Core Facility Management at the Intersection of Academia and Industry - How to Connect and Not Collide Along the Cutting Edge of Scientific Research

Guy DeRose\textsuperscript{1}, Melissa Melendes\textsuperscript{1}

\textsuperscript{1}Kavli Nanoscience Institute, California Institute of Technology, Pasadena, CA 91125 USA

The Kavli Nanoscience Institute (KNI) emphasizes research in nanobiotechnology, nanophotonics, and large-scale integration of nanosystems. A core mission of the KNI is to push the state-of-the-art beyond current capabilities in nanofabrication. To this end, the KNI has pursued aggressive acquisition of strategic instrumentation for advanced nanofabrication capabilities. Our multi-user laboratories and cleanrooms for nanostructure synthesis, fabrication, and characterization are available to users from both academia and industry.

Challenges of core facility management include staff assignments and retention, along with keeping equipment up-to-date and working within specifications. We have built an environment that leads to an atmosphere of cooperation over competition among our diverse research community, while approaching the right number of support staff in the key areas to best serve our customers. This poster will illustrate these achievements and how we have approached the challenges associated with operating a shared research facility while staying within budget [1].
References:

[1] The authors acknowledge critical support and infrastructure provided for this work by the Kavli Nanoscience Institute at Caltech.

**Figure 1:** Without a solid management plan, nanoscience research in a shared core facility can become a “traffic jam” of competing interests.