



APGO
education
foundation

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APGO EDUCATION FOUNDATION ANNOUNCES GRANT OF \$5,300 FOR PERMANENT AUGMENTED REALITY SANDBOX DISPLAY AT MILLER MUSEUM OF GEOLOGY, QUEEN'S UNIVERSITY

February 27, 2017, Toronto, Ontario: The APGO Education Foundation (“the Foundation”) is pleased to announce a grant of \$5,300 to the Miller Museum of Geology at Queen’s University in Kingston, Ontario for installation of a **Permanent Augmented Reality Sandbox Display** (“AR Sandbox”).

The AR Sandbox was created by a research team at UC Davis in California in 2012 as an offshoot of a project to develop activities and resources to teach people about lake and watershed science. They created an amazing interface between cutting-edge 3D visualization technology and everyone’s favourite playtime activity, the age-old but much-loved sandbox. A video of how the AR Sandbox works is available [here](#)

In a nutshell, a 3D sensor maps the topography of the sand in the sandbox, a computer builds a digital elevation model of the surface, and a projector then overlays computed contour lines and colours on the sand surface based on the elevation at each point. Much to the amazement and delight of users of all ages, this all happens in real time. As people dig in the sand to create valleys, or pile the sand up into hills, the map surface is continually updated to show how the sand topography has been changed. The software allows the user to virtually “make it rain” on the landscape they have built in the sandbox. This rain water then flows down the steepest gradients and pools in the lowest areas of the model to form lakes.

Dr. Bill Pearson, P.Geo., FGC, Chair commented: “The AR Sandbox is a remarkable teaching tool. The Miller Museum previously has used a portable version with great success. A permanent installation will make this exciting technology more readily available to the public. We are delighted to support this innovative project. This tool shows in real time to users how topography controls watersheds, surface water and runoff, demonstrating some of the basics of geomorphology and environmental geoscience.”

Mark Badham, M.Sc., Curator of the Miller Museum commented: “Being able to add this incredibly interactive and educational exhibit to the museum displays has been a major goal since we first saw the videos of this amazing technology in action. The museum is extremely grateful to the APGO Education Foundation for the support to build the AR Sandbox which will help to inspire and educate people of all ages who come to our facility each year.”

In 2016, Mr. Badham received the prestigious Ontario Museum Association (OMA) Award of Excellence honouring his 30 years of being curator at the Miller Museum as well as his important contributions to the development of the network of museums in Kingston. This award is presented by the OMA to individuals who, over an extended period of time, have created a lasting and meaningful legacy in the Ontario museum community.

ABOUT THE APGO EDUCATION FOUNDATION

The APGO Education Foundation is a registered charitable organization under the Canada Not-for-profit Corporations Act, registration number 84604 5052 RR0001. The purpose of the charity is to advance the education of the public in the area of geoscience by 1) providing scholarships to post-secondary students for the study of geoscience in a degree program; 2) providing bursaries to immigrants to Canada who are internationally-trained geoscientists and have demonstrated financial need for completion of licensure procedures for registration as a professional geoscientist in Ontario; and 3) holding lectures, presentations and conferences on geoscience to enhance the knowledge of the general public.

Visit us at the APGO Booth #851 Exhibit Hall at the PDAC Convention March 5-8th!

For further information

Please see our website at www.apgoedfoundation.ca

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ABOUT THE MILLER MUSEUM OF GEOLOGY

The Miller Museum of Geology has been a part of in the Department of Geological Sciences and Geological Engineering at Queen's University since 1931. It is open to the public for self-guided visits, free of charge, on weekdays year-round. The museum exhibits feature beautiful minerals and fossils, highlights of the local area geology and also important Canadian geological treasures such as the dinosaurs of western Canada and the fossils of the earliest known complex animals at Mistaken Point, Newfoundland. Since 1986, the museum has offered a popular series of hands-on educational programs in its dedicated classroom for groups interested in geology (school groups, cubs/brownies, nature enthusiasts etc.) that brings in approximately two thousand people per year in addition to the self-guided visitors each year. The museum continues to grow through grant-funded exhibits and programs each year.

For further information

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