Our beginning as ORINS

Founded in 1946 as Oak Ridge Institute for Nuclear Studies

- Science education - research fellowships
- Radiation and nuclear medicine
- Health physics
- Radiation emergency response

14 original member universities

115 ORAU member institutions today
ORAU today

• Nonprofit government contractor (large business)
• University consortium
• Provide customers innovative scientific and technical solutions to:
  o Advance science, education and workforce development
  o Strengthen national security
  o Protect health and the environment
ORAU by the numbers

978 employees

$359M annual revenue

22+ state and federal customers

115 member universities

18 locations

65+ years in business
ORAU University Partnership Agenda

ORNL

- Leverage partnership with UT-Battelle
- Help ORNL build mutually beneficial university partnerships
- Primary foci of interest: Neutrons, Computational Science

ORAU

- Expertise to supplement ORAU competencies in large contracts
Why University Partnerships?

Poised for Joint Proposal Opportunities

Grants & Awards

Funding Opportunities

Relationships

Federal Investment

ORAU Business Lines + University Research Expertise
Grants and Awards

• Ralph E. Powe Junior Faculty Awards
  o 2015: 35 Awards
  o 20 year retrospective study

• Events – up to $4000, twice a year

• High Performance Computing Grants with ORNL

• Faculty travel to seed new collaborations

• Lindau and Heidelberg Fellows
Ralph Powe Junior Faculty Award

- Early career faculty – competitive selection

- 35 awards at $5,000 ORAU, $5,000 university match

- Intended to enrich the research and professional growth of young faculty and result in new funding opportunities

- MST had two winners for FY 2015

Tansel Yucelen  
Missouri University of Science and Technology  
Assistant Professor of Mechanical and Aerospace Engineering  
FY 2015 Winner

Heng Pan  
Missouri University of Science and Technology  
Assistant Professor of Mechanical and Aerospace Engineering  
FY 2015 Winner
ORAU Events Grants 2015

• “Graphene and Beyond: From Atoms to Applications” May 2015 Penn State

• Florida Worm Meeting May 2015 Florida Institute of Technology

• Workshop on Respiratory Syncytial Virus May or June 2015 University of Georgia

• Inorganic/Organometallics Symposium June or July 2015 Utah State

• Science Teachers Workshop July 2015 Virginia Commonwealth

• International Symposium on Free Radicals August 2015 Ohio State

• NURETH-16 Student Program August – September 2015 North Carolina State

Deadline for proposals: September 1, 2015
Lindau and Heidelberg Fellows

Lindau Meeting of Nobel Laureates
- University Partnerships acted as the main catalyst in continuing the Lindau-Noble Laureate Program after DOE discontinued its sponsorship
- 2015: UPO sponsored 14 students

Heidelberg Laureate Forum
- University Partnerships is the U.S. delegation lead for the Heidelberg Fellows Program, a program for top doctoral students in mathematics
- 2014: University Partnerships partnered with ORAU to support four students to attend the conference

Students Alexandra Keefe (left), Tracy Norman (second from left), Brittany Rohrmann (third from left) and Bomy Lee Chung (far right) spend some time chatting with Nobel Laureate Sir John E. Walker while participating in the 64th Lindau Meeting of Nobel Laureates in Lindau, Germany.
Funding Opportunities

- Listserv: Opportunity information emails, many regarding ORNL

- ORAU placement programs –
  - $212M in FY14
  - More than 8,900 participants in FY14
  - $114K to Missouri University of Science and Technology in FY14

- Campus visits
Relationship Building

- ORNL Associate Lab Director Visits
- Campus Visits
- Memoranda of Understanding
- SharePoint Agreements
- One new member in March 2015
  - Lehigh University
Federal Investment

Poised for Joint Proposal Opportunities

Grants & Awards
Funding Opportunities
Relationships
Federal Investment

ORAU Business Lines + University Research Expertise

ENERGY SCIENCES COALITION

May 6, 2011

U.S. House of Representatives
Washington, DC 20515

To Members of the U.S. House of Representatives:

As members of the Energy Sciences Coalition and the Task Force on American Innovation, we write today to urge you to make robust and sustained funding for the Department of Energy (DOE) Office of Science a priority in the Fiscal Year 2012 Energy and Water Development Appropriations Act.

We recognize the difficult challenges and choices you face as you work to reduce the federal budget deficit, get the economy growing again, and create jobs for the American people. However, to achieve these goals, Congress must make strategic decisions and set priorities when it comes to federal funding.

