



NNSA LDRD 2009 Tri-Lab Symposium Strengthening America's Infrastructure Security

August 19, 2009

Ritz-Carlton Hotel – 1150 22nd Street NW – Washington DC

AGENDA

7:30 Continental Breakfast/Registration

8:00 Welcome

Session 1 Chair: Hank Westrich, Sandia National Laboratories

8:05 NNSA Overview – LDRD Program
Jamileh Soudah, NA-121.4, Office of Institutional & Joint Programs

8:30 *William F. Brinkman, SC-1, Director, DOE Office of Science*

9:10 LLNL Overview – Bio Terrorism and Climate Change
Tómas Díaz de la Rubia, LLNL/Chief R&D Officer

9:50 Break

Session 2 Chair: Judy Kammeraad, Lawrence Livermore National Laboratory

10:10 SNL Overview – Cyber and Energy Storage
J. Stephen Rottler, SNL/CTO & VP of Science Technology & Engineering

10:50 Energy Infrastructure Security: A National Challenge
William N. Bryan, OE-30, Dep. Assist. Sec. DOE Office of Electricity Delivery & Energy Reliability

11:30 LANL Overview – Border Security and Energy Grid
Duncan McBranch, LANL/Principal Associate Director of Science, Technology & Engineering

12:10 Lunch

12:30 – 1:30 Poster Session

Session 3 Chair: William Friedhorsky, Los Alamos National Laboratory

1:30 *John Fischer, Director, Defense Laboratory Programs DoD, Office of the Under Secretary of Defense, Acquisition, Technology and Logistics*

2:10 NTS Overview – Site Directed R&D
Jim Holt, NTS/Deputy General Manager & Director

2:30 PDRD Overview – Plant Directed R&D
Anna Marie Trujillo, NA 112.3, Senior Engineer

2:50 Break – Panel Assembly

3:00 Panel Discussion – Led by David Crandall (NA-1); Jan Cervený (NA-22), Barbara McQuiston (STO/DARPA), Walter Polansky (SC-21.1), Tammy Taylor (OSTP), and Brandon Wales (DHS)

Session 4 Hank Westrich, Sandia National Laboratories

4:15 Awards and Survey/Questionnaire

4:30 Poster Session, continued

5:00 Adjourn

Poster Presenters

Advanced Microwave Antenna Array and Multiband Receiver	Ryan Martin and Kevin Thomas (NTS)
CeBr ₃ as a High-resolution Gamma-Ray Detector	Paul Guss (NTS)
Development and Integration of Computational Methods into Biodefense Therapeutic Countermeasure Design	Felice Lightstone (LLNL)
Defense against Pandemics: Host-Pathogen Interactions (Pathomics) in Avian Influenza.....	Ruy Ribeiro (LANL)
Differential Mobility Spectrometry/Mass Spectrometry	Manuel Manard (NTS)
Engineering Few Electron Occupation Si Double Quantum Dots for Quantum Bits And Future Quantum Circuitry	Rick Muller (SNL)
Environmental Tracers For Determining Water Resource Vulnerability to Climate Change	Michael Singleton (LLNL)
HEU Equivalent Spheres Fabrication	John Leckey (Y12)
Magnetic Resonance Imaging to Understand the Brain And Protect Our Borders: Ultralow Field Resonant Absorption Magnetic Resonance Imaging of Neural Activity	Michelle Espy And Petr Volegov (LANL)
Mapping Patterns of Past Drought in California: Late Holocene Lake Sediments as Model Diagnostics.....	Tom Guilderson (LLNL)
Modeling and Small-scale Testing for Nuclear Explosive Facility Safety.....	B. D. Faubion (Pantex)
Network Discovery, Characterization, and Prediction	Philip Kegelmeyer (SNL)
Oxygen Insensitive Anodes: Towards a Printable Lithium Ion Battery	Chris Apblett (SNL)
Perimeter Security	Paul J. De Rego (KCP)
Portable, Tagged Neutron Triple-coincidence Counter System.....	Ray Keegan (NTS)
Predicting the Future of California's Water Supply	Peter Caldwell (LLNL)
Protecting our Space Enterprise: A Vital Portion of our Nation's Information Infrastructure	Jeffrey Bloch (LANL)
Scalable Solutions for Processing and Searching Very Large Document Collections	Danny Dunlavy (SNL)
Science for a Robust Electrical Grid: Optimization and Control Theory for Smart Grids	Michael Chertkov (LANL)
Secure Wireless with Application to Nuclear Facilities and Radiation Detection	Joe Cordaro and Davis Shull (SRNL)
Stronger Materials for the Infrastructure: Spatial-temporal Frontiers of Atomistic Simulations in the Petaflop Computational World	Steve Valone (LANL)
Synthetic Biology of Novel Thermophilic Bacteria for Enhanced Production of Ethanol from 5-carbon Sugars	Rajat Sapra (SNL)
Templated Synthesis of Nanomaterials for Ultracapacitors	Bruce Bunker (SNL)
The Viral Discovery Platform	Christopher Bailey (LLNL)