

Funding Opportunity: Army Releases BAA for NSA Quantum Computing Collaboration

Lewis-Burke Associates LLC – April 23, 2021

The Army Research Office (ARO), in partnership with the National Security Agency's (NSA) Laboratory for Physical Sciences (LPS), released a multi-year Broad Agency Announcement (BAA) seeking proposals for collaborative qubit research. ARO and LPS seek disruptive fundamental research to improve the current state of quantum computing and qubit development. In addition, this BAA seeks to bring together researchers from a variety of backgrounds including academia, private industry, and government laboratories in order to address long-term challenges pertaining to quantum information science (QIS). ARO will accomplish this by forming Collaboratories, "a center without walls," in which researchers can collaborate and share information and data regardless of physical location.

Three types of proposals will be funded under this BAA:

1. **Incubators:** This opportunity will provide funding to single investigators or small teams for proposals addressing the BAA's research thrusts or generally of interest to the QIS field, but lack the research infrastructure to pursue this research at their own institutions. Incubator teams will be able to collaborate with LPS staff and leverage the Lab's research infrastructure.
2. **Collaboratories:** This opportunity aims to bring from academia, private industry, and government laboratories to advance long-term projects developing fundamental research in qubit technology and quantum information science. Collaboratories are expected to last between one to three years in order to develop proof-of-concept experiments and/or explore new theories relevant to QIS.
3. **Quantum Computing Research (QuaCR) Fellowships:** this opportunity will support U.S. graduates and postdoctoral students entering the field of quantum information processing and quantum sensing. QuaCR fellows will spend at least one summer working with an LPS researcher at the Lab.

In fiscal year (FY) 2021, ARO and LPS have identified six research thrusts as part of the BAA. More information on each can be found in the full BAA:

- Spin qubits, fast
- More epitaxy, better qubits?
- Voltage controllable superconducting qubits
- Going hot and not looking back
- Beyond Moore, before Shor
- Accelerated learning of quantum information concepts

Due Dates: This BAA will be open until **April 30, 2026**. White papers, while not required, are highly encouraged to be submitted via email to usarmy.rtp.devcom-arl.mesg.qcbox@mail.mil between **February 1** to **May 30** of each year. Full proposals should be submitted through grants.gov before June 1 in order to be considered for funding during that fiscal year.

Award Information: ARO anticipates funding multiple awards under each category, subject to the availability of funding. This includes:

- Incubator proposals will be funded up to \$500,000 per year for one to three years.
- Collaboratory proposals will be funded at up to \$800,000 per year for two to three years
- QuaCR fellowships will be funded for three years for graduate students and two years for postdoctoral candidates.

Eligibility: This BAA is open to proposals from institutions of higher education, non-profit and industry (for-profit) organizations. Historically Black Colleges and Universities and Minority Serving Institutions (HBCUs/MSIs) are encouraged to apply. Applicants for the Quantum Computing Research (QuaCR) Fellowship must be U.S. citizens in a graduate or postdoctoral position and must work with a principle investigator or co-investigator of ARO quantum information science research awards.

Sources and Additional Information:

- The full ARO solicitation can be found [here](#), or at www.grants.gov under Funding Opportunity Number “W911NF-21-S-0009.”