Case 48

Monterey Bay Aquarium and Research Institute

David and Lucile Packard Foundation, 1977

Scott Kohler

Background. The Monterey Bay Aquarium was first dreamed up one night by four young marine biologists who were concerned that increasing numbers of tourists would soon threaten the northern California bay, a treasure chest of marine biodiversity. The group, which soon grew to include a fifth member, thought that "a modest aquarium" might work as an anchor for research and protection efforts in the region. Their idea got a lot more serious when two of the five—Julie and Nancy Packard—took the idea to their father David, the billionaire electronics pioneer who, with his business partner Bill Hewlett, had established Silicon Valley as the epicenter of the twentieth century technology boom. David Packard, who had grown up fishing the waters of Monterey Bay, challenged his daughters to be practical, but also to think big.[738] A feasibility study was commissioned, and when the Packard Foundation agreed to fund the aquarium's construction, the project's cost was estimated to be $7 million.[739]

Strategy. In fact, the aquarium cost $54 million over seven years. The Packard Foundation paid all of this, and David Packard himself was deeply involved in designing the aquarium. He worked with architects and exhibit specialists, and designed the Aquarium's state-of-the-art wave machines personally.[740] When it opened in October 1984, the Monterey Bay Aquarium was the largest in the nation, and began to quickly attract hundreds of thousands of visitors.

From the start, "the Aquarium sought to apply the most current technology to further its purpose."[741] More than a tourist attraction, it housed extensive research, both of the Monterey Bay ecosystem and the oceans beyond. Increasingly interested in marine research, Packard in 1986 convened a blue-ribbon panel of oceanographers to consider the development of a full-scale research institute. The panel recommended that the new institution should fill "a mostly vacant niche of importance." In 1987, the Monterey Bay Aquarium Research Institute (MBARI) was incorporated, independently of the Aquarium, "with a broad mandate for cutting-edge research and development in oceanography." In contrast to traditional marine science, which seeks to answer questions to the best ability of the available technologies, the MBARI challenges scientists to formulate the questions, its engineers to make them answerable, and its operations staff to carry out the experimentation. The Institute is also committed to disseminating widely the findings of its research.[742] Again the Packard Foundation bore all the costs, and David Packard was determined that the traditional constraints of foundation support would not impede scientific progress. He told Bruce Robison, the Institute's former director, "I don't want you to waste your time writing grant proposals. I want you to do science and take risks."[743]

Outcomes. Today the Monterey Bay Aquarium draws almost 2 million visitors per year.[744] It is supported entirely by admissions fees, visitor donations, and the revenues of its gift shop and restaurant.[745] The MBARI now has assets of more than $120 million.[746] Its annual budget of $40 million is still supported largely by the Foundation,[747] helping to make MBARI "one of only two privately funded oceanographic research centers in the country...."[748] By the year 2000, MBARI's four submersible research vessels had already carried out a total of more than 4,000 dives, discovering a number of previously unknown marine species along the way.[749] The Institute conducts a range of research projects, from a multi-year study of variations in coastal surface waters to investigations of the biological consequences of deep-sea geologic processes, such as underwater volcanic eruptions and tectonic movements.

Impact. In creating and continuing to support the Monterey Bay Aquarium and Research Institute,

the Packard Foundation has performed two distinct services. It has given to the public a huge and state of the art attraction that, in addition to its recreational value, is a center of marine education. And the Research Institute—one of the world's premier centers for the study of the oceans and marine life—serves as a hub of cutting-edge science, exploring the seas for discovery's own sake, and adding volumes to human understanding of those vast regions of our planet which lie underwater. As federal funding for basic research in the field has declined, MBARI's mission has become all the more important. And thanks to the support of the Packard Foundation, it is able to carry out an ambitious research agenda, charting for human understanding places, species, and phenomena that would otherwise go unexplored.

Notes

738. David Perlman, "A Celebration of the Ocean: Monterey Bay Aquarium's Mission to 'Inspire, Engage, Empower' Marks Twentieth Year," *San Francisco Chronicle*, 10/18/2004.
739. Ibid.
740. Marcia McNutt, "How One Man Made a Difference: David Packard," paper presented at the symposium "Oceanography: The Making of a Science," 2/8/2000, available from http://www.mbari.org.
741. Ibid.
742. Ibid. McNutt, the executive director of MBARI, identifies these four elements—science, engineering, operations, and information dissemination—as the four pillars of the Institute.
743. David Perlman, "Deep-Sea Robot Reports on Life in Monterey Bay," *San Francisco Chronicle*, 8/9/1993.
744. Perlman, "A Celebration of the Ocean."
745. Robert Lindsey, "Huge Ocean-Front Aquarium to Open in Steinbeck's Monterey," *New York Times*, 10/20/1984.
746. Form 990 of The Monterey Bay Aquarium Research Institute, 2003.
747. In 2003, for example, the Packard Foundation gave $32 million to the Institute, which, unlike the aquarium, cannot support itself by fees.
748. Available from http://www.mbari.org/.
749. Ibid.