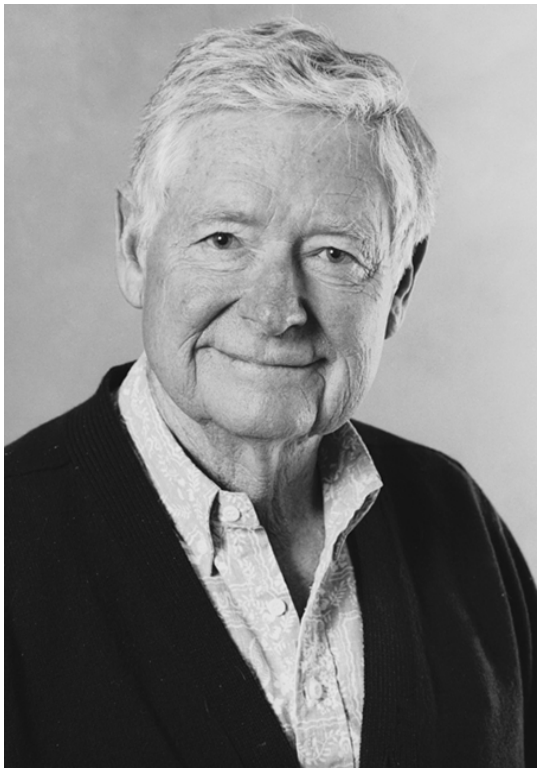
UC San Diego
UC San Diego News Center

September 07, 2016 | By Robert Monroe

Obituary Notice: Edward (Jerry) Winterer, Scripps Oceanography Geologist

Scripps Institution of Oceanography at UC San Diego Emeritus Professor of Geology Edward Litton (Jerry) Winterer, died Aug. 30 at his home in Del Mar, Calif. He was 91.



Edward "Jerry" Winterer: 1925-2016

Winterer was a renowned expert in the study of sediments and after being recruited to Scripps, he became deeply involved in what was then known as the Deep Sea Drilling Project. Previously he had been a UCLA geology professor interested in sediments in the American desert southwest. He came to Scripps with no training in oceanography, but fate soon led him to a rich career working with sediments that cover the seafloors of the world's oceans.

The earliest attempt at ocean drilling was Project Mohole, conceived of in 1957 as an attempt to drill to the point where the earth's crust and mantle meet. It was to be an attempt to drill to the point where the earth's crust and mantle meet. Cost overruns scuttled the project but laid the groundwork for the Deep Sea Drilling Project, which began at Scripps in 1968.

In an oral history recorded in 2006, Winterer recalled his first drilling trip in the western Pacific Ocean in 1969:

"We knew almost nothing about what we were going to run into. Mainly just blank mystery. And so I simply oriented my career thereafter on a study of the kind of sediments that occurred way out there in the main ocean basin, so-called pelagic sediments, far from the land and just out there."

The drilling program went on over the course of dozens of worldwide expeditions, six led by Winterer, to enable scientists to reconstruct 150 million years of ocean history and to confirm plate tectonics hypotheses about seafloor spreading and other phenomena.

Winterer also played a major role in the administration of Scripps, serving as chairman of the graduate department from 1968 to 1972. In addition, he was a member of the Scripps academic staff from the time he joined the institution, becoming a distinguished research professor in 1994, and retiring in 1997.

“Jerry Winterer was the man who introduced me to the wonders of limestone in the Alps of Italy,” said his former student Christopher Metzler, now a professor at Mira Costa College. “Not only did he impart great knowledge, and introduce me to how to think about Jurassic limestone, but also his gentle manner inspired me.”

Winterer was joined at Scripps by wife and fellow geologist Jacqueline Mammerickx. The two had met in 1960, when the young professor Winterer had put a question to Mammerickx during her dissertation defense at the University of Louvain in her native Belgium. He told her there were geological features in the Mojave Desert that she really needed to see in person. After Winterer returned to UCLA, Mammerickx came to the university on a fellowship. The two married in 1964.

Winterer was born Feb. 14, 1925 in Oakland, California. His father, also a geologist, was vice-president of the Superior Oil company. He received his bachelor’s and master’s degrees in geology at UCLA before receiving his doctorate there in 1954. While a student, he worked as a geologist for the U.S. Geological Survey from 1949 to 1953.

Winterer joined the UCLA faculty after receiving his doctorate. His being awarded the position of Fulbright Lecturer at the University of Louvain is what enabled him to first meet his future wife. Other awards included the Shepard Medal for Excellence in Marine Geology in 2000 and an American Geophysical Union fellowship in 2004.

Winterer is survived by his wife, Jacqueline Mammerickx, five children (Catherine Grainger of Spokane, Wash.; Stephen Winterer of Spokane; Wendy Skolfield of Topanga, Calif.; Juliette Winterer of Lancaster, Penn.; and Caroline Winterer of Menlo Park, Calif.); eleven grandchildren; and sixteen great grandchildren.

