Center for WMD Analytical Excellence

February 2011

An Intelligence Community Resource

CONTACT:
Fay Frederick
865-576-1460
frederickaf@ornl.gov

Analyst Education Program – An Integrated & Comprehensive Educational & Experiential Program

- **Mission**: Produce highly skilled technical analysts who understand the complex technologies involved in the production or procurement of WMDs
- **Objective**: Develop a Formal Education and Experiential Curriculum
  - Graduate Level Nuclear Engineering (Graduate Certificate, MS Degree)
  - Hands on Experiences at DOE, NNSA, and other sites
  - Continuing education and workshops/training/seminars
- **Benefits**:
  - Creates a pipeline of highly qualified WMD resources through advanced educational programs and training
  - Promotes sharing of ideas, techniques, and tools
  - Provides exposure to cutting-edge R&D at DOE & NNSA Facilities
  - Promotes reachback between analysts and subject matter experts

Center for WMD Analytical Excellence

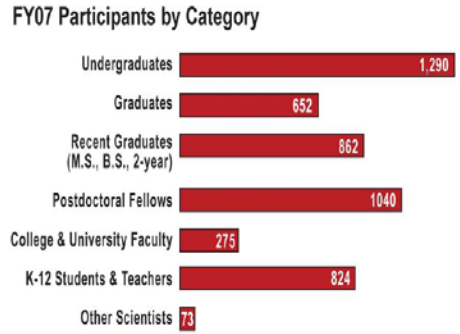
PARTNERS

- *University of TN*
- *16 other identified curriculum providers identified:*
  - *Georgia Institute of Technology*
  - *University of Florida*
  - *Massachusetts Institute of Technology*
  - *University of Illinois*
  - *North Carolina State University*
  - *University of Michigan*
  - *Pennsylvania State University*
  - *University of New Mexico*
  - *Texas A & M University*
  - *University of Wisconsin*
  - *University of California –Berkley*
  - *New Mexico State University*
  - *South Carolina State University*
  - *University of Maryland*
  - *Georgetown University*
  - *George Mason University*

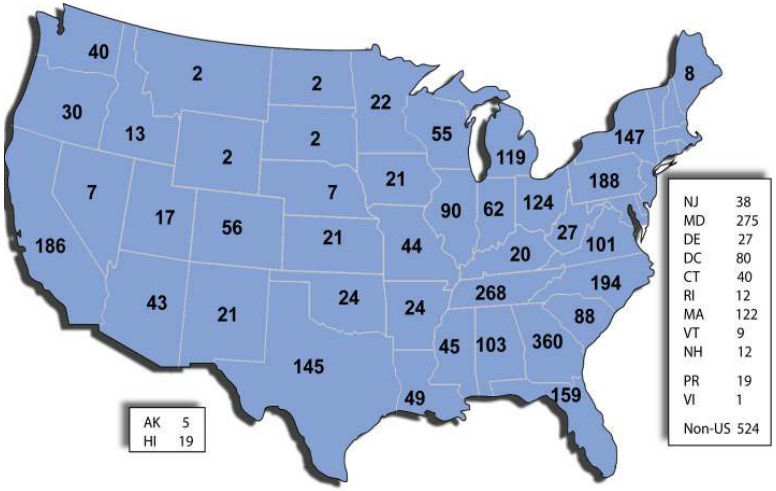
Oak Ridge Associated Universities (ORAU)

University consortium focused on building partnerships to support S&T innovation

- Manage the Oak Ridge Institute for Science and Education (ORISE) for DOE
- A partner with UT-Battelle helping expand university partnerships
- Undergraduate scholarships
- Graduate fellowships
- Postdoctoral research appointments
- Internships and research participation
- F
as
- S rams
- C vents



Distribution of Colleges and Universities Represented by Undergraduate and Graduate Students, Recent Graduates, and Faculty



Participants in FY2007

- Came from every state in the country
- Represent nearly 900 U.S. and foreign colleges and universities
- Received $99M in stipends and other payments to participants
- Took 2600 domestic and foreign trips

Status: Center Curriculum →Fall 2010

- Nuclear Security Science And Analysis Graduate Certificate Complete
- University of Tennessee, Knoxville TN
  - 4 Courses
    - Nuclear Security Science and Analysis
    - Nuclear Fuel Cycle
    - Nuclear Reactor Theory I *or* Principles of Health Physics
    - Advanced Topics in Nuclear Security Science and Analysis
  - Website: http://www.engr.utk.edu/nuclear/NSSA.html
  - 10 week internship at DOE and/or NNSA site(s)

Path Forward → FY2011

- Complete MS Degree courses
- Continue to partner with Universities
- Continue to work with ORAU to solicit student participation
- Continue to pursue funding opportunities
  - National Intelligence University
  - Department of Defense
  - National Counterproliferation Center
- Continue to work with Wounded Warrior Program and USSCOM Care Coalition