



**WATCH
THE VIDEO**

Learn more about the research into sea anemones and barnacles at the St John's Island facility.
<http://str.sg/4wCf>

The St John's Island marine lab, the only offshore marine research facility here, is now open to all marine scientists here. ST PHOTO: LIM YAOHUI

National lab dives deeper into sea research

National Research Foundation launches new \$25m, five-year marine study programme

Audrey Tan

Singapore's only offshore marine research facility is now open to all marine scientists here, in a move that will pave the way for more sea research.

Previously, the laboratory, on St John's Island, was used largely by scientists from the National University of Singapore's Tropical Marine Science Institute (TMSI).

In March, it was designated a National Research Infrastructure. This means that all marine researchers here will have access to it, al-

though it will continue to be operated by NUS.

The National Research Foundation (NRF) announced this yesterday, alongside the launch of a new \$25-million, five-year marine research and development programme. It is collaborating with NUS on the programme, which will be helmed by Professor Peter Ng, head of the Lee Kong Chian Natural History Museum and former director of the TMSI.

He told *The Straits Times*: "We are an island nation after all, and we cannot ignore or be complacent about our marine environment, its

inhabitants and ecosystem, and what we do with it and to it."

Science could provide solutions to emerging challenges to the marine environment, such as climate change, urbanisation and heavy shipping.

NUS veteran marine biologist Chou Loke Ming said: "Marine science is a strategic research area... (considering that) maritime trade has contributed to Singapore's economic growth."

The new programme could raise the number of research projects in this area.

Already, a team at the TMSI is studying how marine pests brought in by passing ships can be better controlled and managed.

When invasive marine species such as barnacles and tube worms

attach themselves to vessels, they can reduce speeds by more than 10 per cent, owing to drag, and raise fuel consumption of ships.

Sixteen research proposals are being evaluated under the programme, and successful ones are expected to be awarded grants later this year.

Mr George Loh, the NRF's director of programmes, said: "Many of the current marine science research projects are undertaken as and when agencies or companies feel there is a need to be addressed, such as the impact to the corals due to urbanisation works along our coastlines."

But the new programme could spur basic marine research. This is crucial, as there is still much to learn about Singapore's native marine biodiversity, Mr Loh said.

For marine scientists, having access to a facility with direct and immediate access to sea water is critical and many welcomed the move to open up the St John's Island Marine Laboratory.

Dr Tan Lik Tong, a lecturer from the natural sciences and science education academic group at the National Institute of Education, Nanyang Technological University, said the national lab could also increase collaborations between scientists from different institutions.

The NRF said it will support the upgrading of the marine laboratory at a cost of \$9.5 million over three years.

This includes the cost of restructuring labs, increasing aquaria capacity and raising laboratory bench spaces.

New facilities, such as aquaria that allow users to control seawater environment such as temperature and salinity, will also be built over the next one to two years, said Dr Serena Teo, the lab's facility director.

The sea around Singapore is home to a surprising amount of marine life. More than 250 species of hard corals – a third of those found worldwide – have been recorded in Singapore's waters.

In addition, it has 12 of the 23 species of seagrass in the Indo-Pacific region, about 200 species of sponge and over 100 species of reef fish, according to data from the National Parks Board.

audreyt@sph.com.sg

SEE SCIENCE B13