

## Investment Mode 3: Centers of Excellence

Centers provide opportunities and support for multidisciplinary research among investigators from a variety of disciplines and from different research sectors, including academia, industry, and government laboratories. Such multidisciplinary research not only leads to advances in knowledge, but also fosters relationships that enhance the transition of the results of basic research to

devices and other applications. Fourteen multidisciplinary centers to encourage research networking have been initiated throughout the country. Seven have been funded by NSF, three by DOD, and four by NASA. A list of these centers is shown in Table 2. More are planned by NSF to broaden the range of topics and the geographical distribution.

**Table 2. NNI Centers of Excellence**

Center Name	Principal Investigator	Institution
<b>NSF</b>		
Nanoscale Systems in Information Technologies Nanoscale Science and Engineering Center (NSEC)	Buhrman	Cornell University
Nanoscience in Biological and Environmental Engineering NSEC	Smalley	Rice University
Integrated Nanopatterning and Detection NSEC	Mirkin	Northwestern University
Electronic Transport in Molecular Nanostructures NSEC	Yardley	Columbia University
Nanoscale Systems and their Device Applications NSEC	Westervelt	Harvard University
Directed Assembly of Nanostructures NSEC	Siegel	Rensselaer Polytechnic Institute
Nanobiotechnology Science and Technology Center	Baird	Cornell University
<b>DOD</b>		
Institute for Soldier Nanotechnologies	Thomas	Massachusetts Institute of Technology
Center for Nanoscience Innovation for Defense	Awschalom	University of California, Santa Barbara
Nanoscience Institute	Prinz	Naval Research Laboratory
<b>NASA</b>		
Institute for Cell Mimetic Space Exploration	Ho	University of California, Los Angeles
Institute for Intelligent Bio-Nanomaterials & Structures for Aerospace Vehicles	Junkins	Texas A&M
Bio-Inspection, Design, and Processing of Multifunctional Nanocomposites	Aksay	Princeton University
Institute for Nanoelectronics and Computing	Datta	Purdue University