

**Friends of ORNL**  
**Compilation of Luncheon Lecture Speakers from 2004 to 2018**  
**(\*including planned lectures for 1<sup>st</sup> three months of 2019)**

- March 2019\* Dr. Don Spong, ORNL, **Status of Magnetic Confinement Fusion Energy**
- Feb 2019\* Brian Egle, ORNL, **ORNL Isotopes Program**
- Jan 2019\* Dr. Karen Lloyd, UTK. **Microbes in Weird Places: What Life is Like Deep in the Earth**
- Nov 2018 Radu Custelcean and Neil Williams; ORNL, **Sustainable Approach to CO2 Capture from Air**
- Oct 2018 Ken Roy, retired ORGDP, **Terraforming Planetary Systems of Distant Stars**
- Sept 2018 Fred Haywood, retired consultant, **Fat Man and Little Boy**
- August 2018 Fred Sloop, ORNL, **Fluvial Catastrophes -- Megafloods**
- July 2018 Dr. Raphael Pooser, ORNL, **21<sup>st</sup> Century Information Technology and the Second Quantum Revolution**
- June 2018 Dr. Steven Stow, retired ORNL, **...And Some of the Cowboys Wore White Hats; Disposal of Liquid Nuclear Waste at Clinton Laboratories in the Early Days**
- May 2018 Dr. Geoffrey Greene, ORNL/UTK, **The Neutron Enigma**
- April 2018 Barry Stephenson, MCLinc Inc.. **The History of MCLinc, An Investigative Analytical and Testing Laboratory in Oak Ridge**
- March 2018 Robert Kennedy, Tetrattech, **Renewable Energy in Africa**
- Feb 2018 Dr. Robert Compton, ORNL/UTK, **Lasers in Physics and Chemistry**
- Jan 2018 Dr. William Peter, ORNL, **Progress at the Manufacturing Development Center**
- Nov 2017 Cathy Toth, OR Public Schools Education Foundation, **ORPSEF's "Making a Critical Difference Campaign"**
- Oct, 2017 David Holcomb, ORNL, **Molten Salt Reactors**
- Sept, 2017 Ryan McManamay, ORNL, **Cities Can Choose Their Future Water Sustainability**
- Aug, 2017 Lee Riedinger, UTK, **Data Science and Engineering Doctoral Program at UTK**
- July, 2017 Bronson Messer, ORNL, **Computational Astrophysics at ORNL: Modeling Stellar Death and Rebirth**
- June, 2017 Doug Kothe, ORNL, **The Exascale Computing Project**

- May, 2017 Adam Rondinone, ORNL, **Converting Carbon Dioxide to Ethanol:Waste to Fuel Technology**
- April, 2017 Jim Campbell, ETEC, **Economic Development in East Tennessee**
- March, 2017 Stacy Prowell, ORNL, **Vehicle Security: Where the Rubber Meets the Code**
- Feb, 2017 Melissa Allen, ORNL, **Impacts of Climate Change on Energy Demand**
- Jan 2017 Emily Wescott Hunicutt, **The Building of the Atomic City: As Seen Through the Photographs of Ed Wescott**
- Nov, 2016 Costas Tsouris, ORNL, **Uranium from Seawater.**
- Oct, 2016 Dr. Joseph J. Shonka, ORNL and UT, **Radiation Hazards to Flight Crews.**
- Sept, 2016 Ower C. Onar, ORNL, **ORNL Progress in Wireless Power Transfer Systems for EV Charging Applications.**
- August, 2016 John Galambos, Director of the Spallation Neutron Source Second Target Station Project Office at ORNL, **The SNS Second Target Station Project.**
- July, 2016 Robert Kennedy, Tetra Tech Inc., **Tennessee Valley Interstellar Workshop.**
- June, 2016 Professor Michael Guidry, Physics and Astronomy Department at the University of Tennessee in Knoxville, **Gravitational Waves.**
- May, 2016 Tim Powers, Director of the Research Reactors Division (RRD) in the Neutron Sciences Directorate at ORNL, **High Flux Isotope Reactor: Celebrating History and Moving Forward.**
- April, 2016 Dr. Lou Qualls, ORNL Nuclear Science and Engineering Directorate, **Space Nuclear Power.**
- March, 2016 Richard Cook, Oak Ridge book author, **Ignored Heroes of World War II: The Manhattan Project Workers of Oak Ridge.**
- February, 2016 Dave Adler, DOE Oak Ridge Operations office, **The Department of the Energy's Environmental Management Program in Oak Ridge.**
- January, 2016 D. Ray Smith, Oak Ridge Historian, **Manhattan Project National Historical Park - an update.**
- November, 2015 Tom King, Director of Sustainable Electricity Program at ORNL, ***Dream On - How Innovation Will Transform our Electricity Infrastructure.***
- October, 2015 Bruce MacLennan, Electrical and Computer Science Department of the University of Tennessee, ***Can a Robot Have a Mind?***

