Partnerships for Innovation

ORAU

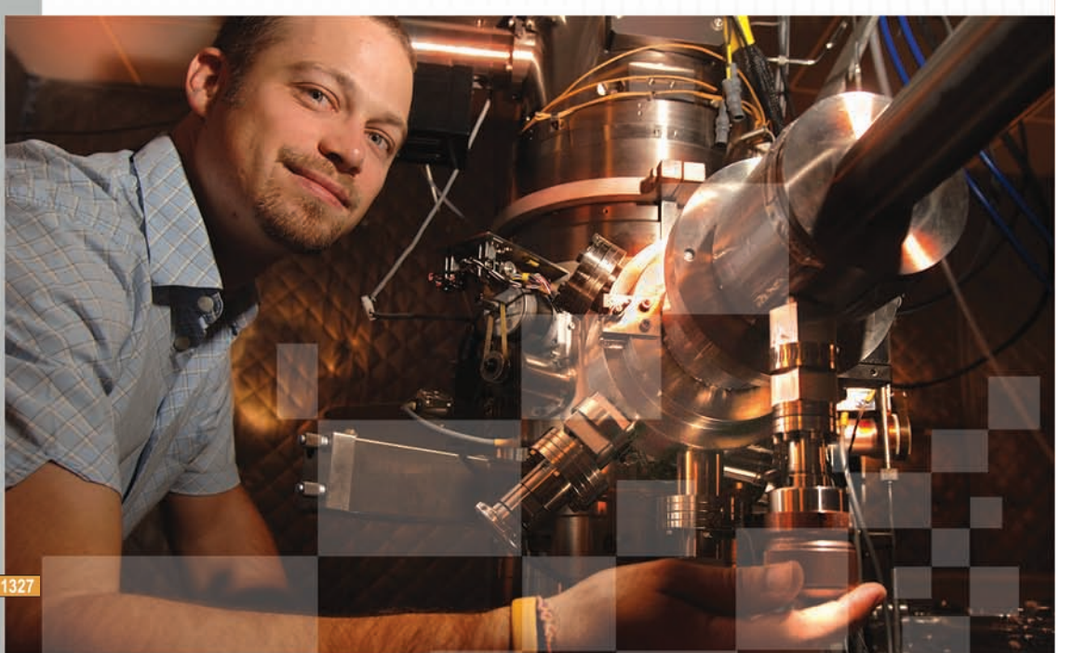
OAK RIDGE ASSOCIATED UNIVERSITIES

Creating a Talent Pool of Future Science and Technology Leaders

Our nation needs a steady supply of scientists and engineers to meet future requirements in critical science and technology areas. Students in science, technology, engineering, and mathematics (STEM) fields require the skills, knowledge, and experience to stay competitive in an ever-changing global marketplace. To address these national workforce and science education needs, ORAU provides a national resource for developing and administering high-quality, experience-based programs to help create the next generation of science and technology leaders.

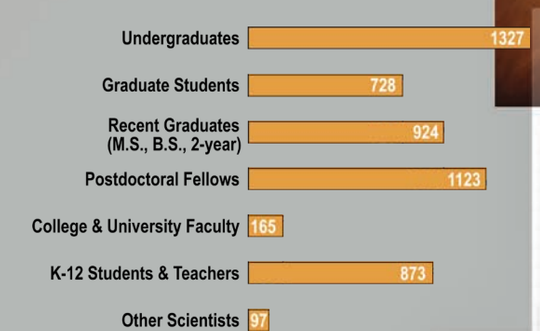
Capabilities in Science Education and Workforce Development

- Serve education needs at all levels—from K-12 through university faculty and postdoctoral researchers
- Ensure comprehensive administration of fellowship, scholarship and internship programs—from program design and implementation to workforce analysis and program evaluation
- Manage a national Center for Science Education, focused on improving STEM education by providing access to the advanced research and technologies of national research centers
- Promote science education and research opportunities for underrepresented minority groups
- Build partnerships among federal agencies, academic institutions, and the private sector to assess labor market trends and to address emerging needs in STEM education

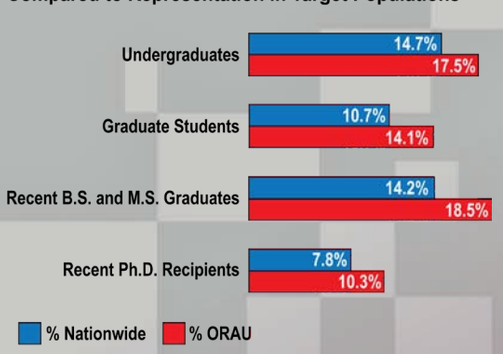


Program Data

FY08 Participants by Category



Underrepresented Minorities in ORAU Programs Compared to Representation in Target Populations



Customers and Partners

- U.S. Department of Energy (DOE)
- Oak Ridge National Laboratory (ORNL)
- National Aeronautics and Space Administration (NASA)
- U.S. Department of Commerce (DOC)
- U.S. Department of Defense (DoD)
- Centers for Disease Control and Prevention (CDC)
- National Institutes of Health (NIH)
- U.S. Food and Drug Administration (FDA)
- U.S. Department of Homeland Security (DHS)
- National Science Foundation (NSF)
- U.S. Environmental Protection Agency (EPA)
- Nuclear Regulatory Commission (NRC)
- Federal Bureau of Investigation (FBI)
- National Oceanic and Atmospheric Administration (NOAA)

ORISE

OAK RIDGE INSTITUTE FOR SCIENCE AND EDUCATION

ORISE is managed by ORAU for the U.S. Department of Energy

Cultivating the Next Generation of Scientists and Engineers

A high percentage of the science and technology (S&T) workforce is nearing retirement age. Our schools are producing graduates who are finding it increasingly more difficult to compete in an international science and engineering labor market. Maintaining a steady flow of highly qualified and motivated scientific and technical talent is critical.

In direct response to this ongoing challenge, ORAU is playing an important role in the renewed national commitment to improve education, research, and innovation in the United States.

Creating a National Center for Science Education

Central to ORAU's leadership in and commitment to strengthening science education is a focus on bringing tomorrow's science into today's classrooms. ORAU's Center for Science Education was completed in January 2009 and provides a resource for strengthening STEM education, facilitating new ways of teaching and learning with new educational technologies, and advancing visualization and simulation as motivational tools.

FY08 by the Numbers

- $124 million—the amount of expenditures for educational initiatives administered by ORAU.
- 5,237—the number of students, faculty, and postdoctoral participants for whom educational opportunities were provided.
- 950—the number of U.S. and foreign colleges and universities represented by these students, faculty, and postdoctoral participants.
- 873—the number of K-12 teachers and students involved in programs.
- 220—the number of universities and research centers hosting science education and research participants.
- 41%—the percentage increase in the number of participants in programs since 2003.
- 40,000—total number of participants in science education programs since inception.

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