

Maryland, College Park, has spent most of his career working with various aspects of nuclear weapons design. After a stint at the National Bureau of Standards (now NIST), where he worked in atomic physics, he joined the nuclear design department of Lawrence Livermore National Laboratory in 1982. While there, he led design groups for the nuclear-driven x-ray laser and other nuclear explosive concepts.

Younger moved to Los Alamos in 1989 and led programs in inertial confinement fusion, and “was responsible for the largest operational unit at the laboratory, the nuclear weapons directorate, during a period of significant change and enormous challenge,” said lab director John Browne. Younger told his Los Alamos colleagues that he was “looking forward to the challenge of leading the Defense Threat Reduction Agency. This move continues a career commitment to reducing the dangers to the United States and our allies from weapons of mass destruction.”

NSF TeraGrid. Four groups will share \$53 million over three years from NSF to develop the TeraGrid, a distributed supercomputer network capable of performing 11.6 trillion calculations per second (11.6 teraflops) and transferring 40 billion data bits per second.

“This will be the largest, most comprehensive information infrastructure ever deployed for open scientific research,” says Dan Reed, director of the National Center for Supercomputing Applications (NCSA) at the University of Illinois at Urbana-Champaign and one of the TeraGrid’s principal investigators. “Unprecedented amounts of data are being generated . . . and groups of scientists are conducting new simulations of increasingly complex phenomena.”

The TeraGrid will be a user facility, available competitively to US scientists. All data- and computation-intensive research will be game, with foreseen applications in, among other areas, genomics, particle physics, astrophysics, and storm, climate, and earthquake prediction. The TeraGrid is slated to start up next year.

NCSA’s TeraGrid partners are the San Diego Supercomputer Center at the University of California at San Diego, Argonne National Laboratory, and Caltech. NSF may expand the TeraGrid to include the Pittsburgh Supercomputing Center—which is expected to reach its peak performance of 6 teraflops this fall—and the National Center for Atmospheric Research in Boulder, Colorado. ■