Sandia Academic Alliance

Sandia National Laboratories' Nanodevices and Microsystems (NMRF) Research Foundation is interested in funding a research collaboration for women in their second or third year of a PhD program.

If you are interested in exploring funded research collaborations with Sandia, please send a paragraph summary of your thesis, anticipated graduation date, resume and contact information to academicprograms@sandia.gov no later than **1/31/2022.** After this date, we will review applicants and make selections based on merit and research alignment. The funded project will include opportunities for internships and laboratory visits. **Note: U.S. citizenship is required to support this project.**

The NMRF LDRD portfolio is looking for a student to support a project summarized below:

This research aims to develop a practical quantum computing (QC) processor with at least 100 neutral-atom qubits and high entangling gate fidelity (> 99%) by accomplishing the following: Investigations in fundamental science and engineering solutions for the unique single-photon Rydberg-dressing schemes; Development of UV photonic integrated circuits for scaling neutron-atom QC beyond hundreds of qubits; Studies of robust quantum-control methods. This new QC platform will be ideal for benchmarking and experimenting QC codes and algorithms toward universal quantum computation that classical supercomputers cannot achieve, an important capability for national security missions.