We believe that the scientific research, unique world-class user facilities, and teams of skilled scientists and engineers funded by the Department of Energy Office of Science at universities and national laboratories are critical to long-term economic growth and job creation. Economic experts have asserted as much, crediting past investments in science and technology for up to half the growth in the Gross Domestic Product (GDP) in the 50 years following the end of World War II. Yet today, other nations such as China, India, and Europe are increasingly investing in their scientific infrastructure and are challenging U.S. leadership in areas such as supercomputing and energy research with the goal of capitalizing on the many technological advances and economic benefits that result from scientific research.

That is why we urge you to support the request of Representative Judy Biggert (R-IL) and Representative Rush Holt (D-NJ) to the House Energy and Water Development Appropriations Subcommittee to make strong and sustained funding for the DOE Office of Science a priority in fiscal year 2012. They articulate how important the DOE Office of Science is to American industry and universities, how it is unique from and complementary to the research efforts of other federal research agencies, how it serves to educate the next generation of scientists and engineers, and how research funded by the DOE Office of Science has made our nation more secure, healthy, competitive, and prosperous.

In light of current budget constraints, and with an eye toward creating jobs and strengthening the economy, we urge you to sign the Biggert-Holt letter and support making funding for the DOE Office of Science a priority in fiscal year 2012.

Sincerely,

Alliance for Science & Technology Research in America (ASTRA)
American Chemical Society
American Institute of Physics
American Mathematical Society
American Physical Society
Joint Proposal Opportunities

- ORAU major contracts
- ORAU as sub-awardee
Comprehensive Engagement Strategy

ORAU
- Past performance
- Federal/State relationships
- Program specific resources
- Independence
- Operational Infrastructure

UNIVERSITY
- Subject Matter Experts
- Students
- Research assets
- Funding relationships

Win-Win
ORAU Contracts, University Sub-Awards

Information International Associates
Homeland Defense and Security Information Analysis Center, Critical Infrastructure Protection, WMD, CBRN, Biometrics, Medical, Cultural Studies, Alternative Energy
$24M

Sigmatech
Systems Engineering and Training Assistance – ID/IQ
$997M – 7 Draft Task Orders Released

L-3 Communications and the Air Force Research Laboratory
Cyber Security – ID/IQ
$300M – Waiting for Task Orders
A Successful Partnership

The University of Georgia is partnering with the CDC to conduct influenza testing. This is a result of ORAU’s partnership with Ila.
ORAU’s Expertise and Capabilities

Advancing Science, Education and Workforce Development

Strengthening National Security

Protecting Health and the Environment
Workforce Development Capabilities

- Fellowships and scholarships
- Internships and research participation
- Over 8,900 participants in FY14
- K-12 teacher professional development
- Science competitions and other activities
- Research, analysis and assessment

http://see.orau.org/
Scientific Assessment
Capabilities

• Identify and recruit scientific and technical experts
• Design and conduct expert-based reviews and evaluations, including peer reviews
• Support meetings and conferences
• Prevent funding decisions from being challenged or overturned
• Provide onsite support for in-person meetings of any size as well as virtual peer reviews
• Independent Reviews and Evaluations platform to engage broad scientific resources of ORAU and university partners to address challenging problems
National Security Capabilities

Emergency preparedness planning and response training
- Incident management training and operational support
- Emergency, terrorism and health preparedness
- Crisis and risk communication
- Emergency information management tools

Radiation emergency medical support and training (REAC/TS)
- Pre-hospital radiation emergency preparedness
- Health physics in radiation emergencies

Policy development and implementation
- Exercise program design and management
- National-level and no-notice exercises

Forensic science support and training
- Fingerprint, toolmark and firearm analysis
- DNA and forensic biology
- Evidence processing and examination
Worker Health and Public Health Capabilities

Provide innovative worker health solutions to government agencies and private industry, relying on capabilities in:

- Data management/statistical analysis
- Beryllium exposure studies/registry
- Beryllium Lymphocyte Proliferation Tests (~ 5000 tests annually)
- Former Worker Medical Screening Program
- Worker health studies
- Radiation exposure data collection and dose reconstruction
- Protection of human subjects
Health Communication and Technical Training Capabilities

Research and evaluation
- Message development and testing
- Qualitative and quantitative research
- Media monitoring

Communication
- Evidence-based communication
- Spokesperson training

Technology applications
- Custom apps and web-based training
- Mobile/distance learning products
- Webinars and virtual meetings

