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National Laboratory Resources and Partnerships for Public and K-12 Outreach and Engagement

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Nanoscale science and engineering draws upon aspects of chemistry, physics, biology and engineering to address scientific problems in energy, healthcare, security and technology. Scientists in this field often work in a multidisciplinary setting, which suggests a need for educational content unlike that currently offered in single-discipline high school and college science courses. Instructors are faced with the daunting task of accurately describing nanoscience in the context of their discipline, while inspiring students to explore careers in nanoscale science and engineering. The Molecular Foundry, a Department of Energy nanoscience user facility located at Lawrence Berkeley National Laboratory, offers opportunities for high school and college students, along with science and engineering educators interested in learning basic concepts and research developments in nanoscience. Successful partnering with the Nanoscale Informal Science Education Network also provides opportunities for scientists to interact informally with the general public. These interactions convey the role of national laboratories in helping lay audiences understand the breakthroughs, potential issues and societal impact of nanoscience.