



Communicating Science: Educating Science Researchers and Science Policy Fellows







Myrna Jacobson Meyers ¹ Linda Duguay ¹ James Fawcett ¹ Emily Yam ² David Bader ² Celeste Frazier-Barthel ³ Catherine Halversen ⁴

1- USC Dana and David Dornsife College of Letters, Arts and Sciences, Wrigley Institute, USC SEA GRANT, COSEE West ,2 - Aquarium of the Pacific, 3- Wilson College Corvallis, Oregon, 4- Lawrence Hall of Science University of California Berkeley



As part of a NSF funded project, the authors went to Washington D.C. February 13-16th 2011 to train the Knauss NOAA fellows in the tools, and theories useful in communicating science to our representatives, lobbyists, and other government officials. The program of hands-on activities approached issues such as: 1) Understanding how people build an understanding of scientific concepts, communicating the nature and process of science to the general public, journalists, and other professionals. 2) Creating and presenting your best elevator talk, 3) "Getting to yes" in presenting new ideas. 3) Bridging the gap between science and policy. In addition, The University of Southern California USC Dana and David Dornsife College of Letter, Arts and Sciences and the Aquarium of the Pacific co-partner in offering a graduate course in communication of science to informal audiences. The purpose of the latter course is both to enable communication of science by high level professionals to their peers and the public, and to facilitate a higher level of understanding on how research thinking develops within the scientific community.

KNAUSS FELLOWS in NOAA HQ Sliver Spring, MD February 13-16, 2010 – Next workshop March 12-14, 2012

Some concepts introduced through traditional and newly created COSIA exercises include: (1) New ideas in science and what tools we can use to help inform policy, (2) Negotiation techniques based on an understanding of using prior knowledge and questioning, (3) Data Visualization, (4) Non-verbal communication, (5) Framing conversations, using prior knowledge and cultural lenses to effectively communicate controversial science topics.





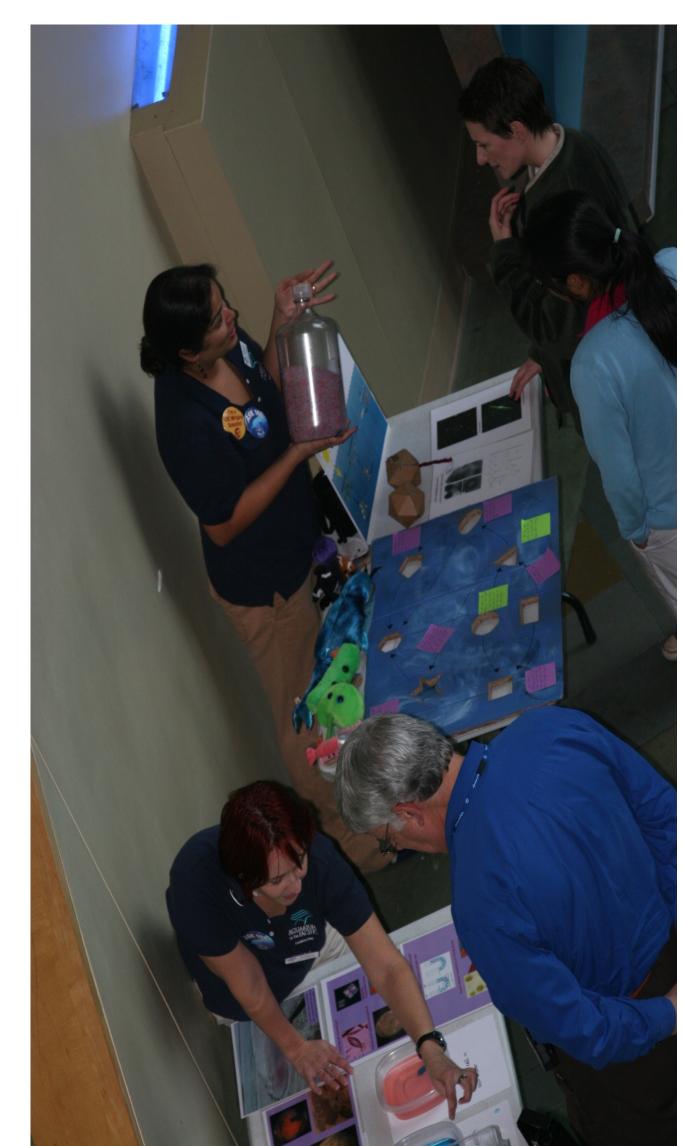






COSIA at USC and AOP: Presenting exhibits that foster interaction

Graduate students learn about educational theory to help them understand both their own thought processes and how others codify concepts. Emphasis is both on peer communication and communication in interactive environments of various educational settings. They then develop on-the-floor exercises at the Aquarium of the Pacific which relates to their own field of research.



Extremophiles: Have you ever seen a pink lake? What are Extremophiles and where do they live?





Microbes the billions and billions of stars of the Ocean. Understanding the role of microbes in the ocean.

Copepods in the ocean, cool creatures

swim like they are in honey. Behavior

and food chain dynamics

The Game Arcade – recent research indicates that both creating and playing interactive games facilitates motivation, interest and codification of learning concepts. Our game arcade was a smashing success even with distractions such as scuba divers in the exhibits retention time was very high.



What is so Key about a Sea Star. Dice game about predators & species diversity



Freaks of Nature a game of matching species and understanding genetic combinations.



Tell occ

What can modern oceans tell us about ancient oceans.