

November 21, 2016 | By Mario Aguilera

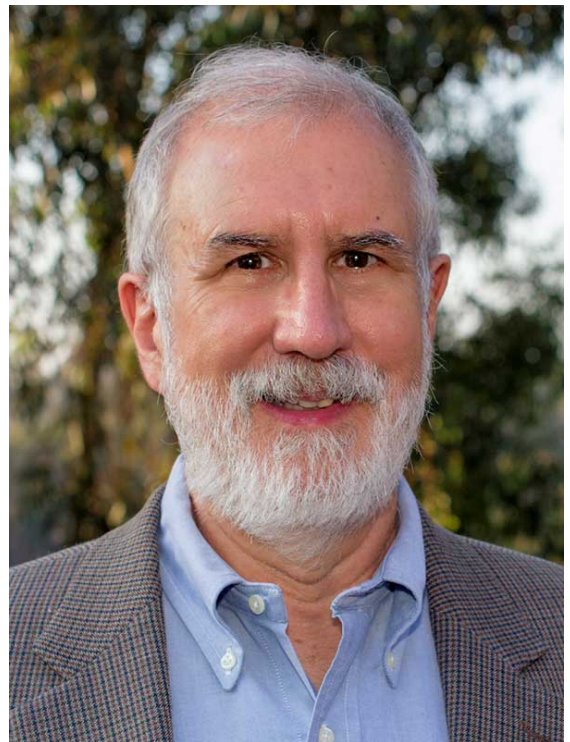
## Five UC San Diego Professors Named 2016 AAAS Fellows

### New fellows to be recognized in Boston in February

The American Association for the Advancement of Science (AAAS), the nation's largest general science organization, has awarded the distinction of fellow to 391 members, including five from the University of California San Diego.

New fellows will be honored for “their efforts toward advancing science applications that are deemed scientifically or socially distinguished” on Feb. 18 during the 2017 AAAS Annual Meeting in Boston. Continuing a tradition started in 1874, AAAS members are considered for the rank of fellow if nominated by a steering group of their respective sections, by three existing fellows or by AAAS's chief executive officer.

- **Richard Carson**, a professor of economics in the UC San Diego Division of Social Sciences, was recognized for “distinguished contributions to the economic theory, method and application of environmental impact evaluation and resource economics, including pollution, water quality and climate change.” Carson has developed widely used methods for assessing the benefits and costs of environmental policies and the economic impacts of environmental disasters. His projects have ranged from analyzing the benefits of the U.S. Clean Water Act and examining the impacts of fisheries management to studying visibility improvements in the Grand Canyon and preventing residential water shortages in California cities. After the Exxon Valdez oil spill, he served as a principal investigator on economic



*Richard Carson*

damage assessments for the State of Alaska and more recently for the National Oceanic and Atmospheric Administration on the BP oil spill in the Gulf of Mexico. His work on forecasting Chinese carbon dioxide emissions received international attention, and recent studies in developing countries look at labor market impacts of arsenic exposure in Bangladesh and protecting tropical forests in Malaysia. A former chair of UC San Diego's Department of Economics, Carson has also served as president of the Association of Environmental and Resource Economists.

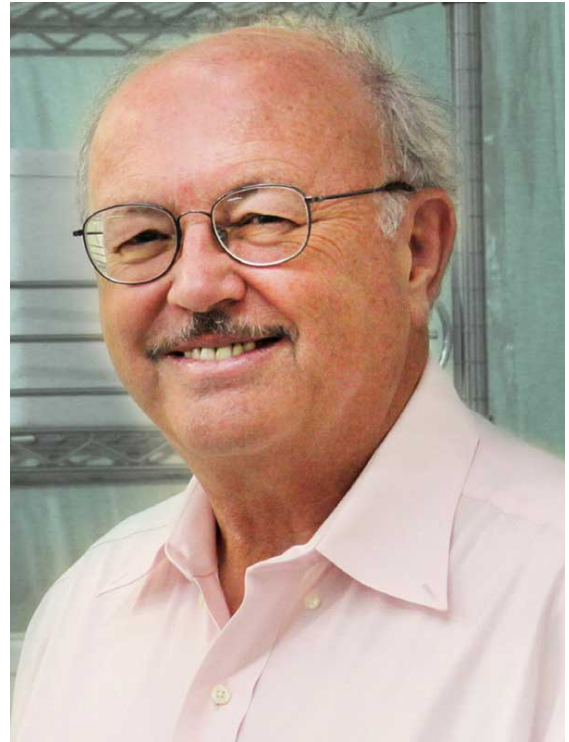
- **Konstantine Georgakakos**, an adjunct professor and research hydrologist at Scripps Institution of Oceanography at UC San Diego, was recognized by AAAS “for seminal contributions to the development of hydrometeorological models and flood forecasting systems and their application for the benefit of society.” Georgakakos, who joined Scripps in 1994, studies hydrology, hydroclimatology, and hydrometeorology. In 1993 he founded the Hydrologic Research Center (HRC) in San Diego, a science cooperation and technology transfer center, whose main emphasis is the application of advanced methods of science and engineering toward the improvement of disaster and water resources management worldwide. He serves as HRC's managing director and senior research scientist. He is one of the chief editors of the *Journal of Hydrology*.



