

*NSF NANOSCALE SCIENCE AND ENGINEERING GRANTEES CONFERENCE:
NANO AND AI CONVERGENCE
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“Building and Supporting Interdisciplinary Graduate Teams”

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Bio: Shana McAlexander is the Associate Director for the Harnessing AI for Understanding & Designing Materials (aiM) Program, an NSF-NRT grant. She leads team science workshops and a year-long interdisciplinary project course that prepares students for cutting edge research at the intersection of AI and materials science. Shana also conducts STEM education research and evaluation projects with students and educators from high school to postsecondary environments. She is passionate about STEM education and educational research to increase interest and access to STEM careers.

Abstract: The NSF NRT Programs focus on supporting interdisciplinary graduate research. The Harnessing AI for Understanding & Designing Materials (aiM) NRT Program at Duke University is a training program at the intersection of AI/Machine Learning and materials science. The program currently supports 32 PhD students representing 9 departments including engineering, physical sciences, computer science, and statistics. We will highlight a scaffolded training model for interdisciplinary convergence that includes an introduction to Team Science activity, a rapid proposal design workshop, and a year-long project course that may scaled or modified for use within various educational contexts.