- September, 2015 Buddy Bland, Project Director Oak Ridge Leadership Computing Facility, *World Leading Computing and Computational Science at ORNL*.
- August, 2015 Gina Tourassi, ORNL Director for Biomedical Sciences and Engineering Center, *Data-Driven Health Innovations at ORNL*.
- July, 2015 Johney Green, ORNL Director for Energy and Transportation Sciences, *Sustainable Transportation Program: Delivering Innovation*.
- June, 2015 Michelle Buchanan, ORNL Associate Laboratory Director for Physical Sciences, *Grand Challenge Science Questions in Materials and Chemical Sciences*.
- May, 2015 Barry Stephenson, President and CEO of Material and Chemistry Laboratory, Inc., *Excellence is a Choice, as related Oak Ridge Public Schools Education Foundation (ORPSEF)*.
- April, 2015 Dr. Ben Preston, Deputy Director of ORNL's Climate Change Science Institute, *The State of Climate Change Science and Policy: Local to Global*.
- March, 2015 Dr. Ken Tobin, Director of the Electrical and Electronics Systems Research (EESR) Division at ORNL, *Telemedical Screening to Reduce Blindness from Diabetic Retinopathy*.
- February, 2015 Dr. Brian Davidson, ORNL, *The BioEnergy Science Center: An Integrated Strategy to Understand and Overcome Biomass Recalcitrance*.
- January, 2015 Patrick Hughes, ORNL's Building Technologies Research and Integration Center (BTRIC), *Building Energy Efficiency R&D at ORNL: What's New*.
- November, 2014 Douglas B. Kothe, ORNL, *CASL: The Consortium for Advanced Simulation of Light Water Reactors; A DOE Energy Innovation Hub*.
- October, 2014 Dr. Robert Lauf, ORNL retiree, *Radioactive Minerals*.
- September, 2014 Dr. Piotr Zolnierczuk, ORNL SNS, *Germany's Part of the SNS -- A Polish Scientist's Experience*.
- August, 2014 Dr. T. J. Blasing, retired ORNL ESD, *Climate Change Research at ORNL*.
- July, 2014 Dr. James Roberto, head of Science and Technology Partnerships at ORNL, *Technology Transfer, Industry Partnerships and Graduate Education*.
- June, 2014 Ms. Lee McGetrick, Carbon Fiber Technology Facility, *The CFTF mission and recent successes*.
- May, 2014 Dr. Graeme Murdoch of ORNL, *U.S. ITER Superconducting Systems*.
- April, 2014 Dr. Hans Vogel of ORNL, *U.S. ITER Nuclear Systems*.
- March, 2014 Dr. Brad Nelson of ORNL, *ITER overview*.

