



Nuclear Security Education: The Intersection of Policy, Science, and Technology

July 19–23, 2010

Agenda

Monday, July 19

Travel day. Participants arrive in Knoxville.

6:30 Evening Reception and Registration at the Knoxville Hilton

Badging will take place at this event so participants should bring photo identification to receive an Oak Ridge National Laboratory visitor's badge for the tour on Thursday. If you will not arrive until Tuesday, you can register at the Baker Center in the rotunda on Tuesday morning.

Bus transportation will be provided from the Hilton to the Baker Center and back each day of the workshop.

The first bus will load at 7:00 a.m. and depart at 7:15 a.m.

The second bus will load at 7:30 a.m. and depart at 7:45 a.m.

IMPORTANT: There is no public parking at the Baker Center. Out of town participants are strongly encouraged to ride the bus from the Hilton. Local attendees can find parking maps on the Workshop website at the following link for Baker Center Parking:

<http://wiki.ornl.gov/sites/gnstd/gssec/meeting4/Documents/Howard%20Baker%20Parking.pdf>

Attire for this workshop is Business Casual.



Tuesday, July 20

7:00 am First bus run from Hilton to Baker Center. (Bus will depart at 7:15)
7:30 am Second bus run from Hilton to Baker Center. (Bus will depart at 7:45)

8:00 – 8:10 Welcoming remarks Carl Pierce

8:10 – 8:30 Welcoming remarks Dunbar Lockwood

Morning Session I – Defining the Need

- *Demographic trends in the International Safeguards/Nonproliferation workforce*
- *The multidisciplinary nature of International Safeguards/Nonproliferation education, tools, and learning objectives necessary to bridge divides between academic disciplines and departments*

8:30 – 9:15 DOE/NA-20 Perspective Dunbar Lockwood

Morning Session II – Defining the Need

Moderator: Michael Whitaker, ORNL

Laboratory Perspectives:

- *Challenges and approaches to recruiting, training, and retaining the next generation of International Safeguards/Nonproliferation professionals*
- *Identifying core capabilities that need to be sustained and the required skill sets needed for young professionals in Nonproliferation and International Safeguards*
- *The multidisciplinary nature of International Safeguards/Nonproliferation education, tools, and learning objectives necessary to bridge divides between academic disciplines and departments*

9:15 – 9:30 Presenter Introductions Michael Whitaker

9:30 – 10:15 *Nuclear Nonproliferation International Safeguards
Scientist and Engineer Workforce at
U.S. Department of Energy National Laboratories* Larry Blair/Don Johnson

10:15 – 10:45 Break

10:45 – 11:15 *Defining the Need: ORNL Perspective* Alan Icenhour

11:15 – 11:45 *PNNL's Approach to Defining, Recruiting, and
Developing International Safeguards Specialists* Carrie Mathews

11:45 – 12:15 *Human Capital Development Student Program
Career Development Philosophy (LANL)* Brian Boyer

12:15 – 1:15 Working Lunch
Civilian Research & Development Foundation Ambassador Joe DeThomas

Afternoon Session I – Existing Federal Programs

Moderator: Alan Icenhour, ORNL

1:15 – 1:30	Presenter Introductions	Alan Icenhour
1:30 – 2:00	NGSI Human Capital Development Activities	Dunbar Lockwood
2:00 – 2:30	NNSA Office of Nonproliferation R&D University Programs	David LaGraffe
2:30 – 3:00	The Nonproliferation Graduate Fellowship Program	Phyllis Byrd
3:00 – 3:30	Break	

Afternoon Session II – Existing Academic Initiatives

Moderator: Bernadette Kirk, ORNL

- Current activities in distance learning programs, certificate and degree programs, recruiting, Lab/Academic alliances, student and faculty support mechanisms.

