

## Do You Remember Where You Were When...?

I RECALL EXACTLY what I was doing when I learned that John F. Kennedy was shot; and I recall exactly what I was doing when I learned of the 9/11 attacks. We all have attended events or witnessed activities that eventually serve as markers or turning points through history. It will be interesting to see whether a public workshop that I attended in Denver two weeks ago in mid-April 2006 will prove to be a defining moment for oceanography—in its broadest sense. The workshop, sponsored by the 24 U.S. federal agencies of the National Science and Technology Council (NSTC) Joint Subcommittee on Ocean Science and Technology (JSOST), was a step in the process for developing a National Ocean Research Priorities Plan (ORPP). The development of the ORPP was called for in the follow-up activities to the Report of the Commission on Ocean Policy (see Briscoe, M. 2005. *Oceanography* 18(3):9–13).

The “Guiding National Ocean Research Investment” workshop attracted nearly 300 members of the ocean science communities from 28 U.S. states (plus Mexico and American Samoa), including representatives from federal, state, and local government, academia, industry, and non-governmental organizations, to provide guidance on the development of the national Ocean Research Priorities Plan. Participants from all sectors of the ocean enterprise addressed common research and infrastructure needs, identified gaps and deficiencies, and provided input on the establishment of national ocean research priorities within seven societal themes (quality of life, human health, natural hazards, natural resources, ecosystem health, the ocean’s roles in climate variability and change, marine operations) and cross-cutting topics highlighted as critical to advances in all areas (basic understanding, observations/infrastructure, ocean education). The Plan’s goal of seeking enhanced collaboration, coordination, cooperation, and synergies across these themes and cross-cuts was reflected in the collegial, engaging atmosphere propagated through the workshop by the enthusiasm of the participants. It was all that TOS tries to do, but on a somewhat grander scale.

The strong relationship between human health and wellbeing and the ocean came up in many different contexts during discussions. In an October 2003 speech to the House Oceans Caucus in Washington, D.C., Dr. Rita Colwell, a name nearly synonymous with ocean-related human health issues, commented, “...our own fate and the fate of the oceans are inextricably linked. Although we often focus on disease and its cures, when we investigate this relationship, a larger, more complex picture emerges. We recognize that oceans not only harbor potential pathogens, but, most importantly, they *maintain* health.” This relationship was among the most prominent of the workshop’s set of recurring themes, and its interdisciplinary nature makes this issue of *Oceanography* particularly timely. The topic of oceans and human health encompasses two seemingly disparate sides of a coin.

The planning document for the Ocean Research Priorities Plan workshop matter-of-factly highlights the two sides of the oceans and human health coin in the opening sentence of the Enhancing Human Health theme: “The ocean holds untapped resources for enhancing human well-being, however, it also contains significant health hazards.”

A list of potential human health threats stemming from the ocean, including harmful algal blooms, shellfish poisoning, and anthropogenic contaminants, is countered by an equally impressive list of potential benefits in the form of, among other products, pharmaceuticals and diagnostics compounds, molecular probes, and nutrients. The workshop participants who contributed to the Enhancing Human Health sessions recognized this duality, giving equal emphasis to the challenges of fostering discovery and development of new marine bio-products, and monitoring, assessing, predicting, and preventing risks from pathogens, toxins and other chemical contaminants.

Dr. Colwell closed her talk with words that are as true today as ever: “When we limit our view of human health to problems of disease, diagnosis, and cure, we miss a significant perspective. A larger vision recognizes the evolutionary processes through which we arrived on the scene, and the ecological balances that sustain us. We see the vulnerability of the oceans and life that resides there as *our* vulnerability. That is what links our health to the health of the oceans.”

This issue of *Oceanography* explores the larger vision, the breadth of efforts underway to reveal the complex interactions between human and ocean, for the health of one relies on the health of the other. As we increase our understanding of how we influence and are influenced by ocean, coastal, estuarine and Great Lakes ecosystems, so will we increase our power to protect, enhance, and preserve their well-being, as well as our own.

Time will tell whether the April 2006 JSOST workshop will become recognized as a defining event for ocean sciences and whether the Ocean Research Priorities Plan will become a catalyst for enhanced support for ocean-related activities. Bringing together and engagement of passionate and enthusiastic members of the ocean community from widely disparate areas was a very positive step toward helping the nation realize the importance of the oceans in our daily lives and the importance of enhanced ocean research if we are to make progress towards more responsible stewardship of the ocean’s resources. It was a privilege to participate in the event and I will always remember where I was at that time in history.

### CONGRATULATIONS!

David Karl, founding TOS Member and previous TOS Council Member, plus Professor of Oceanography, Department of Oceanography, University of Hawaii at Manoa, has been elected to the National Academy of Sciences.



LARRY CLARK, TOS PRESIDENT