Public health preparedness
- Workshops, toolkits, training and exercises

Health promotion and outreach
- Health literacy and promotion

Health and safety training
- Radiological preparedness
Environmental Assessment Capabilities

- Independent verification (Is it clean enough?)
- Facility and land area characterization (How dirty is it?)
- Health physics technical services and research
- Health physics instrumentation and calibration
- Radiochemistry and metals laboratory using inductively coupled plasma mass spectrometry
- Radiation science training
- Atmospheric research and monitoring
Moving Forward

- Actively pursuing joint proposals
  - ORAU plus universities
  - ORNL with universities
  - Facilitating collaborative proposals between universities
- Negotiating MOUs, signing SharePoint agreements with member universities
71st Annual Meeting of the Council of Sponsoring Institutions
March 9-10, 2016 Oak Ridge, Tennessee

https://www.orau.org/council/
Thank You

Contact:
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865-241-1513
Extra Slides
Opportunity Capture Process

Reasons why opportunities fall out of the funnel

- No relevant past performance
- Team not well-constructed
- No knowledge of competition
- No knowledge of political landscape
- No understanding of client pain points
- No knowledge of price to win
- No differentiation
- Client has clear contractor preference
- Cannot sign the right teaming partners
- Cannot get to price to win
- Do not have the right personnel
- No access to funding streams
Multi-University Collaboration...
...Another Possible Approach

- Universities perform the research, ORAU the administration
  - ORAU proposal management
  - ORAU project management
  - ORAU assessment, national dissemination
- Outcomes – student support, joint publications, ORAU builds new expertise

Business Sensitive

ORAU Member Institutions
MOUs June 29, 2015

Finalized
MOUs = 117

Southern University and A&M College
Syracuse University
Temple University
Tennessee State University
Tennessee Technological University
Texas Christian University
Texas Tech University
Tulane University
Tuskegee University
University of Alabama at Birmingham
University of Alabama
University of Alabama in Huntsville
University of Arkansas
University of Arkansas for Medical Sciences
University of Central Florida
University of Cincinnati
University of Colorado
University of Colorado
University of Delaware
University of Florida
University of Georgia
University of Houston
University of Kentucky
University of Louisville
University of Maryland
University of Memphis
University of Miami, Coral Gables
University of Michigan
University of Mississippi
University of Mississippi Medical Center
University of Missouri-Columbia
University of Nebraska, Las Vegas
University of Nevada, Las Vegas
University of New Mexico
University of New Orleans
University of North Carolina at Charlotte
University of North Dakota
University of North Texas
University of Notre Dame
University of Oklahoma
University of Pittsburgh
University of South Alabama
University of South Florida
University of Tennessee
University of Tennessee at Chattanooga
University of Texas at Arlington
University of Texas at Austin
University of Texas at Dallas
University of Texas at San Antonio
University of Texas-Pan American
University of the District of Columbia
University of Tulsa
University of Utah
University of Virginia
Utah State University
Vanderbilt University
Virginia Commonwealth University
Virginia Tech
Wake Forest University
Washington University in St. Louis
Wayne State University
West Virginia University
Western Kentucky University
External SharePoint Agreements
June 29, 2015

Appalachian State
Arkansas State
Auburn University
Catholic University of America
College of Charleston
College of William and Mary
Duke University
Eastern Kentucky University
Embry-Riddle Aeronautical University
Fayetteville
Florida Institute of Technology
Florida International University
Florida State University
Georgetown University
Georgia Southern University
Idaho State University
Louisiana State University
Maryville College
Meharry Medical College
Michigan Technological University
Middle Tennessee State University
Mississippi State University
Missouri University of Science and Technology
Morgan State University
North Carolina A&T State University
Ohio State University
Oklahoma State University
Polytechnic University of Puerto Rico
Purdue University
Southern University and A&M College
Syracuse University

Tennessee State University
Tennessee Technological University
University of Alabama at Huntsville
University of Arkansas
University of Arkansas for Medical Sciences
University of Central Florida
University of Colorado
University of Delaware
University of Florida
University of Georgia
University of Kentucky
University of Maryland
University of Mississippi
University of Mississippi Medical Center
University of North Texas
University of Pittsburgh
University of South Alabama
University of South Florida
University of Tennessee
University of Tennessee at Chattanooga
University of Texas at Arlington
University of Texas at Austin
University of Texas at San Antonio
University of Utah
University of Virginia
Utah State University
Vanderbilt University
Virginia Commonwealth University
West Virginia University
Western Kentucky University

Active Accounts = 61