3:30 – 3:45	Presenter Introductions	Bernadette Kirk
3:45 – 4:05	Nuclear Nonproliferation Education Program at Texas A&M University	Bill Charlton
4:05 – 4:25	The Nuclear Security Program at the University of Tennessee	Howard Hall
4:25 – 4:45	Activities/Initiatives in Nuclear Security Studies at NCSU	Man-Sung Yim
4:45 – 5:05	Nuclear Safeguards Education at the University of Missouri Activities	Kathleen Trauth
5:05	Meeting adjourns	

Bus returns to Hilton

6:30 – 9:00 Evening reception and dinner (7:30) at the East Tennessee Historical Society

Wednesday, July 21

7:00 am First bus run from Hilton to Baker Center. (Bus will depart at 7:15)
7:30 am Second bus run from Hilton to Baker Center. (Bus will depart at 7:45)

Morning Session I – Exposing Technologists to Policy

Moderator: Jim Sumner, ORNL

8:00 – 8:15	Presenter Introductions	Jim Sumner
8:15 – 8:35	<i>Integrating Science, Technology, and Public Policy</i> Howard H. Baker, Jr. Center for Public Policy	Mike Fitzgerald
8:35 – 8:55	<i>Exposing Technologists to Policy:</i> <i>Triangle Institute for Security Studies</i>	Bill Boettcher
8:55 – 9:15	<i>Nonproliferation Research & Education:</i> <i>Bringing the Academy Back In</i> Sam Nunn School of International Affairs	Adam Stulberg
9:15 – 9:35	<i>Interdisciplinary Approaches to Nonproliferation Education</i> Monterey Institute of International Studies	Fred Wehling
9:35 – 9:55	Break	

Morning Session II – Exposing Political Scientists to Technology

Moderator: Jim Sumner, ORNL

9:55 – 10:10	Presenter Introductions	Jim Sumner
10:10 – 10:30	<i>Graduate Certificate in Global Security Education</i> University of Tennessee	Brandon Prins
10:30 – 10:50	<i>Exposing Policy Students to Technology in the TAMU</i> <i>Nuclear Nonproliferation Education Program</i>	Bill Charlton
10:50 – 11:10	<i>Benchmarking Safeguards & Nonproliferation Education:</i> <i>A Heuristic Approach</i> Georgia Tech	Shaheen Dewji
11:10 – 11:30	<i>Laboratory–University Partnerships for Safeguards</i> <i>Summer Courses and Internships: LLNL and MIIS as</i> <i>Case Study</i>	Justin Reed
11:30 – 12:30	Working Lunch <i>Providing for the Uncommon Defense</i> MIT Nuclear Science and Engineering Belfer Center At KSG Harvard – Raytheon IDS	Michael Hynes

Afternoon Session I – Working with the National Labs in Technology – Panel Session

Moderator: Larry Satkowiak, ORNL

- *Criteria for partnership between Labs and Universities*
- *Coupling of technical and policy, natural science and social science*
- *Proximity to Labs (geographic)*
- *Integration of Lab and University courses*
- *Flow of information, materials, university students and faculty, lab experts*

12:30 – 12:45 Panelist Introductions

Larry Satkowiak

12:45 – 3:00 Panel Discussion

Panel:

**Texas A&M University
University of Tennessee
Oak Ridge National Laboratory
Savannah River National Laboratory
Pacific Northwest National Laboratory
Los Alamos National Laboratory**

**Bill Charlton
Jason Hayward
Alan Icenhour
David Hanks
Carrie Mathews
Brian Boyer**

3:00 – 3:30 Break

Afternoon Session II – Working with National Labs at the Policy Level – Panel Session

Moderator: Howard Hall, Baker Center and ORNL

- *Criteria for partnership between Labs and Universities*
- *Coupling of technical and policy, natural science and social science*
- *Proximity to Labs (geographic)*
- *International engagement opportunities*
- *Integration of Lab and university courses*
- *Flow of information, materials, university students and faculty, lab experts*

3:30 – 3:45 Panelist Introductions

Howard Hall

3:45 – 5:30 Panel Discussion

Panel:

**Monterey Institute for International Studies
Raytheon Integrated Defense Systems
Sam Nunn School of International Affairs
American Association for the Advancement of Science**

