

Jan 31, 2011

Q&A with John Pierce



As UC San Diego's fourth alumnus, John Pierce received his doctorate in physics in 1964. He was one of the fortunate few students who worked alongside our world-renowned founding faculty and administrators in the early days, including the university's first chancellor, Herb York, and oceanographer Walter Munk. They had a tremendous influence on his career path, leading him to spend most of his career in government service. In this interview, John talks about what it was like to be one of the first students at UC San Diego, how the university and its founders shaped the direction of his life, and why he flew across the country from his home in Virginia to attend the campus' 50th anniversary Founders' Day celebration on Nov. 18.

1. Why did you choose to be one of the first students at UC San Diego? And how did you learn about the fledgling university?

Pierce: I was enrolled in a Ph.D. program at Rice. As happens from time to time, there was a feud in the physics department, and several professors left unexpectedly, stranding me without a mentor. I was invited to go to Duke, but that did not appeal to me, so I was looking for other options that would allow me to continue my graduate work. Fortuitously, a brochure for UC San Diego (or UC La Jolla as it was then called) appeared on the department bulletin board. I was already familiar with Scripps and the beaches looked inviting, so the decision was easy.

2. How did your time at UC San Diego and the people you encountered on campus shape your career and life?

Pierce: Interestingly, the people I met at UC San Diego inspired me to go into national security work rather than pursuing an academic career. UC San Diego's first Chancellor Herb York arrived on campus the same time that I did. He spoke enthusiastically about his work in Eisenhower's Defense Department and about the critical role that scientists could play in government. Other faculty such as Keith Breuckner and Marshall Rosenbluth were active on government advisory panels that later became the JASONs, an independent group of scientists which advises the U.S. government on matters of science and technology. They, too, emphasized the importance of sound scientific advice for government executives.

After leaving UC San Diego, I joined the Center for Naval Analyses and spent 20 years advising on naval operations and tactics. That phase of my life ended in 1986 as Director of Naval Operational Research for NATO in La Spezia, Italy. Subsequently, I turned to submarine engineering and have been dealing with various aspects of submarine technology and operations ever since.

In the late 90's I came to the realization that, while the 20th century had been the century of physics, the 21st century would become the century of biology. Consequently, I went back to grad school at the age of 61 and got a second Ph.D. in biology. After 9/11, I spent several years consulting on biological defense. During that time I was privileged to work with some of the senior biologists from the former Soviet Union and to gain insights into their thinking on emerging biological threats from both natural and man-made sources. Ultimately, however, I went back to physics and submarine technology.

3. What was it like to work alongside Walter Munk and other world-renowned faculty and leaders?

Pierce: I worked most closely with Carl Eckart, who was my dissertation advisor, and with Walter Munk. Walter was on my dissertation committee, and I subsequently worked directly with him as a post-doc at the *Institute of Geophysics and Planetary Physics (IGPP)*. Both Eckart and Munk were major figures in the world of oceanography at that time. They had very different personalities: Eckart was formal and reserved; Munk was gregarious and outgoing. My scientific development benefitted from both associations. From Carl, I learned to think carefully; from Walter, I learned to think boldly.

4. It has been said that the early years at UC San Diego were magical. Did you feel the magic?

Pierce: More than anything, we grad students felt privileged. We had an extraordinary faculty all to ourselves in the early years. At Scripps, there was a snack bar with tables on the bluff overlooking the beach. We could sit there between classes and chat with present and future Nobel laureates in a very casual atmosphere.

5. Did you have any inkling that UC San Diego would become a world-renowned research university, especially so quickly?

Pierce: Yes. It was quite obvious from the effort that went into the recruitment of faculty that the University had both the vision and the commitment to achieve world-class status.

6. You were here when Camp Matthews handed over the land to build the campus. What was the campus like then?

Pierce:All of my class work was done on the Scripps campus. Camp Matthews was still largely in its original state. I can recall using one of the barracks buildings as a practice hall. (At the time, I was still in transition from being a musician to becoming a physicist.) Construction of some of the first campus buildings began while I was there.

6. Why was it important to you to come back to campus for the Founders' Day celebration?

Pierce: I am frequently in San Diego on business, but I had never seen the campus in its full glory. I was interested to see the campus, and to see if any of my contemporaries and professors would be present. I had missed the 25th anniversary celebration of my class in 1985 when I was living in Europe. Happily, I located three former professors and three classmates. I was particularly pleased to be invited to take part in the Founders' Day Procession. When I graduated in 1964, there had been no ceremony; we simply received our degrees in the mail.

Fun Faves

Favorite UC San Diego memory: Being in Maria Mayer's nuclear theory class the day that her Nobel Prize was announced. She received a standing ovation from the class as she entered. **Favorite place on campus:** IGPP. In 45 years since leaving, I have never had a better office than I had at IGPP. I used to dry my sails on the roof outside my office. **Favorite place in San Diego:** The Beachcomber, a bar in South Mission Beach where I wrote much of my PhD dissertation.

Favorite place on Earth: London **Favorite hobby:** Observing bears in the wild **Favorite accomplishment:** Getting a second Ph.D. at the age of 69 **Favorite words to live by:** Lux et veritas.

Keep up with campus news by subscribing to *This Week @ UC San Diego*