



NCI Southwest

"At its core, the National Nanotechnology Coordinated Infrastructure (NNCI) exists to help scientists and engineers from around the country access the state-of-the-art resources necessary to participate in the nanotechnology revolution. As the southwest regional node of the NNCI, the goals of the NCI-SW are to build a regional infrastructure for nanotechnology discovery and innovation, to address societal needs through education and entrepreneurship, and to serve as a model site of the NNCI."

Dr. Trevor Thornton
<https://ncisouthwest.org/>

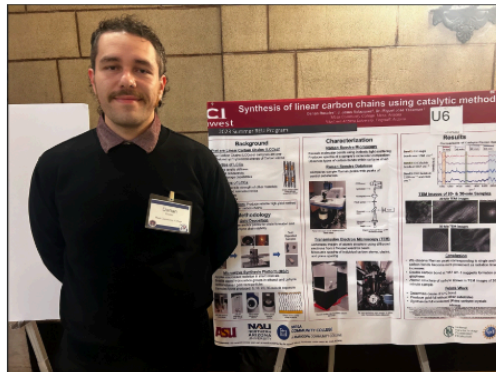
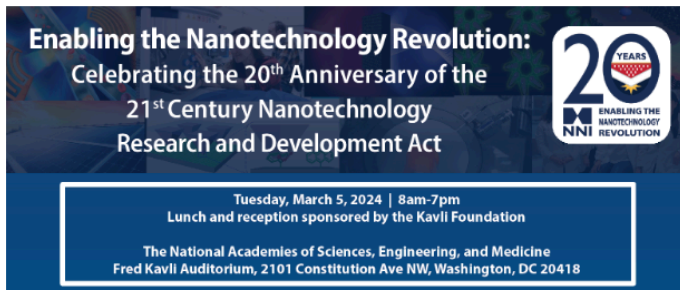
Senator Kelly visits NCI-SW at ASU



Arizona Senator Mark Kelly celebrated innovation and manufacturing by visiting ASU NanoFab and NCI-SW team members. Kelly worked to create the Microelectronics Commons program in the CHIPS and Science Act. ASU was selected as a member of the Microelectronics Commons, receiving \$39.8 million for initial investments in staffing, infrastructure, and programs.

[Learn More about his visit...](#)

<https://www.kelly.senate.gov/newsroom/press-releases/kelly-visits-asu-nanofab-celebrates-innovation-and-manufacturing-at-work-thanks-to-microelectronics-commons/>



NCI-SW Attends Enabling the Nanotechnology Revolution Symposium

The NNI community celebrated the 20th Anniversary of the 21st Century Nanotechnology Research & Development Act by hosting a symposium on March 5, 2024, at the National Academies of Sciences, Engineering, and Medicine in Washington, D.C. The event aimed to acknowledge the significance of research and development at the nanoscale and strategize for the promising future of the NNI. NCI-SW Summer 2023 REU Participant Darian Rosales presented his research poster, "*Synthesis of Linear Carbon Chains Using Catalytic Methods*" while NCI-SW REU Advisor Dr. Miguel José Yacamán, Northern Arizona University, participated in an expert panel on nano infrastructure. NCI-SW's Dr. Jameson Wetmore joined a panel presentation on responsible development of nanotechnology.

[Learn more about the anniversary symposium here.](#)

<https://www.nano.gov/anniversarysymposium/>



11th Annual Winter School on Emerging Technologies: Accelerating Impactful Scholarship

The National Nanotechnology Coordinated Infrastructure (NNCI) Coordinating Office supports NCI-SW and the School for the Future of Innovation in Society at Arizona State University's Winter School - an opportunity for junior scholars and scientists to be introduced to and gain practical experience with methods and theory for better understanding the social dimensions of emerging technologies. The 2024 Winter School at Saguaro Lake Ranch in Mesa, AZ focused on the broad notion of impact with an aim to explore ways for participants to increase and diversify the impact of their work.

[Learn more about the annual NNCI-Supported Winter School](#)

NCI-SW PI Dr. Trevor Thornton Supports Workforce Development

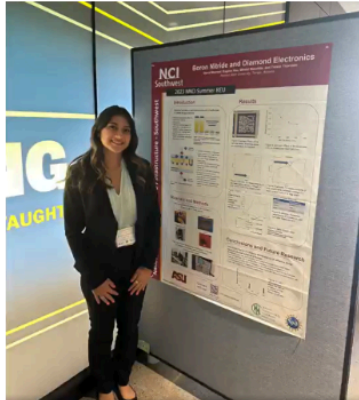


NCI-SW's Dr. Trevor Thornton was recognized for his work developing power and RF electronics capabilities for the Microelectronics Commons Hub at ASU. Dr. Thornton and his students analyze novel materials and designs for communications and power electronics. His work with NCI-SW contributes to developing the workforce and technology essential for safeguarding the future of the US semiconductor industry.