**Fred Wehling
Michael Hynes
Adam Stulberg
Benn Tannenbaum**

5:30 Adjourn – Evening free

Thursday, July 22

7:00 am First bus run from Hilton to Baker Center. (Bus will depart at 7:15)
7:30 am Second bus run from Hilton to Baker Center. (Bus will depart at 7:45)

Morning Session I – Defining the Path Forward – Panel Session 1

Moderator: Michael Whitaker, ORNL

- *Raising awareness and increasing attractiveness of the International Safeguards/Nonproliferation field*
- *Integration of Lab and university courses*
- *Faculty perspectives: challenges and approaches to teaching International Safeguards/Nonproliferation*
- *The role of R&D funding at universities*
- *The role of support to academic missions at the Labs*

8:00 – 8:15 Panelist Introductions

Michael Whitaker

8:15 – 9:45 Panel Discussion

Panel:

**University of Wisconsin
Texas A&M University
University of Tennessee
North Carolina State University
Sam Nunn School of International Affairs**

**Jerry Kulcinski
Bill Charlton
Howard Hall
Man-Sung Yim
Adam Stulberg**

9:45 – 10:00 Break

Morning Session II – Defining the Path Forward – Panel Session 2

Moderator: Alan Icenhour, ORNL

- *Building a common university-level Safeguards Certification Process*
- *Integrating feedback into future programs/courses*
- *Collaboration and clearinghouse of educational and training materials; sharing between Labs and universities*

10:00 – 10:10 Panelist Introductions

Alan Icenhour

10:10 – 11:45 Panel Discussion

Panel:

**Howard H. Baker Jr. Center for Public Policy
Texas A&M University
University of Tennessee
University of Florida**

**Carl Pierce
Bill Charlton
Howard Hall
Glenn Sjoden**

11:45 – 12:45 **Working Lunch** **Benn Tannenbaum**
Communicating with Congress
American Association for the Advancement of Science

12:45 – 2:00 **Board bus and travel to ORNL for tours**

Everyone participating in the tour must ride the bus since there will be no parking available at the tour sites for private vehicles.

If you are not attending the tour, you can drive on site for the reception if you have site access (i.e., a DOE Badge)

2:00 – 3:00 **Spallation Neutron Source** **Al Ekkebus**

3:15 – 4:00 **Graphite Reactor** **Fred Strohl**

4:10 – 5:00 **High Performance Computing Area / Everest** **Bill Renaud**
Sean Ahern

5:00 – 8:00 **Evening Poster Session/Reception**
ORNL, Building 5100
National Institute for Computational Sciences

Friday, July 23

7:00 am First bus run from Hilton to Baker Center. (Bus will depart at 7:15)
7:30 am Second bus run from Hilton to Baker Center. (Bus will depart at 7:45)

Morning Session I – Enabling Tools – Panel Session

Moderator: Howard Hall, Baker Center and ORNL

Future needs for:

- Distance Learning programs
- Certificate and Degree programs
- Recruiting
- Lab/Academic Alliances
- Student and Faculty Support Mechanisms

8:00 – 8:15 Panelist Introductions Howard Hall

8:15 – 9:45 Panel Discussion

Panel:

Texas A&M University
University of Tennessee
Oak Ridge National Laboratory
S. Carolina Universities Research & Educational Foundation (SCUREF)

Bill Charlton
Lee Dodds
Bernadette Kirk
Craig Williamson

9:45 – 10:15 Break

Morning Session II – Metrics and Measures – Panel Session

Moderator: Jim Sumner, ORNL

- What is success and what should it look like?
- Tracking student outcomes
- Program effectiveness metrics
- How do you measure things at the intersection?

10:15 – 10:30 Panelist Introductions Jim Sumner

10:30 – 11:30 Panel Discussion

Panel:

Triangle Institute for Security Studies (TISS)
Oak Ridge National Laboratory
North Carolina State University
University of Tennessee

Bill Boettcher
Alan Icenhour
Man-Sung Yim
Howard Hall

11:30 – 12:00 Closing Remarks Howard Hall

12:00 Adjourn