Tom Terwilliger of LANL's Biosecurity and Public Health group is the recipient of the Trueblood Award from the American Crystallographic Association (ACA), presented at the organization’s annual meeting.

In announcing Terwilliger’s selection, the ACA noted in its newsletter that “the ACA Trueblood Award recognizes exceptional achievement in computational or chemical crystallography. Thomas C. Terwilliger has made brilliant contributions to the community of crystallographers through his software that permits the near-automatic determination of molecular structures. His deep understanding of chemical crystallography, statistics, and computer codes has enabled him to produce a string of programs that have helped to transform the field of macromolecular structure determination. Tom has been selected for this award partly because he fits the Trueblood model of generosity and service, but even more because of his brilliant contributions to crystallographic computing.”

Notable achievements
Terwilliger obtained a doctorate at the University of California, Los Angeles. He was a Helen Hay Whitney Postdoctoral Fellow and a Presidential Young Investigator before joining Los Alamos in 1991. His research focuses on structural genomics—a field he helped to create—in which the three-dimensional shapes of proteins are determined to provide a foundation for understanding biology. The Trueblood Award recognizes his development of the SOLVE/RESOLVE software, the world’s first completely automated procedure to determine the shapes of proteins by analyzing the diffraction of X-rays from protein crystals. The publication for SOLVE (with coauthor Joel Berendzen of Physics (P) Division) has been cited over 2,800 times, RESOLVE has over 2,000 citations, and PHENIX (another software) has over 2,100 citations. Terwilliger is a Fellow of the American Association for the Advancement of Science, American Crystallographic Association and Los Alamos National Laboratory.

About the American Crystallographic Association

The American Crystallographic Association, Inc. is a nonprofit, scientific organization of over 2,200 members in more than 60 countries. The Association promotes interactions among scientists who study the structure of matter at atomic (or near atomic) resolution. The Trueblood award is established in memory of Professor Kenneth N. Trueblood of UCLA, who was a major force in the early use of computers and the development of crystallographic computer programs. The ACA presents the award every three years.