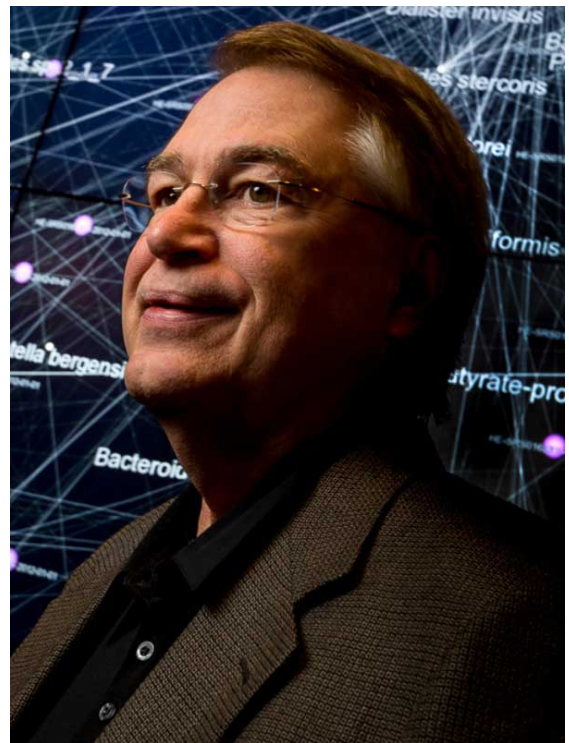
*Konstantine Georgakakos*

- **David Gough**, a professor of bioengineering, focuses on developing and implementing a long-term implantable glucose sensor for people with diabetes that may aid in improved regulation of the disease. One version of the sensor, developed by Gough and the startup he co-founded, GlySens, is currently in human trials and may soon be available in the clinic. Gough's work includes physiologic studies of implanted sensors; mass transfer of small molecules in tissues; blood glucose dynamics; development of biomaterials; and more. He is currently vice-chair of the Department of Bioengineering. He also teaches in the freshman introductory bioengineering course, senior design, and in the Medical Devices Engineering Masters of Advanced Study Program.

- **Larry Smarr** is the Harry E. Gruber professor of computer science and engineering in the UC San Diego Jacobs School of Engineering, and founding director of the California Institute for Telecommunications and Information Technology (Calit2), a partnership of UC San Diego and UC Irvine. In naming him a fellow, AAAS cited Smarr for “leadership in scientific computing, high-performance computing, and cyberinfrastructure.” Prior to joining the UC San Diego faculty in 2000, Smarr spent 20 years as a professor of physics and astronomy at the University of Illinois at Urbana-Champaign, where he was also the founding director of the National Center for Supercomputing Applications (NCSA). A fellow of the American Physical Society since 1991 and the American Academy of Arts and Sciences since 1994, Smarr was elected a member of the National Academy of Engineering in 1995. In 2006 he was awarded the IEEE Computer Society’s Tsutomu Kanai Award for lifetime achievements in distributed computing systems and in 2014 he received the congressionally-supported Golden Goose Award.
- **Lynne Talley**, a distinguished professor of oceanography at Scripps, was honored “for measuring the intermediate and deep water masses of the world ocean, leading to our understanding of ocean circulation and the climate.” Talley’s research focuses on the general circulation of the ocean and the role of various oceanic and atmospheric conditions that affect ocean currents and property distributions, including salinity. Her work involves analysis of data from most of the world’s oceans, depicting the movement of heat, salinity, and water masses,



David Gough



Larry Smarr

and the formation of water masses, particularly in subpolar regions. Her research combines analysis of ocean observations with advanced theoretical work to describe and map large-scale circulation. She was a lead author of the IPCC Fourth Assessment Report (Working Group I chapter “Observations: Oceanic Climate Change and Sea Level,”), which earned contributing scientists a share of the Nobel Peace Prize, and a lead author on the same topic for the Fifth Assessment Report.

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*Lynne Talley*