- February, 2014 Omer Onar of ORNL, *Wireless Battery Charging for Vehicles.*
- January, 2014 Melissa Voss Lapsa, Deputy Director of ORNL's Building Technologies Research and Integration Center, *The award winning sustainability program at ORNL.*
- November, 2013 Katie Corcoran, Ph.D. Student in Anthropology at the University of Tennessee and graduate intern in the Geographic Information Science and Technology (GIST) Group at Oak Ridge National Laboratory, *The Remote Detection of Unmarked Graves.*
- October, 2013 Dr. Bruce Warmack of ORNL's Measurement Science and Systems Engineering Division, *The ORNL-developed Smart Smoke Alarm.*
- September, 2013 Michael Whitaker, ORNL, *Recent IAEA training program held at ORNL for more than 40 safeguards professionals and regulatory officials.*
- August, 2013 Dr. Jeff A. Nichols, Associate Laboratory Director for ORNL's Computing and Computational Sciences Directorate, *Leadership Computers as Instruments of Discovery.*
- July, 2013 Dr. Cymbeline (Bem) Culiante, Founder, Chief Scientific Officer and Scientific Board Chairman of NellOne Therapeutics, Inc., *Clinical applications of the Nell1 protein in skeletal muscle wound healing and treatment of cardiovascular disorders.*
- June, 2013 Dr. Liyuan Liang, ORNL, *Recent discovery of genes associated with the production of methyl mercury in the environment.*
- May, 2013 Dr. Lonnie Love, ORNL group leader, Automation, Robotics, and Manufacturing, *Development of 3D Printing and other Advanced Manufacturing Applications at ORNL*
- April, 2013 Dr. Martin Keller, Associate Laboratory Director, Energy and Environmental Sciences, ORNL, *On The Way To a Sustainable World—Are We Too Late*
- March, 2013 Dr. Anthony King, Environmental Sciences Division, ORNL, *Energy, Climate Change, and Adaptation: An Ecologist's Perspective*
- February, 2013 Dr. Klaus Daniel, Deputy Director of ORNL's Sustainable Transportation Program, *Electrification of Transportation: Cost and Opportunities*
- January, 2013 Dr. Sean C. Smith, [Director, Center for Nanophase Materials Sciences, ORNL.](#) *Nanoscale Science and the Exploration of New Materials, Functionality and Applications.*
- October, 2012 John W. Krueger, Isotope Production Manager, Fuel Cycle and Isotopes Division, ORNL and recently Federal Project Director for U-233 Disposal Project, on loan from ORNL to DOE. *U-233 Disposition from ORNL: An Innovative Path Forward.*
- September, 2012 Dr. John Kyle P. Mueller, Post-Doctoral Fellow, ORNL. *The Development of a Mobile Gait Analysis System for Military Populations with Lower Limb Prosthetics.*

August, 2012 Dr. Donald Batchelor, Research Professor, Univ. of Tenn., recently retired from Fusion Energy Division, ORNL, ***An Overview of Fusion Energy Research.***

July, 2012 Frank Munger, Senior Writer, Knoxville News Sentinel/Knoxnews.com. ***Somebody Stole My Dosimeter: Looking Back Lightly on a 30-Year Adventure.***

June, 2012 Dr. Paul J. Hanson, Distinguished Staff Member, Environmental Sciences Division, ORNL. ***Spruce-Peatland Responses Under Climatic and Environmental Change: Using Experimental Systems to Glimpse the Future.***

May, 2012 Dr. Gene Ice, Director, Materials Science and Technology Division, ORNL. ***X-ray and Neutron Optics for Spatially-Resolved Characterization of Materials.***

April, 2012 Dr. Kent A. Williams, retired ORNL chemical engineer and consultant to Idaho National Laboratory. ***A Walk Through the Nuclear Fuel Cycle: the Last 46 Years.***

March, 2012 Ziyuan Liu and Cassee Cain, Oak Ridge High School winners of the 2011 national Siemens Competition in Math, Science and Technology team award. ***Using Kinect for Xbox 360 and Computer Vision to Analyze Human Gait.***

February, 2012 Dr. Jess Gehin, ORNL Reactor and Nuclear Systems Division, Lead for Reactor Technology R&D Integration. ***Consortium for Advanced Simulation of Light Water Reactors (CASL).***

January, 2012 Lee McGetrick, ORNL Energy and Environmental Sciences Directorate, Director, Carbon Fiber Technology Facility (CFTF), ***Carbon Fiber Technology Facility (CFTF)***

