Media Release

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International scientists collaborate for online STEM educational game

Scientists across the globe have contributed to a unique educational game developed by Swinburne researchers and students.

Hosted by Amazon Web Services (AWS) and currently available in beta, <u>Science</u>
<u>Island</u>, is the multi-year project of Swinburne Design, Senior Lecturer, James Marshall.

Mr Marshall had been working on the game for close to eight years when suddenly the coronavirus (COVID-19) hit and the world entered lockdown. He knew that he wanted to make *Science Island* available for families as soon as possible to help educate children during lockdown.

"We had planned to launch Science Island at the end of 2020, but given the COVID-19 outbreak and the number of children in social isolation, we have partnered with Amazon to launch a beta version immediately," says Mr Marshall.

"I'm hoping that giving kids access to this now will encourage them to play the game and develop a passion for science, technology, engineering and maths (STEM)."

"STEM is crucial to addressing the challenges the world is facing at the moment. Things such as climate change, population growth, health care and sustainable energy production. But STEM is also about creating new opportunities in areas like ubiquitous computing, the internet of things, genetics, nanotechnology, artificial intelligence and driverless cars, to mention just a few."

Leading a global project

The concept of *Science Island* came to Mr Marshall in 2012 after he formed a partnership to help build the Kasese Humanist Primary School, a science-based school in Uganda. Through his ongoing work with the school, the idea came to him.

"I had this idea that Swinburne students could take a design-led approach to teaching STEM, creating cool content and fun activities to inspire children all over the world."

"We asked sixth-grade Kasese students to come up with over 100 STEM-based questions. Students from our Digital Media Design program developed interactive quizzes, animations, videos, experiments, games and catchy songs to address these curly science questions."

Some of these were relatively straight forward such as "how does an aeroplane fly?", where others were more challenging such as "is it true that the whites have a cure for AIDS?" or "which planet is heaven on?".

International support



To answer these tricky questions, Mr Marshall enlisted the help of world-leading scientists from institutions including NASA, MIT, University of Cambridge and Swinburne.

"We've even managed to get leading astrophysicist Pamela Gay to provide voice acting for the character of 'Jean Pool'," says Mr Marshall.

The answers to the questions became interactive components of *Science Island*.

650 final-year design students at Swinburne worked in collaboration with these international scientists to create the content.

The project represents more than 100,000 hours of research and development and it contains more than 20 hours of animated video, games, books, quizzes, songs and fun experiments that kids can do at home.

An entire section of the game is dedicated to medicine, including stories and games about bacteria and viruses and how to prevent them spreading.

A beta version of *Science Island* is currently available to <u>play online</u> at no charge.

Media enquiries

- Images including screenshots and behind-the-scenes photos are available via the <u>Science</u> Island website
- Interview opportunities with James Marshall are available



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