BUILDING 21st CENTURY EXPLORERS: LEARNING ABOUT ASTROBIOLOGY EXPLORATION INTERACTIVELY P. G. Conrad[1], K. E. Phillips[2], and A. M. Sohus[1], [1]Jet Propulsion Laboratory, California Institute of Technology, 4800 Oak Grove Dr, Pasadena, CA, 91109, conrad@jpl.nasa.gov, [2]California Science Center, 700 Exposition Park Dr, Los Angeles, CA 90037.

Introduction: Exploration in this century is as important to contemporary culture as it has ever been. This important biological activity has, for humans, often conducted in teams of individuals with diverse skills—an interdisciplinary pursuit.

The instant availability of new information via the World Wide Web enables educational settings that were formerly static to be remade in a dynamic response to new discovery. In a rapidly growing interdisciplinary field such as astrobiology, it behooves us to reach the widest possible audience with the most current information possible if we are to capture the imagination of candidate future astrobiologists.

To that end The Jet Propulsion Laboratory and the California Science Center have collaborated on the development of an interactive kiosk for display at the museum (California Science Center in Los Angeles, CA).

The Display: The kiosk is located in the aerospace gallery of the museum. Its centerpiece is a sizeable backlit image above a sealed tray of rock samples, one of which contains a layered microbial community. A user-positionable magnifier slides on rails so either rock can be studied, and a UV lamp can be switched on at the viewer's discretions as an analog to the way we commonly use UV fluorescence to detect organic molecules and organisms in the field or in the laboratory.

Two Mac ™ mini computers power two touch screen monitors, one of which is accessed at seated level with a rollaway seat so that a visitor in a wheelchair can use the kiosk.

The curator is able to remotely update either of the computers with recent or even breaking news in astrobiology research.

Topical Content. The exhibit provides four types of content

- Current astrobiology science
- Beginners guide to astrobiology
- Aliens in pop culture
- People and profiles

Current science: provides visitors with excerpts from articles announcing the most recent scientific discoveries and efforts in the field of astrobiology. Visitors can search a data cloud to explore areas of particular interest—for example articles on extreme environments or those pertaining to organic molecule discoveries.

Beginners' guide: offers those not too familiar with astrobiology a friendly overview of the various methods by which scientists undertake the search for extraterrestrial life. Visitors can explore both historical NASA missions (such as the classic Viking I and Viking II Mars landers) as well as the most recent technologies for sensing the existence of planets around other stars.

Aliens in pop culture: provides an upbeat and often humorous look at how our culture responds to Hollywood's interpretation of "little green men." This area also offers evidence of how actual scientific discoveries influence the motion picture industry by helping to raise the bar on the attempt to portray scientific endeavors with a degree of accuracy not seen in some of the older (but truly classic) films.

People and profiles: provides visitors with a brief introduction to some of the people and personalities undertaking work in the field of astrobiology around the world. This section helps visitors to understand the international nature of the many collaborations taking place among scientists at NASA and universities all over the globe.

Discussion: The astrobiology kiosk opened in December 2008. Since that time, a conservative estimate of visitor attendance suggests that approximately 10,000 visitors have actively explored the content pro-

vided in the kiosk with an additional 30,000 visitors observing the samples beneath the sliding microscope and spending just a few moments exploring one of the four content areas.

The mix of science with popular culture teaches that the real exploration and hunt for aliens is within grasp and just as exciting. Everyone can explore interdisciplinary science by using information that is itself drawn from interdisciplinary sources.

Because of the instant availability of information in the 21st century, people have come to expect and demand the most current information available, and the astrobiology kiosk at the California Science Center is an example of how collaborations between museums and scientists can respond to that public expectation.

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