



Brian G. McAdoo, PhD (1969-Present)

Professor of Science, Yale-NUS College

**Althea Ward Clark Professor of
Environmental Science, Vassar College**

"I would pay to do my job." Brian McAdoo, 2014

Overview

Dr. Brian McAdoo is a tsunami scientist at Yale-NUS College. He completed his undergraduate at Duke University (Geology), studied the Alpine Fault in New Zealand as a Fulbright Scholar. He also obtained a PhD at the University of California, Santa Cruz, where he worked on submarine geomorphology. Some of his selected publications include:

- McAdoo, B.G. and L. Paravisini-Gebert, Not the Earthquake's Fault, *Nature Geoscience*, doi: 10.1038/ngeo_1116, 2011.
- Moore, A., J. Goff, B. McAdoo, H. Fritz, A. Gusman, N. Kalligeris, K. Kaslum, A. Susanto, D. Suteja, and C. Synolakis, "Sedimentary deposits from the 17 July 2006 West Java tsunami near Cilacap, Indonesia", *Pure and Applied Geophysics*, 2011.
- Comfort, L.K., L. Huggins, M. Siciliano, S. Scheinert, P. Sweeney, S. Stebbins, T. Serrant, B. McAdoo, J. Augenstein, and N. Krenitsky, "Transition from response to recovery: The January 12, 2010 Haiti earthquake", *Earthquake Spectra*, 2011.
- Borrero, J, B. McAdoo, B. Jaffe, L. Dengler, G. Gelfenbaum, B. Higman, R. Hidayat, A. Moore, W. Kongko, Lukijanto, R. Peters, G. Prasetya, V. Titov, E. Yulianto, "Field Survey of the March 28, 2005 Nias-Simeulue Earthquake and Tsunami", *Pure and Applied Geophysics*, DOI 10.1007/s00024-010-0218-6, 2011.
- Goff, J., C. Chague-Goff, D. Dominey-Howes, B.G. McAdoo, S. Cronin, M. Bonte-Grapetin, S. Nichol, M. Horrocks, M. Cisternas, G. Lamarche, B. Pelletier, B. Jaffe, and W. Dudley, "Paleotsunamis in the Pacific Islands", *Earth Science Reviews*, 2011.

This interview was conducted in 2015.

Early Life and Career

Brian McAdoo says there's no secret as to why he has remained in the environmental field: he really, really likes it. "To be honest, it's somewhat selfish," McAdoo says. "I really enjoy looking at the questions. There are so many issues to address; it's an intellectual challenge to pursue them, and it's great to feel like you can have an impact on living species' interaction with the environment." Now Professor of Science at Yale-NUS College, a new liberal arts and science institution in Singapore, McAdoo is gratified that his work has allowed him to make significant contributions as both a scientist and educator.

McAdoo grew up in Pittsburgh, but spent his summers in rural North Carolina, where his father grew up. "Having that summer experience outside—playing all day every day, walking around in creeks and swamps and fields—gave me a certain love and appreciation for the outdoors I would not have gotten in the city," he says. Nonetheless, McAdoo did not start out with the intention of becoming a geologist or even a scientist; he was initially an economics major at Duke University. But after taking a geology class as his science requirement, McAdoo fell in love with the subject and switched his major. However, his primary concern was still finding a career where he could make money, and for a geologist that meant going into the oil industry. McAdoo had several summer jobs in that industry during college, including one as an exploration geologist for a natural gas exploration company in West Virginia, and another as a Shell offshore operation in Louisiana.

After graduating from Duke, McAdoo got a Fulbright Scholarship to study in New Zealand. There, he became interested in the role of deep earth fluids and earthquakes, and he did research on the Alpine fault, which separates the Indo-Australian and Pacific plates. He then returned to the U.S. to do his doctorate, which was funded by a Shell fellowship, in earth science at the University of California, Santa Cruz. It was during this time that he took his first dive on the *Alvin* submersible, a three-person vessel operated by the Woods Hole Oceanographic Institution, to study submarine geomorphology and surficial fluid venting in the Cascadia Accretionary Prism. He would return to the seafloor six more times over the course of his career. After experiencing a research-intensive environment in graduate school, McAdoo decided a career in the oil industry wasn't for him, and decided to look for work in academia instead.

Contributions

In 1998, McAdoo joined Vassar College, first as a Minority Scholar-in-Residence, later as an assistant professor, and was made Althea Ward Clark Professor in 2009. Presently, he is helping found Yale-NUS as a member of the science faculty, and as the inaugural College Rector. "I've had an amazing career," McAdoo says. He notes his *Alvin* dives to research the sea floor, and his 2004 visit to Indonesia and Sri Lanka after the Indian Ocean tsunami, as career highlights. The last trip, which involved doing social and scientific surveys in the tsunami's immediate aftermath, was especially meaningful because, "It reminds us of why we do what we do," McAdoo says. "Being

able to do research in the weeks after the tsunami there has really changed my perspective.” Still, “I don’t think I’ve achieved much yet,” he says. “I’m just doing my job.”

Importance of Mentoring to Career

Mentoring is another aspect of academia that McAdoo enjoys, although he has encountered some frustrations in encouraging minority students. “In general, mentoring at the undergraduate level has a lot to do with recruiting, with encouraging minority students to go into the sciences,” he says. “I did that for a while, and I got frustrated with it, as not everyone loves science.” However, McAdoo says that for those minority students who *do* choose the field on their own, they need to have a strong network of encouragement. “The way academia works, mentors often choose mentees because they see something familiar in those students, i.e. something of themselves. But because there’s a lack of minority faculty in the sciences, there are few mentors for the students that are out there. Lots of minority students struggle because an academic mentor is absolutely key to succeeding in academia.” McAdoo himself was fortunate to have such mentors: most notably, his advisor at Duke who helped him secure the Shell fellowship, and two black female geologists who have been both good friends and advisors, and helped him to “not take it personally” when he was struggling with graduate school.

Advice to Young Professionals

McAdoo says if there is one thing he’s learned from his career in the environmental field, it’s that its rewards are more than monetary. He notes that he understands the “money mindset” that can lead many minorities and first-generation college students to reject careers in the environmental field. “I think for a lot of minority students, the focus is making money and having a good, ‘respectable’ professional career,” he says. “Sometimes scientists are not in that league...they don’t make that sort of money or have that sort of image. But in my opinion image and money are not as important as doing something you love for a career. I would do my job for free.” McAdoo’s advice to minority students considering environmental careers: “Make sure you really love it.”

For More Information

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