

July 16, 2012 | By Jan Zverina

SDSC Mourns the Loss of Allan Snavelly

Co-PI of the 'Gordon' Supercomputer Suffers Heart Attack



ely. Photo courtesy of SDSC.

Dr. Allan Snavelly, a widely recognized expert in high-performance computing whose innovative thinking led to the development of the *Gordon* supercomputer at the San Diego Supercomputer Center (SDSC) at UC San Diego, died of an apparent heart attack on Saturday, July 14. He was 49.

Dr. Snavelly, an avid cyclist, had just completed a ride up and down Mt. Diablo, a peak of almost 3,900 feet that is visible from most of the San Francisco Bay area and much of northern California.

Dr. Snavelly joined SDSC in 1994 and held a variety of leadership positions, serving as associate director of the center before joining the Lawrence Livermore National Laboratory as Chief Technical Officer earlier this year. He was part of LLNL's Advanced Simulation and Computing (ASC) program. While at SDSC Snavelly also was an adjunct professor in computer science and engineering at UC San Diego.

As an active researcher, Dr. Snavelly regularly advised policy makers and federal agencies on the strategic value of high-performance computing, his focus being on how to improve the computational speed efficiency of data-intensive supercomputer systems. He also directed SDSC's Performance Modeling and Characterization (PMAc) Laboratory, which he founded in 2001 to help advance the understanding of factors that affect performance of HPC applications in order to guide scientific code development and improve architectural design.

Dr. Snively was a co-PI along with SDSC Director Michael Norman in the development and deployment of *Gordon*, the first supercomputer to employ massive amounts of flash-based memory, common in smaller devices such as laptops or cell phones, to help speed solutions often hamstrung by slower spinning disk memory. *Gordon*, the result of a five-year, \$20 million National Science Foundation (NSF) award, went online earlier this year. With the ability to perform more than 36 million input/output operations per second, *Gordon* is considered one of the most capable systems in the world when it comes to moving and analyzing huge amounts of data.

“It’s difficult to summarize a life so full of accomplishment,” said SDSC Michael Norman. “Allan would rather blaze his own trail than travel along a well-worn path accepted by others. He was driven to stay ahead of the curve, striving to find innovative solutions to advance high performance computing for science and society. The *Gordon* system embodies Allan’s out-of-the-box thinking. The term visionary is sometimes overused, but I and others believe Allan fit the description. The HPC community has lost a true visionary.”

“The amount of new technology in *Gordon* presented challenges that had never been tackled, and if I could point to one thing that made it a success, it was Allan’s leadership,” said Shawn Strande, project manager for *Gordon*. “Allan had a way of presenting things in mythic terms. He would quote lines from memory from The Iliad, or recall scenes from the Peloponnesian War whenever I was hitting a rough spot on the project or needed advice. Allan instinctively knew how to bring out the best in people and inspire them to work together for something bigger than themselves. Computers come and go, but Allan was a one of kind.”

Dr. Snively and his research collaborator at SDSC, Laura Carrington, were among finalists for the prestigious Gordon Bell Prize two years running (2007 and 2008). In 2009, he shared the SC09 Storage Challenge Award for the design of Dash, a prototype for the much larger *Gordon* supercomputer.

“Most people know about Allan’s great accomplishments in high-performance computing but one thing they might not know is that he was very much a family man,” said Carrington. “Our daughters were to be born a few months apart. Allan said ‘Our productivity is going to go down a lot next year but family is first.’ That really tells you what truly mattered to him.”

Said Wayne Pfeiffer, SDSC distinguished scientist: “I’ve known Allan since 1996, but really didn’t get to know him until the next year when he started working on performance evaluation for an HPC system as part of an NSF grant for which I was the principal investigator.

“Allan was really enthusiastic about this project, as he was about most things he spent his time on. He later earned his Ph.D. from UC San Diego in 2000, carrying that great enthusiasm into his future work as founding director of the Performance Modeling and Characterization Laboratory. More recently, Allan’s intellectual drive and leadership were instrumental in the preparation of our winning the *Gordon* proposal. He was a ferocious competitor at work and away from work.”

“Our thoughts and prayers are now with Allan’s family, his wife Nancy and his daughter Sophia,” added Norman.

Arrangements for a memorial service have not been finalized at this time.

MEDIA CONTACT

Warren R. Froelich, 858-822-3622, froelich@sdsc.edu

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