Expansion of SWIMS

Meeting the challenges faced by marine ecosystems in Asia's World <u>City</u>

The way of doing science is dynamic. Enhancing our infrastructure and acquiring different skill sets are crucial for us to meet the challenges of the future for research and community outreach.

> Professor Gray A Williams, Director of SWIMS

Science is ever-evolving, and with discoveries comes new theories, ideas, and insights. However, this evolution cannot be sustained without constantly upgrading research infrastructure. Since its inception in 1990, SWIMS has been a driver of advances in both marine biology and ecology in Hong Kong and the surrounding region. After three decades since its launch, the time has come for SWIMS to modernise and this led to the construction of a new laboratory annex, supported by Swire Trust.

Vision beyond expansion

The new laboratory will comprise a molecular biology lab, a biodiversity centre, and an expanded seminar room, as well as provide the necessary space for new staff and research students. "It is hoped that through the addition of new facilities, SWIMS will be able to host more researchers from around the world and maintain its leading role in marine science research, while catering to the growing interest in local marine ecology and biodiversity being developed by citizens in Hong Kong," said Professor Gray A Williams, Director of SWIMS, visualising the blueprint of the expansion project.

Another factor for SWIMS expansion is the incredibly swift developments taking place in Greater China. As one of the leading marine research institutes in the region, SWIMS is dedicated to protecting and sustaining the coastal marine ecosystem, as well as investigating the impacts made by development and finding solutions for mitigation, so as to achieve sustainable development.

New experiences

To achieve this, new outreach plans have been devised with the opening of a seminar room and biodiversity centre. "We will have facilities where we can hold seminars and workshops for students; and after that we can go downstairs to the centre, where we can interact with living organisms in the aquarium, as well as access the museum collections and on-line resources," said Professor Williams. A more ambitious move is to engage local students, encouraging them to collect data and contribute to building a local database via citizen scientist programmes.

Future endeavours

As a top-notch research institute in Asia, the expansion of SWIMS will certainly cater to the growing needs of researchers. One of these is the establishment of a new molecular biology laboratory. In the past, ecological studies mainly consisted of field-based work, be they observation or pattern-driven studies. Today, with the rapid development of molecular and multi'omics techniques, scientists can reveal the fundamental genetic and physiological changes that occur in species.

The opening of the new lab coincides with a number of ongoing local and global projects, which offer many exciting opportunities for further collaboration between organisations around the world. Links have also been established with prominent institutions in the Pan-Pearl River Delta region. Together, these projects bring insight from leading researchers around the world to solve imminent problems related to marine conservation — putting a global perspective on local struggles with the loss of biodiversity; or as Professor Williams would put it: "finding local solutions to global issues".

An evolving scene

As the scale of environmental conservation expands and more actors become involved, SWIMS will continue to play a pivotal role in providing a sound scientific basis for future decisions made by other stakeholders when balancing economic development with conservation management. In addition, through outreach and education, SWIMS will carry on training passionate individuals who contribute to society. The new expansion will certainly play an important part in SWIMS' continued evolution and support the discoveries, theories, and insights which

SWIMS provides to help conserve and manage our rich marine biodiversity.

Article excerpted from the feature "Expansion of SWIMS Opens up Possibilities and Opportunities" by student reporter Mr Luke Ian Cuimin in the Faculty of Science Oak Anniversary Commemorative Volume 2019.

> More about the expansion of SWIMS: <u>bit.ly/3gGFza0</u>







THE SWIRE INSTITUTE OF MARINE SCIENCE THE UNIVERSITY OF HONG KONG 香港大學 太古海洋科學研究所

Opening Ceremony of the EXPANSION OF THE SWIRE INSTITUTE OF MARINE SCIENCE

Conserving the present for a sustainable future

July 28, 2021 (Wednesday) 3 pm



Programme Rundown

Welcome speech by Professor Matthew R Evans, Dean of HKU Science

> Opening remarks by Mr Merlin Swire, Chairman of Swire Pacific Limited

Address by Professor Xiang Zhang, President and Vice-Chancellor of HKU

Unveiling of plaque for SWIMS' expansion

Introduction of new facilities by Professor Gray A Williams, Director of SWIMS

Tour of new facilities at SWIMS

Introduction of "Restoring Hong Kong's Whale" campaign and vote of thanks by Professor Gray A Williams, Director of SWIMS

Souvenir presentation

A glance at the new laboratory



Milestones

Construction of The Swire Marine Laboratory Foundations being laid at Cape d'Aguilar

1989

∟1990





Expansion and renaming as SWIMS

Professor Geping Qu, Sir John Swire

and HKU Vice-Chancellor Professor

Gungwu Wang opening SWIMS

2003-

Opening of The Swire Marine Laboratory Laboratory and **Residence Block**

Establishment of Cape d'Aguilar Marine Reserve Faculty of Science, HKU Hong Kong's one and only marine reserve

Establishment under the Group photo at an international conference at HKU

Support from Swire Trust

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Science philanthropy is the catalyst to create impacts from scientific research and education.

The Swire Group Charitable Trust

Never far from the ocean

Starting its business as a shipping company two centuries ago, Swire Group always finds the ocean close to its heart. Thanks to the Group's dedication to give back, marine conservation naturally becomes one of the pivotal foci of its Charitable Trust. With the belief that science philanthropy can create impacts through scientific research and education, Swire has been a staunch supporter of SWIMS for the past three decades, from the humble establishment of The Swire Marine Laboratory (SML) to the expansions along its evolution.

More about the Trust

Established in 1983, Swire Trust is the philanthropic arm of Swire Pacific Limited and a registered Hong Kong charity. The Trust aims to create positive change in Education, Marine Conservation and Arts.

Swire Trust

Further renovation & expansion Renovations funded by Swire Group



25th Anniversary of SWIMS Group photo at the SWIMS 25th Anniversary Celebration



Further expansion of SWIMS Celebrations at the Topping Out ceremony for SWIMS expansion



-2015





Open House Naming Ceremony of 'Swire Asterina', SWIMS research boat



Re-opening of SWIMS expanded facilities Artist's vision of the new SWIMS laboratory

Creating impacts through research

Science enables us to understand the world, it is also a ground to advocate policy change and to arouse public awareness. Indeed, scientific evidence is the first step to change, the foundation to pinpoint problems around us. Only with science can one strive to make changes for the betterment of society. The Trust hopes to build a platform to transform this philosophy into reality through policy change, research and education, so that the issues of biodiversity loss, overfishing and pollution in our waters can be resolved. In this sense, science philanthropy plays a crucial role in fostering the translation of scientific knowledge into societal impacts.

Education is the key

Apart from basic science research, education is equally essential. Only by inspiring the young generations can we achieve and create sustainable values. Thirty years ago, the Trust funded SWIMS to build a multidisciplinary research environment, as well as to grow a research culture and train young scientists; today, the Trust still carries on its mission through supporting the recent expansion of SWIMS and its ambitious development plans. The journey towards a more sustainable marine environment is a long one, yet through concerted efforts in fostering collaborations and sharing scientific knowledge, this goal can be realised in the near future.