25th IAA SYMPOSIUM ON SPACE ACTIVITY AND SOCIETY (E5) Space Societies, Professional Associations and Museums (6)

Author: Ms. Kerrie Dougherty Australia

THE POWERHOUSE MUSEUM MARS YARD: EDUCATION AND OUTREACH WITH A 'LIVING LABORATORY'

Abstract

In 2009, the Powerhouse Museum joined a consortium to bid for funding under the Australian Space Research Program for a unique science communication and education project that would be based within the museum, but draw on the expertise of two universities and a corporate partner. The project, Pathways to Space, combined high school, undergraduate and graduate education with real science and technology research in astrobiology and robotics, while also conducting a study into the efficacy of exposing high school students to real scientific research.

The central focus of this project was the Mars Yard, a high fidelity recreation of the Martian surface on which experimental robotic roving vehicles could be tested. Established within the public area of the museum, this facility has served as a 'living laboratory', with both university-level research and educational activities taking place in full view of visitors to the museum, thus engaging the public in a simultaneous space outreach activity.

This paper will outline the Powerhouse Museum's Mars Yard and its associated programs as an exemplar for the way in which museums can employ a living laboratory-a research facility on open public view-for educational and outreach purposes in communicating space activities to the public. It will look at the invaluable contribution made to the outreach and educational activities by motivated university students and museum volunteers and the potential that exists for the members of space societies to contribute to the programs now being developed for the Mars Yard under the Pathways follow-on program "The Mars Lab", which will allow for national and international education and outreach.