



Quantum New Mexico (QNM) Symposium - Welcome!

Edl Schamiloglu

Distinguished Professor of Electrical and Computer Engineering Special Assistant to the Provost for National Lab Relations Associate Dean for Research and Innovation, School of Engineering

University of New Mexico, Albuquerque, NM 87131-0001 USA

March 31, 2022





Quantum New Mexico (QNM) Symposium - Welcome!

Edl Schamiloglu

Distinguished Professor of Electrical and Computer Engineering

Special Assistant to the Provost for National Lab Relations

Associate Dean for Research and Innovation, School of Engineering

University of New Mexico, Albuquerque, NM 87131-0001 USA

March 31, 2022





LANL - Workforce Development

 UNM-Los Alamos (UNM-LA), UNM School of Engineering, and the Los Alamos National Laboratory (LANL) launched a program in mechanical engineering to meet local workforce needs in 2020-2021. The collaboration expands the existing two-year pre-engineering program to a Bachelor of Science in Mechanical Engineering (BSME) program on the UNM-LA campus. LANL Laboratory Director Thom Mason remarked "Partnerships like this are essential to providing possibilities for our current workforce and for preparing the workforce of the future." "I thank the University of New Mexico and UNM-Los Alamos for recognizing the need to train new mechanical engineers for high-paying jobs that are in demand at the Laboratory and nationwide."





LANL - Workforce Development

 LANL has been sponsoring several UNM faculty under the auspices of the "LANL-Accelerator Science and Technology Graduate and Undergraduate Research Program"

All News » News Releases » 2019 » July » Institutional Agreement

UNM and Los Alamos National Labs sign new cooperative

joint faculty agreement

Five-year joint appointments will increase research opportunities

This is a tremendous opportunity to grow the QNM workforce for LANL!



Los Alamos National Laboratory, shown above, is coordinating with the University of New Mexico with a new joint faculty agreement to increase learning and research opportunities.





SNL - Workforce Development

The following activities are ongoing as part of workforce development activities with Sandia:

• The University of New Mexico School of Engineering has been partnering with Sandia National Laboratories' Nonlinear Mechanics and Dynamics (NOMAD) Summer Research Institute. The summer Institute, which brings together graduate students and researchers from around the USA, including from Sandia and UNM, is a two-week intense program held at UNM. The program seeks to tackle research challenges in the field of nonlinear mechanics and dynamics.





SNL - Workforce Development

- The UNM/Sandia Advanced Materials Laboratory (AML) partnership (pre-COVID) used to host dozens of students from around the US to perform summer research at AML, located in UNM's Science & Technology Park in south campus.
- In order to build upon this collaboration and enhance the throughput of highly specialized M.S. and Ph.D. graduates, UNM, Sandia, and AFRL are collaborating to build the New Mexico Research Innovation Collaborative (NM-RIC), a large new collaborative facility to not only house AML, but also UNM's recently founded Directed Energy Center, the Center for Advanced Research Computing, some QNM space, and other tenants. Design is to be completed in 2023 and construction in 2025.





SNL - Workforce Development - DEI

The University of New Mexico, led by Dean Julie Coonrod of Graduate Studies, is supporting Sandia's START HBCU Program. Four schools known for their academic excellence and scientific capabilities joined Sandia's Securing Top Academic Research & Talent with Historically Black Colleges and Universities (START HBCU) Program: Florida A&M, Norfolk State, North Carolina A&T State, and Prairie View A&M.





SNL - Workforce Development - DEI

The START HBCU Program is focused on increasing Sandia's diversity pipeline through the creation of strategic partnerships and cultivation of strong research collaborations with distinguished universities. Each university brings expertise in areas that complement Sandia's. The SOE is recruiting B.S. graduates from these schools for their M.S. and Ph.D. programs. The School of Engineering is offering in-state tuition and Sandia is hiring these students as year-round interns. The first cohort started UNM in Fall 2020.

Sandia Women's Action Network (SWAN) has collaborated with UNM SWE on speakers and events.





SNL - Workforce Development

• Sandia is in discussions with A&S undergraduate advisors to recruit non-STEM students to join Sandia as technologists.

UNM and Sandia are close to completing a **Faculty Loan Program Master Agreement**, similar to the LANL Joint Appointment Master Agreement. We anticipate ~30 Sandians to participate, coming to UNM for a fraction of their FTE and ~10 UNM faculty to participate, joining SNL for a fraction of their FTE. This is a tremendous opportunity to grow the QNM workforce for SNL and industry!