VINSE I³: Increasing Immersion and Innovation in Interdisciplinary Nanoscience Research and Education
VRA Award, Cycle 2016

What We Do:
• Undergraduate immersion in cutting-edge nanoscience through coursework and research experiences in the Vanderbilt Institute of Nanoscale Science and Engineering (VINSE).
• Add soft lithography capabilities to VINSE to broaden opportunities for interdisciplinary research and teaching in VINSE.

Why We Do It:
• Enable Vanderbilt to be among the elite schools in making cutting-edge nanoscience facilities accessible to undergraduates to promote a highly skilled workforce and foster increased appreciation of the basic R&D underlying most modern technology.
• Provide the capability to carry out projects that requires both hard and soft lithography in a clean environment – this is essential for research at the intersection of engineering and biology/medicine.

Who’s Involved?
VINSE is comprised of a highly interdisciplinary group of 49 faculty members, >150 graduate students and >60 undergraduates from the College of Arts and Science, the School of Engineering and the School of Medicine, along with strong technical and administrative staff. The VINSE I³ TIPs leadership is listed below.

School of Engineering
Sharon Weiss (PI), Professor of Electrical Engineering and VINSE Deputy Director
Peter Cummings, John Hall Professor of Chemical Engineering and School of Engineering Associate Dean for Research
Paul Laibinis, Professor of Chemical Engineering
Jason Valentine, Assistant Professor of Mechanical Engineering
Greg Walker, Associate Professor of Mechanical Engineering

College of Arts & Science
Sandra Rosenthal, Jack and Pamela Egan Professor of Chemistry and VINSE Director
David Cliffel, Professor of Chemistry
Richard Haglund, Stevenson Professor of Physics