October, 2011 John Waggoner, Consultant, TerraPower, LLC, ***Traveling Wave Reactor.***

September, 2011 Mike Paulus, Director-Technology Transfer, ORNL, ***ORNL Innovations That Have Impacted America.***

August, 2011 Daniel Ingersoll, Senior Program Manager, Reactors and Nuclear Systems Division at ORNL, ***Small Modular Reactors and the Second Nuclear Era.***

July, 2011 Pat Parr, Natural Resources Manager for Oak Ridge National Laboratory, ***ORNL's Sustainable Landscaping Initiative.***

June, 2011 Mr. Phil Andrews, ORAU Vice President of Business Operations and Chief Financial Officer, ***Overview of Oak Ridge Associated Universities***

May, 2011 Dr. Elias Greenbaum, Chemical Sciences Division, ORNL, ***The DOE Artificial Retina Program***

April, 2011 Dr. Randy K. Nanstad, Group Leader of the Nuclear Materials Science and Technology Group of the Materials Science and Technology Division at Oak Ridge National Laboratory, ***Containing the Reactor Core - Historical and Current Pressure Vessel Research for Nuclear Reactors***

March, 2011 Dr. Glenn Cada, Senior Research Staff Member at Oak Ridge National Laboratory, *Efforts to Ensure the Environmentally Sound Development of New Marine and Freshwater Hydrokinetic Energy Technology*

February, 2011 Dr. Brandon Prins, Associate Professor of Political Science, University of Tennessee, *Controlling the Bomb.*

January, 2011 Dr. Madhavi Martin, ORNL Environmental Sciences Division, *Use of Laser-induced Breakdown Spectroscopy (LIBS) in Forensics Applications.*

October, 2010 Tim Myrick, Living Waters for the World Organization, *Living Waters for the World brings Clean Water to Appalachia*

September, 2010 Steve Stow, ORNL Retiree and History Room Volunteer, *ORNL History Room Activities.*

August, 2010 Robert G. Kennedy, III, The Ultimax Group, Inc., *The Real Goldeneye: A Personal Account of the Star Wars Program.*

July, 2010 James B. Roberto, Director of Strategic Capabilities, *The Recent Discovery Of Element 117.*

June, 2010 Syd Ball, Advanced Reactor Systems and Safety Group at Oak Ridge National Laboratory, *Gas Cooled Reactors*

May, 2010 Gary Mays, Advanced Reactor Systems and Safety Group at Oak Ridge National Laboratory, *Small Modular Reactors: Benefits, Challenges, and Siting.*

April, 2010 Dr. Barry Goss, Founder, Chairman and CEO of Pro2Serve, *Overview of Pro2Serve.*

March, 2010 Robert M. Whitten Jr., User Assistance and Outreach Group of the National Center for Computational Sciences (NCCS), *Secret City and Supercomputers: Oak Ridge Then and Now.*

February, 2010 Murray Rosenthal, *An Account of ORNL's Thirteen Nuclear Reactors.*

January, 2010 Julie Ezold, Nuclear Material Processing Group of the Nuclear Science and Technology Division, *Isotope Production at ORNL.*

October, 2009 Claus Daniel, *Lithium Ion Batteries: Challenges and Opportunities.*

September, 2009 Gary Adkins, Senior Project Manager, Nuclear Generation and Development, TVA, *Nuclear Power: Part of Our Future.*

August, 2009 Larry Satkowiak, Director, Global Security and Nonproliferation Programs, *Nuclear Terrorism and ORNL's Role in Preventing It.*

July, 2009 Ned Sauthoff, Head of the ITER Project Office at the ORNL, *ITER: Bringing a Star to Earth.*

June, 2009 Bill Reich, Transportation Security Program, *Transportation Security of Nuclear Materials*

May, 2009 David Erickson, Computer Science and Mathematics Division, *Global climate modeling: Physics, Satellites, Chemistry, Energy Prediction and Treaty Verification*

