage and release for synchronization of transactions on the network
- Quantum Source (Qu-Source) – creates qubits for use in the network

Quantum Support Devices
- Auto Polarization Compensator (Qu-APC) – preserves qubit fidelity in standard fibers
- Universal Frequency (Qu-Lock) and Timing (Qu-Sync) standards
- Quantum Swapping Station (Qu-Swap) – performs entanglement swapping transactions

FIELD TESTING
- Qunnect generates value through performance testing on fiber testbeds, which informs design improvements.