NCSA Receives Honors in 2013 HPCwire Readers’ and Editors’ Choice Awards

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DENVER, CO. November 18, 2013 — NCSA announced today that it received the HPCwire Editors’ Choice Award for Best Use of HPC in Life Sciences for the use of the Blue Waters supercomputer to achieve a significant breakthrough in the understanding of HIV. The 2013 HPCwire Readers’ and Editors’ Choice Awards were announced at the start of the Opening Reception at the 2013 International Conference for High Performance Computing, Networking, Storage and Analysis (SC13), in Denver, Colorado.

The award recognizes research conducted by biophysicist Klaus Schulten of the University of Illinois at Urbana-Champaign and his collaborators. Using Blue Waters and the NAMD molecular dynamics code developed at Illinois, the team was able for the first time to determine the precise chemical structure of the HIV capsid, a protein shell that protects the virus’s genetic material and is a key to its virulence. The capsid has become an attractive target for the development of new antiretroviral drugs. The results of the team’s unprecedented 64-million-atom simulation were published earlier this year in the journal Nature.

“NCSA and Illinois are honored to be recognized for this renowned computational result of an unprecedented discovery in HIV research by Klaus Schulten and his team,” said Bill Kramer, director of the Blue Waters project. “Prior to Blue Waters, a simulation of this magnitude just was not feasible. Because of the sustained petascale power and balance of the Blue Waters system, the NAMD team was not only able to do the work at unprecedented scale and fidelity, but they were also able to get the result in just a few short months rather than many years. NCSA is honored that Blue Waters could provide the petascale resources and assistance needed to determine the precise chemical structure of the HIV capsid for the first time.”

The HPCwire Readers’ Choice and Editors’ Choice Awards winners are selected by a polling of HPCwire’s global audience for the Readers’ Choice, combined with winners selected by a panel of editors, staff executives and HPC luminaries for the Editors’ Choice. Widely recognized as one of the most prestigious awards presented during the annual Supercomputing Conference, the awards honor demonstrated excellence and outstanding technological advancements achieved by the HPC community.

"It’s an honor and a privilege to be able to publically recognize the organizations and individuals who’s hard work, dedication, and efforts over the past year have contributed to scientific discoveries and new breakthroughs in emerging technologies that will benefit mankind," said Tom Tabor, CEO of Tabor Communications Inc. "The awards represent the highest level of recognition given by the high performance computing community to it’s own for their contributions to the advancement of science and technology. Our warmest congratulations go out to all the recipients of this year’s awards.” A complete list of award winners is available on the HPCwire.com website.

About HPCwire

HPCwire is the leader in world-class journalism for HPC. With a legacy dating back to 1986, HPCwire is recognized worldwide for its breakthrough coverage of the fastest computers in the world and the people who run them. Science, business, and industry professionals worldwide have established HPCwire as the industry’s leading news authority for information and intelligence across a broad range of advanced computing technologies. For topics ranging from the latest trends and emerging technologies, to expert commentary, in-depth analysis, and original feature coverage,
HPCwire delivers it all as the HPC communities' most reliable and trusted resource.

About NCSA

The National Center for Supercomputing Applications (NCSA), located at the University of Illinois at Urbana-Champaign, provides computing, data, networking, and visualization resources and services that help scientists and engineers across the country better understand our world. For more information, visit www.ncsa.illinois.edu.

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