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Dr. Kelly Beierschmitt is currently the Deputy Laboratory Director for Nuclear and Laboratory Operations at Idaho National Laboratory (INL). He has over 30 years of experience in engineering, nuclear and materials-related R&D, production, and operations management. Kelly reports to the INL Laboratory Director and is responsible for institutional leadership in nuclear operations and nuclear support programs and projects. He is responsible for providing strategic leadership, direction, and integration for all nuclear and laboratory operations at the INL including Materials and Fuels Complex (MFC), which is INL's center for fuel fabrication and post irradiation testing; and Advanced Test Reactor (ATR) Complex, designated as a National Scientific User Facility and is available to universities and industry for conducting in-core experiments vital to nuclear energy technology and materials development. He is also responsible for providing strategic leadership and direction to the Transient Reactor Test Facility (TREAT), specifically built to conduct transient reactor tests where the test material is subjected to neutron pulses that can simulate conditions ranging from mild upsets to severe reactor accidents. Kelly is also responsible for providing strategic direction to effect revitalization of the INL physical infrastructure and help advance research and development through management of key infrastructure components supporting Laboratory missions.

Kelly began his career at Pantex as a weapons engineer. He was responsible for the assembly, disassembly and testing of several of the nation's nuclear assemblies. While at Pantex, Kelly held several key roles that ranged from providing leadership to enhance the safeguards and security program to being responsible for high explosives production, storage and disposal. Kelly left Pantex in 1996 as the Department Manager of the Facilities Startup organization where he was responsible for commissioning and early operation of the plant's new modern weapons production, testing, assembly and storage facilities.

Following a decade at Pantex, Kelly moved to the Pacific Northwest National Laboratory where he provided support to DOE's International Nuclear Safety Program's Chernobyl evaluation. He was also a principal on a task force to conduct a priority facility environmental vulnerability analysis at Brookhaven National Laboratory, which included the hot cell facility, old graphite reactor, High Flux Beam Reactor, and Medical Reactor. Kelly served in two key leadership roles while at PNNL; Director of Quality and Deputy Director of Environment Safety and Health. Kelly also served as an adjunct faculty member at Washington State University, Mechanical Engineering Department while working in the Pacific Northwest.

Kelly joined Oak Ridge National Laboratory in January of 2000 as Director of the Environment, Safety, Health and Quality Directorate (ESH&Q). He was responsible for developing, operating, and continuously improving ESH&Q management systems and providing ESH&Q services that

enabled mission accomplishment. He also led the enhancement and implementation of ORNL's Integrated Safety Management System.

In 2004 Kelly assumed the role of Director of the Nuclear Operations Directorate where he led the renewal of ORNL's nuclear facilities capabilities bringing them up to modern standards. This included renewing HFIR to extend its mission for neutron scattering, materials irradiation, and isotope production, and consolidating ten nuclear facilities into four modern facilities with state-of-the-art capabilities. He has extensive experience in isotope production, from target preparation, irradiation, processing, and shipping, as part of the production of actinium, californium and other isotopes either produced or processed at ORNL.

Following this assignment, Kelly was Associate Laboratory Director (ALD) of the Nuclear Science and Engineering Directorate (NSED) and the Executive Director of HFIR. As Director of NSED, Kelly's experience included the development and management of complex systems used to study materials under broad time and length scales, fuel cycle and isotopes research; design, development, modeling and simulation of reactor and nuclear systems; and the development and implementation of nuclear security technology. Kelly was responsible for initiatives to build a small modular reactor to provide carbon-free electricity to the laboratory, the Consortium for Advanced Simulation of Light Water Reactors (CASL), and the cleanup of the laboratory's legacy nuclear and radiological facilities.

Kelly has played a national and international leadership role in support of nuclear science and technology, including isotope production. Kelly has helped lead the transition of the DOE Isotope Program at ORNL from the Office of Nuclear Energy to the Office of Nuclear Physics. As part of this transition, he led the development of a production model for ^{252}Cf that is providing a reliable, cost-effective source of this isotope to the community. He has also advised the Office of Nuclear Physics on models for production of other key isotopes during this transition.

