

## Lynne D. Talley

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As a physical oceanographer specializing in observations and interpretation of water properties and circulation at ocean basin to global scales, I work at the interface of oceanography and climate science. I use observations to find patterns that can be understood in terms of basic dynamics, and use only the simplest models to help interpret my findings.

I ended up as an oceanographer because I enjoyed math and physics in high school, and had supportive teachers. I recall sitting in the Oberlin dorm lounge staring at the course catalog and deciding to major in physics, for no obvious reason other than thinking I could only learn physics through serious classroom study. I was heading towards specializing in low-temperature physics following several internships in college, but a copy of the Woods Hole Oceanographic Institution magazine *Oceanus* made its way to the Oberlin physics student lounge. So, I applied to graduate school in physical oceanography at WHOI/MIT as a shot in the dark—and then went there because Massachusetts had gone for McGovern in 1972!

At WHOI I heard about things I'd never had a clue existed—internal waves especially blew me away. Ultimately, I chose to study problem-oriented geophysical fluid dynamics, so worked with Joe Pedlosky for my thesis. After finishing my Ph.D., I had two postdoc offers, which were both great from the point of view of science. I felt that the choice would affect my science direction and truly couldn't choose. So I walked around Eel Pond, pulled out a quarter and told myself that I would stick with the result. Heads, and I had a wonderful experience at Oregon State with Roland deSzoeke.

I then went to Scripps and San Diego and here I am more than 20 years later. It's been a fantastic environment—the rich and broad group of scientists, great students, seminars, and, of course, the freedom that comes with tenure.

The rewards of being an academic ocean scientist are being able to think globally; looking at some weirdness in a data set and suddenly seeing something much larger than an error; flexible (not fewer!) work hours allowing family time; sitting in a seminar or teaching a class, seeing the next step, and then have a whole new problem open up.

The biggest challenges have been personal. At the beginning I had to work through shyness and face the frightening transition



from diligent classroom student to creative colleague. The main challenge, though, has been balancing personal science, participation in international science, and being at home (son Max, now 14). All are important to me; I wouldn't change anything.

I have never felt inappropriately treated by academic colleagues in the United States. Only once, in another country, has discrimination had serious consequences for the science I was funded to do.

I am concerned that although the number of women in oceanography has increased greatly, we are not yet taking major leadership roles. I don't mean appointed positions or jobs, I mean leading the charge for large new programs, major new directions. Why do we seem to be content to work on small projects, or as part of a team, or occasionally running a committee, instead of dreaming the biggest dreams?