
President's High Growth Job Training Initiative

California Nanotechnology Workforce Training Program

Grantee: International Association of Nanotechnology

Key Partners: Global Crown Capital, Combimetrix, Inc., Nanogram, Inc., Quantum Sphere, Inc., Antibodies, Inc., SDC Materials, Inc., NanoScience Exchange, California Manufacturing Technology Consulting, National Hispanic University, Berkeley City College, State of California Workforce Employment Training Panel, Alameda Workforce Investment Board (WIB), Oakland WIB, NOVA WIB, San Jose WIB, NASA Nanotechnology Center, Molecular Foundry at Lawrence Berkeley National Laboratory, California Community College Economic and Workforce Development program, and the Institute for Community Inclusion-University of Massachusetts-Boston

Grant Amount: \$1,500,000

Leveraged Amount: \$2,400,000

Location of Grant Activities: The cities or counties of San Francisco, Oakland, Alameda, Berkeley, Fremont, Livermore, Hayward, San Jose, Santa Clara, Palo Alto, and Sunnyvale, California.

Challenge: California's high-tech industries are on the verge of a manufacturing revolution driven by nanotechnology. Yet they lack acceptable standards for developing nanotechnology curriculum. Without such standards, various organizations would introduce inconsistent curricula to this emerging industry. Nanotechnology companies, though relatively new, face upcoming retirements like other businesses, but they also lack a talent pipeline and defined career pathways for their employees.

Addressing the Challenge: The International Association of NANO Technology will implement four innovative solutions. First, an Executive and Mid-Level Manager Business Re-engineering training course will be developed to provide insight on the business re-engineering and fundamental applications of nanoscience and nanotechnology. Second, dislocated, unemployed, and underemployed workers will embark on a 13-week Nanotechnology Technician Certificate program to prepare themselves to enter jobs. Third, train-the-trainers sessions will be conducted for those who need advanced levels of technical training in nano-fabrication and nano-manufacturing. They, in turn, will train additional workers in their companies. Fourth, the development of a pre-apprenticeship program will assist a selected number of highly qualified and motivated persons to work at nanotech companies while completing their training.

Projected Outcomes:

- Train 205 clients, including 70 managers
- 120 clients will receive the 13 week technical training (80% graduate and 90% of graduates will find employment).
- 15 clients will enter the one-year nanotechnology technical pre-apprenticeship training program (85% graduate and 95% of graduates will find jobs)
- Establish a California Institute of Nanotechnology Training Center