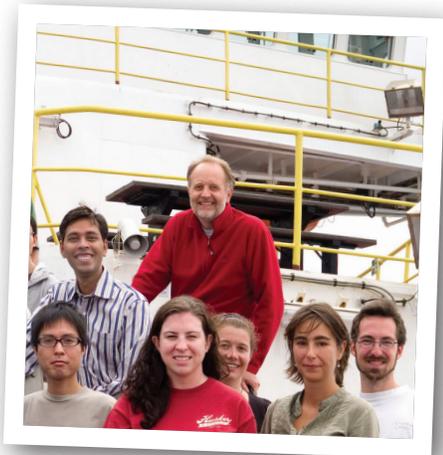


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Alberto (top row) on board the drillship *JOIDES Resolution* during IODP Expedition 321 in 2009.

Degree: When, where, what, and what in?

In 1981, I completed a “Laurea” in Geological Sciences at the University of Milano, Italy, with a thesis on the interpretation of seismic reflection profiles in the Tyrrhenian Sea. I then earned a PhD in geology in 1989 from the Lamont-Doherty Earth Observatory of Columbia University. My dissertation concerned the topographic roughness of mid-ocean ridge flanks, and the application of statistical analyses to high-resolution sonar profiles of the seafloor. As a student, I went to sea on 10 marine geology expeditions, where we took samples by coring and dredging, and also collected a variety of measurements and imagery: gravity, magnetics, seismic reflection, deep-tow photography, and side-scan sonar. Experience at sea got me hooked on marine geology, connected the abstractions I learned in school to the real world, and was a key part of my education.

Did you stay in academia at all, and if so, for how long?

After obtaining my PhD, I continued to do research at Lamont for another three years. I was happy to continue the work on seafloor morphology that I started as a student, but after a while I wanted to change and try some other research direction.

How did you go about searching for a job outside of the university setting? Is this the only job (post-academia) that you’ve had? If not, what else did you do?

I did not actively search for a job outside academia, but was invited to spend a year as a visiting scientist at Schlumberger-Doll Research in Ridgefield, Connecticut. I then accepted a position to do research on using downhole measurements to build three-dimensional computer models of hydrocarbon reservoirs. I found Schlumberger-Doll Research a lively environment, where researchers were encouraged to find their own directions. I was able to develop a new line of research in geophysical inversion, and headed a small group that studied methods to quantify how downhole geophysical measurements reduce the uncertainty of subsurface models. I stayed in industrial research with Schlumberger for 13 years.

What is your current job? What path did you take to get there?

Although I enjoyed my time in industry, I was ready for another change, and in 2005 I returned to academia at the Lamont Borehole Research Group, the downhole logging contractor on *JOIDES Resolution*, the US drillship of the Integrated Ocean Drilling Program. I was able to apply what I learned about downhole measurements and start a new research line on methane hydrates, combining observations from cores and downhole logs with physical models of hydrate formation. At Lamont, I also supervise a small group of logging scientists that help with downhole measurements in the IODP expeditions on *JOIDES Resolution*.

Is the job satisfying? What aspects of the job do you like best/least?

For me, the most satisfying part of the job has always been to find out something about how Earth works. I feel very fortunate that the jobs I have had offered that opportunity. The least favorite parts are dealing with the bureaucracy (large companies and universities are not very different there!), but it is certainly a price worth paying.

Do you have any recommendations for new grads looking for jobs?

I had a rather tortuous career path with two transitions between industry and academia. I have been lucky to find interesting problems wherever I worked, however, and encourage new graduates to keep a broad perspective

and consider positions in both industry and academia. In the academic world we sometimes underestimate the intellectual challenge posed by industry problems, but in my experience it was equally satisfying to work on applied or pure research puzzles. The key was to have enough freedom to find my own way to contribute.

What did your oceanographic education (or academic career) give you that is useful in your current job?

I feel very fortunate that I had a broad education, starting with geology in Milano and continuing with geophysics and applied mathematics at Columbia. That diversity has helped me immensely in dealing with a variety of research problems. My experience at sea has also been a great lesson in how to work with others and how to make do when time and resources are limited. ☺