A private family memorial service will take place later in fall.

Tributes to Edward Winterer

Walter Munk – Distinguished Professor Emeritus of Geophysics, Scripps Institution of Oceanography, UC San Diego:

“Jerry came to Scripps Institution of Oceanography in 1963 with a fresh UCLA degree in geology. His doctoral thesis on the *Geology of Southwestern Ventura County* was an unlikely preparation for what was in store for him in La Jolla in the coming years. For more than two decades Jerry was deeply involved in the Deep Sea Drilling Project (DSDP) and its successor, the Ocean Drilling Program (ODP), serving in the advisory structure and as co-chief scientist on six drilling expeditions. DSDP was a leading Scripps activity for many years.

It all started in 1957 when a committee consisting of Maurice Ewing, Harry Hess, Harry Ladd and me had set through a day of particularly boring NSF proposals. While we recovered over a drink at the Cosmos Club, Harry Hess raised the question of what would have been the most exciting possible proposal and I am quoted to have said, ‘To drill a hole through the thin ocean crust to the Earth’s mantle.’ After a few more drinks, we had submitted a proposal from the American Miscellaneous Society for the ‘Mohole project.’ It failed to get approval until it was resubmitted under our membership in the National Academy of Science.

The proposal consisted of two phases: (i) to keep a drilling vessel in a fixed position at a deep water location; and (ii) to drill through the 10 km oceanic crust to the mantle. A few years later we were aboard the CUSS1 off Guadalupe Island in the Gulf of California. Phase (i) was accomplished by Willard Bascom, Ed Horton and others by interrogating three acoustic transponders on the sea floor and entering the three ranges into a primitive on-board computer to actuate two powerful outboard propellers (remember this was before GPS). Phase (ii) was left in the hands of a prime contractor with no sea-going experience. The cost estimates started at $30 million and by 1966 had escalated to $127 million; at that point we petitioned NSF to cancel the project.

The formation of DSDP in 1968 resurrected some of Mohole and turned it from a splashy idea into good science; here we are indebted to Jerry for his contributions both as a research scientist and as a longstanding member of the DSDP Planning Committee. Ocean sediments have signatures for the last few million years with 40,000-year radiometric resolution of the climate changes caused by the perturbation of the Earth’s orbit by other planets. Dating made it possible to compare sediment cores from different locations which provided important support for the evolving theory of plate tectonics.

Jerry considered the 60s and 70s the golden age of oceanography, and I agree. The drilling program could recruit talented young investigators, send them out on the GLOMAR CHALLENGER on two-month missions with 12-hour duty cycles 7 days a week. There was a good funding climate, strong Office of Naval Research support for science, and a simple command structure where a five member DSDP Planning Committee ran the project meeting twice a year; they would take the early morning flight to O'Hare airport, meet in the afternoon, and return home in the evening. I share Jerry's feelings for the simplicity of this era!

Jerry was interviewed by Laura Harkewicz in April 2006. To her closing question: 'What has Scripps meant to you?' he replied, 'This has really been exciting. I mean, the chance to participate in sea-going things, especially the Drilling Project—You'd just wake up just trembling with excitement to go do it. And it offered that opportunity to me. And that's what it's meant to be. It put scientific spice in my life. Yes.'"

Miriam Kastner – Distinguished Professor of Geochemistry, Scripps Institution of Oceanography, UC San Diego:

"Jerry's research interests were wide-ranging, though with an emphasis on pelagic sediments and their ancient analogues in mountain belts and the geologic history of the Pacific. Jerry was an accomplished field geologist and also at home at sea, serving as a co-chief scientist on six DSDP/ODP drilling legs and leading multiple research cruises on Scripps vessels. These studies led to fundamental advances on a number of large scale problems, including the origin and paleoceanographic significance of Mesozoic radiolarites, the importance of dissolution in determining the morphology of atoll lagoons, evidence for diffuse extension of the Pacific plate and documenting the link between subsidence history and pelagic sedimentation in the Pacific.

Jerry was one of the most interesting colleagues at Scripps, he wasn't just a world leader in sedimentary geology, but also an encyclopedist and an invaluable source of geological information, on scales ranging from the local geology to the global distribution of sediments through time. Discussions with Jerry were always most interesting, exciting, and thought provoking and he will be sorely missed."

MEDIA CONTACT

Robert Monroe, 858-534-3624, scrippsnews@ucsd.edu
Mario Aguilera, 858-822-5148, maguilera@ucsd.edu

UC San Diego's Studio Ten 300 offers radio and television connections for media interviews with our faculty, which can be coordinated via studio@ucsd.edu. To connect with a UC San Diego faculty expert on relevant issues and trending news stories, visit https://ucsdnews.ucsd.edu/media-resources/faculty-experts.