



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

July 19–23, 2010

Agenda

Scripted version for Administrative Use

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/gsec/meeting4/Documents/Howard%20Baker%20Parking.pdf>

Attire for this workshop is Business Casual.



The emergency contact number for the Baker Center is 865-974-0931

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)

Administrative Announcements: Howard

- Emergency exits
- The emergency contact number for the Baker Center is 865-974-0931
- Breakout rooms
- Cell phones on vibrate

Howard Hall to welcome everyone to the workshop and introduce Carl Pierce

8:00 – 8:10 Welcoming remarks Carl Pierce

Howard Hall to introduce Dunbar Lockwood

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
Give brief introduction of all presenters in this session

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	<i>Defining the Need: ORNL Perspective</i>	Alan Icenhour
11:15 – 11:45	<i>PNNL's Approach to Defining, Recruiting, and Developing International Safeguards Specialists</i>	Carrie Mathews
11:45 – 12:15	<i>Human Capital Development Student Program Career Development Philosophy (LANL)</i>	Brian Boyer
Howard Hall to introduce Joe DeThomas		
12:15 – 1:15	Working Lunch Civilian Research & Development Foundation	Ambassador Joe DeThomas

Gather everyone out for Group Photo after lunch talk

Afternoon Session I – Existing Federal Programs

Moderator: Alan Icenhour, ORNL

1:15 – 1:30	Presenter Introductions Give brief introduction of all presenters in this session	Alan Icenhour
1:30 – 2:00	<i>NGSI Human Capital Development Activities</i>	Dunbar Lockwood
2:00 – 2:30	<i>NNSA Office of Nonproliferation R&D University Programs</i>	David LaGraffe
2:30 – 3:00	<i>The Nonproliferation Graduate Fellowship Program</i>	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 Give brief introduction of all presenters in this session	Bernadette Kirk
3:45 – 4:05	<i>Nuclear Nonproliferation Education Program at Texas A&M University</i>	Bill Charlton
4:05 – 4:25	<i>The Nuclear Security Program at the University of Tennessee</i>	Howard Hall
4:25 – 4:45	<i>Activities/Initiatives in Nuclear Security Studies at NCSU</i>	Man-Sung Yim
4:45 – 5:05	<i>Nuclear Safeguards Education at the University of Missouri Activities</i>	Kathleen Trauth

Administrative announcements:

Howard

- Buses to Hilton
- Map from Hilton to East TN Historical Society – short walk
- Badges required at East TN Historical Society dinner
- Bus sched for Wed am

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)

Administrative announcements: Howard

- Emergency exits
- The emergency contact number for the Baker Center is 865-974-0931
- Breakout rooms
- Cell phones on vibrate
- Does anyone leaving today need a taxi to the airport or ride back to Hilton?

Morning Session I – Exposing Technologists to Policy

Moderator: Jim Sumner, ORNL

8:00 – 8:15	Presenter Introductions Give brief introduction of all presenters in this session	Jim Sumner
8:15 – 8:35	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 Give brief introduction of all presenters in this session	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	Nuclear & Radiological Engineering Program Georgia Tech	Shaheen Dewji
11:10 – 11:30	Lawrence Livermore National Laboratory	Justin Reed

Howard Hall to introduce Michael Hynes

11:30 – 12:30 Working Lunch
Raytheon Integrated Defense Systems

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

Leading questions for the moderator to use if needed:

- What defines or demonstrates a successful partnership between a National Lab and a University?
- What are the major impediments to successful partnering, and how can they be addressed?
- What about IP issues and security considerations?
- Are the Labs and University facing critical organizational culture issues that limit successful partnering in technology, and if so, how can they be improved?

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

Leading questions for the moderator to use if needed:

- What is a successful engagement at the policy studies level?
- How do the Lab/University partnerships avoid entanglements of a perception of advocacy or intruding on “inherently federal” prerogatives?
- Are there good examples of student engagement in this area, and what were the lessons learned in that?
- Are the Labs and University facing critical organizational culture issues that limit successful partnering in policy studies, and if so, how can they be improved?

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**

Administrative announcements:

Howard

- Buses to Hilton / Bus sched for Thur am
- Must have ORNL badge to go on tours Thu afternoon
- Get headcount of those not staying for reception after tours
- Shuttle van back to Hilton available Thur afternoon for those not going on ORNL tours

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)

Administrative announcements: Howard

- Emergency exits
- The emergency contact number for the Baker Center is 865-974-0931
- Breakout rooms
- Cell phones on vibrate
- Does anyone leaving today need a taxi to the airport or ride back to Hilton?

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

Leading questions for the moderator to use if needed:

- What has the student response to existing initiatives been?
- What is the limiting factor in increasing the SG/NP efforts in academia?
- What are the challenges of integrating faculty and student interests/experiences with national labs?
- How do you balance R&D efforts between the Lab and the University community?

Are the Labs and University capable of developing a collaborative approach

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

Leading questions for the moderator to use if needed:

- How would a SG certification program be viewed within the academic community?
- What is the limiting factor in sharing educational materials efforts in academia?
- Can the Universities grow in this area in the current economic climate?
- Are the various universities capable of delivering education across their organizational boundaries?

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
American Association for the Advancement of Science
*Communicating with Congress***

Benn Tannenbaum

Administrative announcements:

Howard

- Leave personal things in room?
- Buses to ORNL – Need headcount for those not staying for reception. Shuttle available to take them back to Hilton after tours
- Bus sched for Fri am
- Shuttle back to Hilton available Fri am for those needing to depart early

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
3:15 – 4:00 Graphite Reactor
4:10 – 5:00 High Performance Computing Area / Everest**

**Al Ekkebus
Fred Strohl
Bill Renaud
Jamison Daniel**

**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)

Administrative announcements:

- Emergency exits
- The emergency contact number for the Baker Center is 865-974-0931
- Breakout rooms
- Cell phones on vibrate
- Shuttle available back to Hilton or taxi for those with early flights

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

Leading questions for the moderator to use if needed:

- Where will you find faculty for growing SG/NP educational efforts?
- How do you use distance learning effectively, without diluting the bricks and mortar experience??
- What are the challenges of integrating faculty and student interests/experiences with national labs?
- How do you balance R&D efforts between the Lab and the University community?
- How can we address the different time horizons of the academic and lab communities??

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

Leading questions for the moderator to use if needed:

- How do metrics in this area support (or not) the other metrics that drive organizational behavior?
- Is there a SG/NP “Alumni Association” concept that should be developed?
- Can you measure the effect of integrating faculty and student interests/experiences with national labs?
- What constitutes “effectiveness” in this arena?

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

Administrative announcements:

Howard

- Buses back to Hilton