

UC SANTA BARBARA

THE **Current**

November 27, 2006

Gail Gallessich

Three UCSB Professors Named 2006 AAAS Fellows

Three professors at the University of California, Santa Barbara have been awarded the distinction of Fellow by the American Association for the Advancement of Science (AAAS). The AAAS is the world's largest general scientific society and publisher of the journal *Science*.

Election as a Fellow of AAAS is a prestigious honor bestowed upon select members of the association by their peers. Fellows are elected for their efforts to advance science or for innovations and applications that are deemed scientifically or socially distinguished.

David D. Awschalom, UCSB professor of physics, was named by the Section on Engineering for outstanding research in the fields of optical and magnetic interactions in semiconductor quantum structures and implementations of quantum information processing in the solid state.

Charles E. Samuel, UCSB professor of molecular, cellular and developmental biology, was named by the Section on Medical Sciences for pioneering studies in the interferon field, particularly biochemical analyses that provided understanding of how interferons inhibit virus multiplication and how viruses antagonize interferon action.

Alec N. Wodtke, UCSB professor and chair of the Department of Chemistry and Biochemistry, was named by the Section on Chemistry for distinguished contributions to the understanding of the chemical properties of highly vibrationally excited molecules in collisions, stratospheric ozone formation, and interactions with metal surfaces.

Awschalom received his Ph.D in experimental physics from Cornell University, then served as research staff member and manager of the Nonequilibrium Physics Department at the IBM Watson Research Center in New York. In 1991, he joined UCSB as professor of physics, and in 2001 was additionally appointed as professor of electrical and computer engineering. He is director of the Center for Spintronics and Quantum Computation, and associate director of the California NanoSystems Institute. Awschalom's research group is concerned with exploring magnetic and electron spin dynamics within a variety of semiconductor-based nanoscale systems.

Samuel received his Ph.D. from UC Berkeley and joined the faculty of UCSB in 1974. He served as director of the Biochemistry and Molecular Biology Interdepartmental Program from 1987 to 1995, as the founding chair of the Department of Molecular, Cellular and Developmental Biology from 1995-1998, and then again as MCDB department chair from 2001 to 2004. The overall objective of his research group is to elucidate in molecular terms the mechanisms by which interferons exert their antiviral and cell growth control actions in mammalian cells.

Wodtke received his Ph.D. from UC Berkeley and then served as a postdoctoral fellow at the Max Planck Institute in Goettingen, Germany for two years before joining the faculty at UCSB in 1988. At UCSB he has established a vigorous research program focused on the study of the chemical properties of highly vibrationally excited molecules. He began serving as chair of the Department of Chemistry and Biochemistry in 2003.

This year 449 members have been awarded this honor by AAAS because of their efforts to advance science or its applications.

New Fellows will be presented with an official certificate and a gold and blue (representing science and engineering, respectively) rosette pin on Saturday, February 17 at the Fellows Forum during the 2007 AAAS Annual Meeting in San Francisco.

Related Links

[AAAS](#)

About UC Santa Barbara

The University of California, Santa Barbara is a leading research institution that also provides a comprehensive liberal arts learning experience. Our academic community of faculty, students, and staff is characterized by a culture of interdisciplinary collaboration that is responsive to the needs of our multicultural and global society. All of this takes place within a living and learning environment like no other, as we draw inspiration from the beauty and resources of our extraordinary location at the edge of the Pacific Ocean.