



Robert Stern Class of 2015

Bob Stern graduated from Oroville High School (OHS) in 1968. He was awarded a Block O Scholarship, played football all 4 years and was Block O custodian. In his senior year, he was named to the North Valley All-Star Football Team. He was a member of the Key Cub, on the yearbook staff, and active in the community as a Cub Scout and Boy Scout attaining scouting's highest rank of Eagle Scout.

Following graduation from OHS, Bob's distinguished education accomplishments began at the University of California at Davis (UCD), where he played one year of football and studied Political Science before dropping out for one year within 1970-71. When he returned to UCD, he switched to Geology and earned his BS degree in Geology in 1974. He worked evenings at the California State Capitol as Assembly Sergeant-at-Arms. Bob went on to do graduate studies at Scripps Institution of Oceanography, University of California at San Diego (UCSD), where he began studying the volcanoes of the Mariana arc and the geology of eastern Egypt. In 1977, he married Melissa Fenton of Montebello, CA. In 1979, he received his PhD in Earth Sciences at UCSD. He then went to Washington DC where he carried out post-doctoral research in isotope geochemistry and was a Carnegie Institute Postdoctoral Fellow, Department of Terrestrial Magnetism, from fall 1979 until the end of 1981.

From 1982 to the present, Bob has been a Professor of Geosciences at the University of Texas, Dallas (UTD). During his tenure at UTD he built a radiogenic isotope lab for research, served as Department Head and Graduate Advisor, and taught both undergraduate and graduate students.

At UTD, Bob's research interests focus on how the Earth's continental crust formed and evolved by studying both ongoing processes of continental crust formation at convergent plate margins and how continental crust was generated in the past. The areas where this research is carried out include 1) the still-forming Izu-Bonin-Mariana (IBM) Island arc and back-arc basin system of the Western Pacific and 2) the continental crust of NE Africa and Arabia which formed in Neoproterozoic time, 900-540 million years ago. This research builds on the central geoscientific theory of Plate Tectonics. His research focuses on determining the chemical and isotopic composition of igneous rocks and interpreting these data. Because most of the IBM system is submerged beneath a mile or more of water, this research has required multiple research cruises to study submarine volcanoes and the geology of the Mariana Trench via seafloor investigations using either a manned submersible (Shinkai 6500) or a tethered seafloor robot (ROV) or drilling into the seafloor. His disability makes it impossible to work as he had in the lab or in the field but he continues to do research in these areas via scientific collaborators.

Over the years, Bob's work has taken him to various parts of the world including several islands in the Western Pacific. He has also conducted research projects in Egypt, Sudan, Saudi Arabia, Ethiopia, Israel, and Jordan. He has helped organize several scientific conferences and workshops, for example during 2008-2012, Bob along with 2 scientists from Sweden helped organize an international field conference in the countries around the Red Sea. The aim of the conference was to advance the study of the region's continental crust, known as the Arabian-Nubian Shield, and how it was formed 900 to 540 million years ago.

He has authored or co-authored over 200 peer-reviewed scientific papers on the above and other related scientific problems. Over the years, he has supervised graduate student research leading to doctoral dissertations and theses for 19 graduate students at UTD.

Throughout his distinguished career, numerous honors have been bestowed on Bob as he has been highly involved in professional activities. He is Editor-in-Chief of the journal International Geology review and has served on the editorial boards of 5 professional journals. He has been a visiting scholar at several eminent institutions, including Blaustein Fellow, Stanford University, 2005 and 2011-2012; California Institute of Technology, Tectonics Observatory Fellow, 2006, and Tuve Senior Fellow at Carnegie DTM in May 2015; and Visiting Scholar, ETH Zurich, Switzerland, 2014 and 2015. He is a Fellow of the Geological Society of America, and a member of the American Geological Union and the American Association of Petroleum geologists. He also is frequently asked to give public lectures on geology.

Bob continues to advise UTD students and is involved in student organizations. He also has volunteered time with the YMCA Indian Guides and Indian Princesses in Dallas.

Bob and his wife Melissa have been married for 38 years, have 3 children, and make their home in Dallas, Texas.