

ceased being sent abroad to the US and the UK for their higher degrees, and funds dried up for purchases of books and journal subscriptions." The problem was made worse by the 1991 United Nations embargo on Iraq following the first Gulf War. The embargo "dispensed with what little foreign contact Iraqi universities and their libraries had had with the outside world," Spurr wrote.

The immediate goal is to get the IVSL online for Iraqi scientists by January or February 2006. Officials hope

they will eventually be able to establish wireless networks at Iraqi universities so the library will be easy to use, but that is expected to take much longer.

"Iraqi scientists clearly haven't had access to the rest of the science communities for more than two decades," Atkinson said. "It is difficult to imagine how any community could remain up-to-date without that access to the world. It is obvious that the IVSL could be an important tool to allow them to reenter the scientific world."

Jim Dawson

department chair Angela Olinto. "We don't want to lose the observatory. The carrot for us is having a new building."

In the coming months, the University of Chicago will decide which, if either, of the bids to accept.

Toni Feder

World's Fastest Supercomputers Open to Academia

Crunching numbers to check the design and reliability of nuclear weapons is the main job of BlueGene/L and ASC Purple, but the two supercomputers in Lawrence Livermore National Laboratory's new Terascale Simulation Facility are also available roughly 12% of the time for nonclassified research.

"The new machines are creating simulations at unprecedented detail and speed," says Dona Crawford, LLNL associate director for computation. BlueGene/L, which for the last year has held the record as the world's most powerful computer, and ASC Purple are used for different aspects of the US Department of Energy's nuclear weapons stockpile stewardship program. "Had we attempted to procure a single computer capable of solving all our computational problems rather than utilizing two machines, the cost would have been double the \$200 million we spent," Crawford says.

ASC Purple can simulate, in three dimensions and in a single data run, both the primary fission explosion and the secondary fusion explosion of a nuclear weapon. BlueGene/L has been honed for studies of molecular dynamics, dislocation dynamics in metals, and grain-scale chemical reactions in high explosives, allowing scientists to better understand the behavior of aged material in weapons systems. Both supercomputers will also simulate, among other things, aspects of test shots for LLNL's National Ignition Facility and the effect weather conditions have on the dispersal of biological agents.

Livermore broke ground on the new computer facility three years ago and began moving staff and equipment into it earlier this year. The 23 500-square-meter building uses enough power to heat more than 12 000 homes. The 100-teraflop ASC Purple, which came online in October, contains 12 208 processors, 4 gigabytes of random-access memory per processor, and 2 petabytes of disk space. The 136.8-Tflop BlueGene/L

Historic Yerkes Observatory Is for Sale

Two bids for Yerkes Observatory in Williams Bay, Wisconsin, are being considered by the University of Chicago. In selling, the university wants to ensure that the century-old observatory is preserved, preclude development that would be undesirable to the neighbors, and get the highest possible price. Some 79 acres of land are to be included in the sale.

When the observatory opened in 1897, its 40-inch refractor was among the most powerful telescopes in the world. The observatory is of tremendous historical value, says Robert Feferman, Chicago's dean of physical sciences. "People like [Edwin] Hubble and [Subrahmanyan] Chandrasekhar worked there." The request for proposals says that "Yerkes is no longer a major astronomical research facility and is therefore no longer central to the University of Chicago's primary mission of research and teaching."

Aurora University, which has a campus adjoining the Yerkes land, is offering \$4.5 million for the observatory. To finance the purchase, Aurora would sell parts of the Yerkes land for residential development, says Ted Parge, the university's vice president for advancement. "If we can then move forward in training and development of science teachers through utilization of the observatory, it would

be a wonderful win-win for everyone."

At \$10 million, the other bid, by Mirbeau Companies of Skaneateles, New York, is more than double Aurora's. It includes denser development and a spa, with a portion of the profits used to maintain the observatory. As for actually running the observatory, Mirbeau recommends that Aurora fill that role, although owner Gary Dower says that decision would be up to the Williams Bay community.

Aurora learned of the recommendation on 5 October from a Mirbeau press statement, Parge says. "We were surprised and taken off guard." In response, he issued a statement saying, "We are not interested in collaborating with Mirbeau on their proposal."

In terms of the observatory's continued use, says Yerkes director Kyle Cudworth, "the developer has done the only thing that could be as strong as Aurora's proposal, namely, being the same as Aurora's." But, he adds, "the spa and the number of houses [in Mirbeau's proposal] are things that there is a lot of opposition to in the community. There could be a very big fight." A community group, Yerkes 21, backs the Aurora proposal.

Money from the sale would stay in the University of Chicago's astronomy and astrophysics department, likely going toward a new building. Getting the right mix in terms of preserving the observatory and developing the area while still making a good profit is "a complicated problem," says

Whichever bidder prevails, Yerkes Observatory will be used for education and outreach as a condition of its sale.



YERKES