April, 2009 Bob Perlack, Environmental Sciences Division, *Reality: US Lands Can Produce The Ethanol To Displace One-Third Of US Petroleum Consumption*

March, 2009 Laura Edwards, Center for Nanophase Materials Science, *Nanoscience: Tiny Treasures*

February, 2009 Wayne Manges, Industrial Wireless Program, *ORNL's Worldwide Leadership in Industrial Wireless Technology*

January, 2009 Alan Liby, Industrial and Economic Development Partnerships, *Using the New Oak Ridge Science and Technology Park at ORNL to Create New Partnerships with Industry.*

October, 2008 Johney Green, Fuels, Energy and Transportation Science Division, *Current Activities of the Fuels, Energy and Transportation Science Division.*

September, 2008 Ken Tobin, Measurement Science and Systems Engineering Division, *Current Activities of the Measurement Science and Systems Engineering Division.*

August, 2008 Amy Rothrock, DOE-ORO, *Ask and You Shall Receive (Freedom of Information Act Activities).*

July, 2008 Tilden Meyers, Director of Turbulent Exchange Measurements and Modeling in the Atmospheric Turbulence and Diffusion Division, NOAA Oak Ridge, *ATDD Programs and Activities in Oak Ridge.*

June, 2008 Vinod Sikka, Corporate Fellow of UT-Battelle and a Fellow of ASM International, *The Impact Of Materials Developed at ORNL On The Local and National Economy.*

May, 2008 Gary Jacobs, Director, Environmental Sciences Division at Oak Ridge National Laboratory, *Climate Change: The Energy-Carbon-Water Nexus.*

April, 2008 Virginia Dale, Environmental Sciences Division at Oak Ridge National Laboratory, *Lessons from the 1980 Eruption of Mount St. Helens.*

March, 2008 Brian Davison, Director, Life Sciences Division, *Overview of the Bioenergy Science Center at ORNL.*

February, 2008 Jimmy Stone, Director, Facilities Management Division, *Overview of the Oak Ridge National Laboratory Operational and Infrastructure Improvements.*

January, 2008 Jim Rushton, Director, Nuclear Science and Technology Division, *Revitalization of Nuclear Power in the U. S.*

- October, 2007 Pat Parr, Natural Resources Manager for Oak Ridge National Laboratory, *Changing Landscapes: ORNL and Oak Ridge Reservation.*
- September, 2007 David Rasmussen, U. S. Iter Project, *Overview of the Iter Project.*
- August, 2007 Jerry A. Klein, Director, Isotope Production and Distribution Program, *Overview of the Isotope Production and Distribution Program at ORNL.*
- July, 2007 Brian Davison, Director, Life Sciences Division, *Biomass to Bioethanol: Promises and Challenges.*
- June, 2007 Keith Kahl, ORNL National Transportation Research Center, *Seven Years at NTRC: Where we've been....where we're headed.*
- May, 2007 Keith Joy, Small Business Programs, *ORNL's Small Business Programs Overview.*
- April, 2007 Robert M. Whitten, Jr., National Center for Computational Sciences at Oak Ridge National Laboratory, *An Overview of the National Center for Computational Sciences.*
- March, 2007 Paul Gubanc, National Security Directorate, *Applying ORNL's Scientific Expertise in Support of our Nation.*
- February, 2007 David L. Beshears, Project Manager/Senior Research and Development Scientist, Engineering Science and Technology Division, ORNL, *Hybrid Solar Lighting at ORNL.*
- January, 2007 Walter Dykas, Chief Cyber Security Officer, ORNL, *Cyber Security in the Enterprise and at Home.*
- November, 2006 Tommy Phelps, Environmental Sciences Division, ORNL, *NanoFermentation: microbial production of designed nanoscale magnetic materials.*
- October, 2006 Dr. Wang Lau, Former TVA nuclear engineer, *The Chinese and Their Nuclear Power Program.*
- September, 2006 John Shewairy, Director of Public Affairs, ORO, *Current Events and a Look to the Future for the Oak Ridge Operations Office.*
- August, 2006 Jeff Muhs, ORNL staff member, *A Year on Capital Hill: A Scientist-Engineer's Experience as a Science and Energy Advisor.*
- July, 2006 John Haines, Spallation Neutron Source, *Highlights of the SNS.*
- June, 2006 Ron Townsend, president of Oak Ridge Associated Universities, *ORAU - Its Current Activities and Impact on the Community.*