[Read more...](#)

<https://news.engineering.asu.edu/2024/03/strengthening-semiconductor-skills-at-the-swap-hub/>

NCI-SW 's Sierra Monreal Shines as a Recipient of Prestigious Alumni Scholarship



NCI-SW Educational Outreach Student Assistant, Sierra Monreal, recently starred in an alumni scholarship campaign because of her involvement in the ASU student body as an active freshman. Sierra is a third generation ASU Sun Devil and recognized with a Legacy Scholarship to support her undergraduate coursework in Aerospace Engineering & Aeronautics. Sierra was an REU with NCI-SW during the summer of 2024. We are proud of Sierra and the work she continues to do to promote STEM education and research!

[Watch Sierra's video here.](#)

<https://news.engineering.asu.edu/2024/03/strengthening-semiconductor-skills-at-the-swap-hub/>

Dr. Nidhin Kurian Kalarickal collaborates with industry to develop damage-free manufacturing methods for microelectronics



Summer 2023 REU Faculty Advisor Dr. Nidhin Kurian Kalarickal, Assistant Professor in the School of Electrical Computer and Energy Engineering at Arizona State University's Ira A. Fulton Schools of Engineering, was recently recognized for his collaboration with Agnitron company on research techniques to perfect semiconductors for power electronics through the development of damage-free manufacturing methods. By developing a damage-free etching process with his graduate materials science and engineering student Abishek Katta, Dr. Kurian Kalarickal aims to improve the performance of semiconductors that regulate power electronics.

[Read more about Dr. Kurian Kalarickal's research and collaboration with industry](#)

https://news.asu.edu/20240126-science-and-technology-perfecting-semiconductors-power-electronics?%20Strategic%20Communications_SFMCE&ecd42=518002422&ecd73=221637067&ecd37=All%20ASU%20Employees&ecd43=1/29/2024&utm_campaign=ASU_News_News+1-29-24_6827382&utm_medium=email&utm_source=Media%20Relations%20&utm_term=ASU&utm_content=Read+more_Etching

Open Door

2024

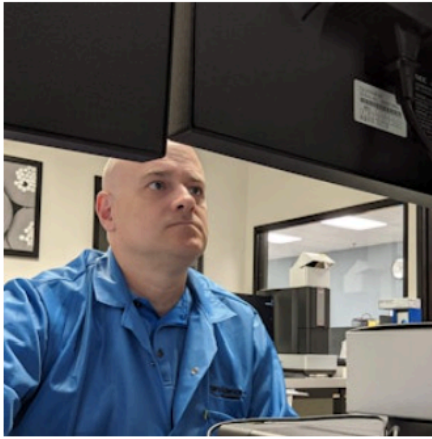
ASU

opendoor.asu.edu



ASU Open Door

ASU community held its annual Open Door on February 24, 2024 in collaboration with SciTech Institute by hosting dozens of interactive events, simulations, challenges, games and more! NCI-SW joined the fun with interactive nanotechnology demonstrations. This signature event is always a favorite for NCI-SW staff and students!



Recent Rio Salado College Microelectronics and Nanomanufacturing Grad Matt Feyerheisen shares his passion for his career as a field engineer with Wingspans.com. “One thing I would say is to have an open mind. The nanotechnology world consists of semi-conductors, supply and logistics, automation, research, troubleshooting, development of new products, chemical and element analysis, and more.” Designed specifically for veterans, the Microelectronics and Nanomanufacturing Certificate (MNC) Program helps meet the needs of a growing microelectronics and semiconductor workforce.

[Listen to Matt's Profile...](#)

NCI-SW Principal Investigators Inès Montañó and Gabe Montañó from Northern Arizona University's Center for Materials Interfaces in Research & Application- ¡MIRA!- continue to break ground in STEM and research through their work to weave science, engineering, and community to drive scientific discovery, education and innovation. Among their successes includes work to support the Dine Institute for Navajo Nation Education, an eight-month fellowship designed for K-12 teachers. [Read more about ¡MIRA! success in their Spring 2023 newsletter.](#)

STEM Fest, a one-day event, held on January 20, 2024 during the Barrett-Jackson Scottsdale Auction, helps introduce attendees to sponsors focused on STEM initiatives. In partnership with the Arizona SciTech Institute, NCI-SW and MIRA showcased their outreach demonstrations at STEM Fest, which brings together STEM programs and companies for an interactive event. NCI-SW also organized for local middle school students to participate in the SparCQS and NNCI outreach tables during STEM Fest to improve the scholars knowledge, confidence, and STEM communication skills.

[Learn more about Gearing Towards the Future STEM Fest 2024](#)

NNCI 2024 Science Outside the Lab Workshop in Washington, DC.



NNCI and NCI-SW's Dr. Jamey Wetmore leads *Science Outside the Lab* workshop in Washington, D.C. as an introduction to how the federal government impacts and is impacted by science and technology. The program recruits a small cohort of scholars into a participatory learning environment, allowing extensive access to speakers and educational opportunities. The goal is to expose participants to as many different viewpoints as possible and help them understand how people and institutions influence and learn from science. In 2024 the Nanotechnology Coordinated Infrastructure Southwest and the NNCI Coordinating Office will be sponsoring two programs. The first will be a three-day program tailored for university faculty in the sciences and engineering. The second will be a week-long program tailored for PhD students in the sciences and engineering.

[Watch our SOTL Video on YouTube](#)

<https://www.youtube.com/watch?v=XgFYIoD5AQE>

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NCI Southwest



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