

Bill Madia: Building a bright future for ORNL

(As published in *The Oak Ridger's Historically Speaking* column on April 14, 2014)

Carolyn Krause continues her excellent series of *Historically Speaking* articles featuring on the directors of the Oak Ridge National Laboratory, the Department of Energy's largest and most diverse basic science laboratory with several significant scientific achievements to its credit. Proudly, all Oak Ridger enjoy the presence of "our" national laboratory! Enjoy Carolyn's focus on Bill Madia and especially notice what Tim Myrick has to say about him.

...

Never underestimate the importance of new buildings at Oak Ridge National Laboratory.

A modern building that receives plenty of natural light and makes available state-of-the-art scientific instruments and lots of coffee attracts bright, young recruits. It also helps if the building is designed to be highly energy efficient.

A building large enough to accommodate supercomputers and provide the power and cooling required is essential to a winning proposal to give ORNL world-class, high-performance computing.

New partnerships between ORNL and the private sector and Tennessee state government hastened construction of new buildings as part of a modernization program.

Impressive progress in the construction of the Spallation Neutron Source—on time, budget, and scope—helped give the lab an anchor facility that promises a healthy future.

Support for renovation of Oak Ridge High School and high-school science labs made possible educational programs likely to motivate more students to enter the fields of science, technology, engineering and mathematics—and prepare for jobs funded by DOE at national labs and universities.

These were the chief accomplishments made under Bill Madia, director of ORNL from April 2000 until 2003. Madia's tenure began when UT-Battelle took over for Lockheed Martin as the manager of ORNL for the Department of Energy. Previously, from 1994 until early 2000, he was director of DOE's Pacific Northwest National Laboratory.

A native of Wilkinsburg who grew up in Swissvale, two boroughs near Pittsburgh, PA, he was the first in his family to attend a university. He graduated from Indiana University of Pennsylvania, with B.S. and M.S. degrees in chemistry. To help pay tuition, he washed dishes in a restaurant and in summer worked at a steel mill, where many of his high-school peers spent their careers.

Madia holds the record at Virginia Tech for acquiring a Ph.D. degree the fastest (in nuclear chemistry, in 27 months). Between his master's degree and studies for a doctorate, he was drafted into the U.S. Army. He trained nuclear reactor operators for the Army's nuclear power program for the Joint Chiefs of Staff in Washington, D.C.

In 1975 he was hired to work in the nuclear research department of Battelle Memorial Institute in Columbus, OH. For Battelle he established the first nuclear fuel cycle group, developed nonproliferation procedures and managed a plutonium fuel fabrication lab.

In 1979 after the Three Mile Island nuclear power plant accident near Harrisburg, PA, DOE appointed him a member of its blue ribbon panel to provide advice on the decontamination and decommissioning of the TMI plant. In 1985 Madia was promoted to director of Battelle's Ohio laboratory. Later, he managed the Battelle labs in Frankfurt, Germany, and Geneva, Switzerland.

While at PNNL, he oversaw the construction and startup of the Environmental Molecular Sciences Laboratory and the elevation of the lab to formal national laboratory status.

Bill Madia: Building a bright future for ORNL

(As published in *The Oak Ridger's Historically Speaking* column on April 14, 2014)

As director of ORNL, where Madia was sometimes seen riding his motorcycle, he oversaw the beginning of construction of the Spallation Neutron Source and Center for Nanophase Materials, DOE's first of five nanoscience labs. He led a laboratory-wide modernization effort that included attracting private-sector investments to fund the buildings that host the Center for Computational Sciences and its supercomputers (e.g., Jaguar and later Titan).

ORNL's position as a world leader in high-performance computing continues today.

On Feb. 26, 2014, Tim Myrick, who worked closely with Madia on the modernization projects, wrote the following about Madia:

"Under Bill's leadership, UT-Battelle's changes to ORNL have been the most dramatic of any of the managing contractors over the past 20 years. The physical facilities have been brought into the 21st century, both in the construction of state-of-the-art research buildings as well as in the operational improvements in the remaining facilities.

"This dramatic shift was accomplished through the innovative use of private-sector and state of Tennessee partnerships in seamless combination with the standard DOE and Department of Defense funding sources. Bill's passion and relentless energy towards reaching the modernization goals were an inspiration for all of us on his management team.

"Bill's passion for community improvements and involvement was equally intense, and he became a leader for educational excellence in all the surrounding communities. The most visible of the many projects for which UT-Battelle provided leadership and funds was the renovation of Oak Ridge High School.

He was committed to making that flagship school's physical facilities equal to its educational excellence. And once again, it was through the building of partnerships with local corporations, the state, the city of Oak Ridge, and the Oak Ridge School Board that the project was so successful.

"The impact that Bill Madia made in the Oak Ridge community will be felt for decades, and that's amazing considering the relatively short time he was actually here. He certainly made me a better person and showed just how important passionate senior leadership is in making step-changes in improvements in our world."

In 2003 Madia returned to Battelle in Columbus as executive vice president for laboratory operations. He retired four years later. In 2008 he became an employee of Stanford University, which appointed him as vice president of DOE's Stanford Linear Accelerator Center. He also became a director of the U.S. Enrichment Corporation, which plans to use gas centrifuges in Portsmouth, OH, to produce enriched uranium for nuclear power plants.

Madia has provided advice on nuclear science and engineering, as well as research, to several universities, and on investments to venture capitalists with a green-energy firm. In 2013 his company Madia & Associates, in La Quinta, CA, conducted the audit of ITER [International Thermonuclear Experimental Reactor], the international fusion energy project (for which ORNL hosts U.S. ITER). ITER will be constructing 39 buildings in St. Paul-lez-Durance, France.

NEXT: The observations of and recommendations for ITER from the audit of Madia & Associates. ORNL is one of the contributors to the international project.

...

Thanks Carolyn, for bringing to our attention again some of the highlights of the three short years of Bill Madia's tenure as the director of ORNL. Thanks also to Tim Myrick for his exceptional

Bill Madia: Building a bright future for ORNL

(As published in *The Oak Ridger's Historically Speaking* column on April 14, 2014)

insight into the leadership of Bill Madia and also for his personal commitment that fulfilled the dream that UT-Battelle had to invest significantly in education in Oak Ridge. This is an example that must continue to be the focus of contractor management if Oak Ridge is to continue to thrive and provide the excellence in education expected by the companies who manage the DOE sites in Oak Ridge.



Bill Madia, ORNL Director 2000 - 2003

Bill Madia: Building a bright future for ORNL

(As published in *The Oak Ridger's Historically Speaking* column on April 14, 2014)



Tim Myrick, under Bill Madia's leadership Tim Myrick was instrumental in assuring the Oak Ridge High School renovation implementation was successful