Completing his time at ORNL and just prior to joining INL, Kelly was the ALD of the Neutron Sciences Directorate responsible for the Spallation Neutron Source (SNS), the world's most powerful pulsed neutron source. This responsibility included leading a community of scientists dedicated to the study of the structure and dynamics of quantum condensed matter, biology and soft matter, chemistry and engineered materials through the application of neutron scattering techniques and supporting over 3,000 users annually. He was also responsible for the operation of the High Flux Isotope Reactor (HFIR), an 85 megawatt research reactor dedicated to neutron scattering, materials irradiation, and isotope production. During his time as ALD, he successfully oversaw the power up-ramp to 1.2 megawatts of proton energy on the target; and he updated the scientific strategy for the SNS supported by the scientific community to identify those research priorities leading to a full build-out of instruments on existing beam-lines, and the need for a second target station. During this period, Kelly served extensively on international advisory boards including support to ISIS at the Rutherford Appleton Laboratory; the European Spallation Source (ESS) in England; the Open Pool Australian Lightwater Reactor (OPAL) in Australia; and Japan Proton Accelerator Research Complex (J-PARC) in Japan.

EDUCATION

Ph.D., Industrial Engineering (Operational Analysis, Risk, Reliability Engineering), Texas Tech University

B.S., Engineering Mathematics (emphasis in Chemical Engineering and minor in Chemistry), West Texas A&M University

PROFESSIONAL EXPERIENCE

Deputy Laboratory Director, Nuclear and Laboratory Operations, Idaho National Laboratory (INL)	2014 - Present
Associate Laboratory Director, Neutron Sciences Directorate, Oak Ridge National Laboratory (ORNL)	2011 - 2014
Associate Laboratory Director, Nuclear Science and Engineering Directorate, ORNL	2010 - 2011
Director, Nuclear Operations Directorate and High Flux Isotope Reactor (HFIR) Executive Director, ORNL	2004 - 2010
Director, Environment, Safety, Health & Quality (ESH&Q) Directorate, ORNL	2000 - 2004
Director, Quality, Pacific Northwest National Laboratory (PNNL)	1999 - 2000
Deputy Director, Environment, Safety and Health (ES&H), PNNL, Adjunct Faculty, Washington State University, Mechanical Engineering Department	1996 - 1999
Manager, Facility Readiness, Pantex	1995 - 1996
Manager, ES&H/Waste Management (WM) Integration Department, Pantex	1993 - 1995
Manager, Operations Support and Senior Project Engineer, Production Engineering and Risk Management Department, Pantex	1990 - 1993
Staff Member, Gas Analysis, Chemistry and Production Departments, Mason & Hanger, Silas Mason Co. Inc.,	1984 - 1990

PROFESSIONAL HIGHLIGHTS

Professional Service:

- Member, Technical Working Group on Research Reactors (TWGRR) of the International Atomic Energy Agency (IAEA), DOE
- Member, Nuclear Science Advisory Committee's Isotopes Subcommittee, DOE
- Member, Office of Science and Technology Policy (OSTP) intergovernmental panel for the emergency production of Molybdenum 99
- Member, National Nuclear Security Administration **(**NNSA)-led merit review committee to evaluate technical feasibility of new technologies to address domestic production of Moly-99 beyond 2014, DOE
- Member, Committee of Visitors, Nuclear Science Advisory Committee, DOE
- Member, Dean’s Council, Texas Tech University
- Charter Member, Bredesen Center for Interdisciplinary Research and Graduate Education at the University of Tennessee
- Member, Japan Proton Accelerator Research Complex (J-PARC) Advisory Board
- Chairman, the DOE National Laboratories Improvement Council (NLIC)
- Member, Industrial Advisory Board for Oklahoma State University
- Member, United Way Board for Roane County
- Member, Higher Education Research Council for Idaho State Board of Education

Professional Registrations: Certified Safety Professional in Comprehensive Practice; Registered Professional Engineer in Texas

Professional Memberships: Member, American Nuclear Society, Materials Research Society, American Society for Quality Control, and American Society of Safety Engineers