May, 2006 Tony Wright, Engineering Science and Technology Division, ***Energy - Reducing Industrial Energy Costs.***

April, 2006 Thomas Watkins, High Temperature Materials Laboratory, ***Title?***

March, 2006 Marilyn Brown, Interim director of Oak Ridge National Laboratory Engineering Science and Technology Division, ***Climate Change Technologies: Seeking Better and More Cost-Effective Solutions***

February, 2006 Charles Forsberg, Nuclear Science and Technology Division, ***The Advanced High-Temperature Reactor: Back to the Future with Liquid [sic: Metals?] and Molten Salt.***

January, 2006 Larry Bryant, TVA, ***TVA Nuclear Power Program***

November, 2005 David Hill, Associate Laboratory Director, Energy and Engineering Science, ***Overview of ORNL's Energy and Engineering Science Activities***

October, 2005 Dr. Michael Smith, ORNL Physics Division, ***The Rare Isotope Accelerator***

September, 2005 Dr. Eli Greenbaum, ORNL Chemical Sciences Division, ***Photosynthesis Research***

August, 2005 Dr. Madhavi Martin, ORNL Physics Division, ***What's New in Spectrometers?***

July, 2005 Lanny Bates, ORNL Facilities Development Division, ***ORNL Modernization Update.***

June, 2005 Richard Kettelle, Bechtel Jacobs Company, ***Environmental Restoration.***

May, 2005 Brian Davison, Life Sciences Division, ***Research in Complex Biology—Life Sciences Division.***

April, 2005 Linda Horton, Center for Nanophase Sciences, ***Center for Nanophase Sciences: ORNL's Newest User Facility***

March, 2005 Tim Myrick, ORNL Loaned Executive, and Pat Postma, University of Tennessee, Retired, ***Latest Status of the New Oak Ridge High School.***

February, 2005 Greg Marland, Environmental Sciences Division, ***Global Climate Change: What's New?***

January, 2005 Ian S. Anderson, ***Spallation Neutron Source Update.***

December, 2004 E. Lara-Curzio, ***The Columbia Mission—Materials Research***

November, 2004 Jim Rushton, Director, Nuclear Science and Engineering Technology Division, ***Re-emergence of Nuclear Power.***

October, 2004 Bill Knee, National Transportation Research Center, ***Intelligent Transportation.***

September, 2004 Larry Allard, High Temperature Materials Laboratory, ***New High Power Electron Microscope.***

- August, 2004 Reinhold Mann, Associate Laboratory Director for Biological and Environmental Sciences, *The Future of Biological and Environmental Research at ORNL*.
- July, 2004 Kris Johnson, Park Ranger, Great Smokey Mountains National Park, *Exotic Plant Pest Management in East Tennessee*.
- June, 2004 Ken Greene, Principal Oak Ridge High School, *ORHS Update*.
- May, 2004 Pat Parr, ORNL Reservation Manager, *The Oak Ridge Reservation*.
- April, 2004 Dick Phillipone, DOE Safeguards and Security, *Practical Nuclear Safeguards and ORNL*.
- March, 2004 Jim Kulesz, *SensorNet*
- February, 2004 Gerald Boyd, Manager ORO, Reflections *After a Year in Oak Ridge*.
- January, 2004 Norbert Holtkamp, *ORNL, A Leading Accelerator Lab in the U. S.*
- June, 2013 Kent Williams, ORNL, **Natural versus Man-made Radioactivity: Differing Scientific, Public, and Regulatory Perceptions**
- Nov 1999 Kent Williams, ORNL, **Fissile Materials Disposition Program**

Compiled by Bob Hightower, Chuck Coutant, Herb Krause, and Kent Williams