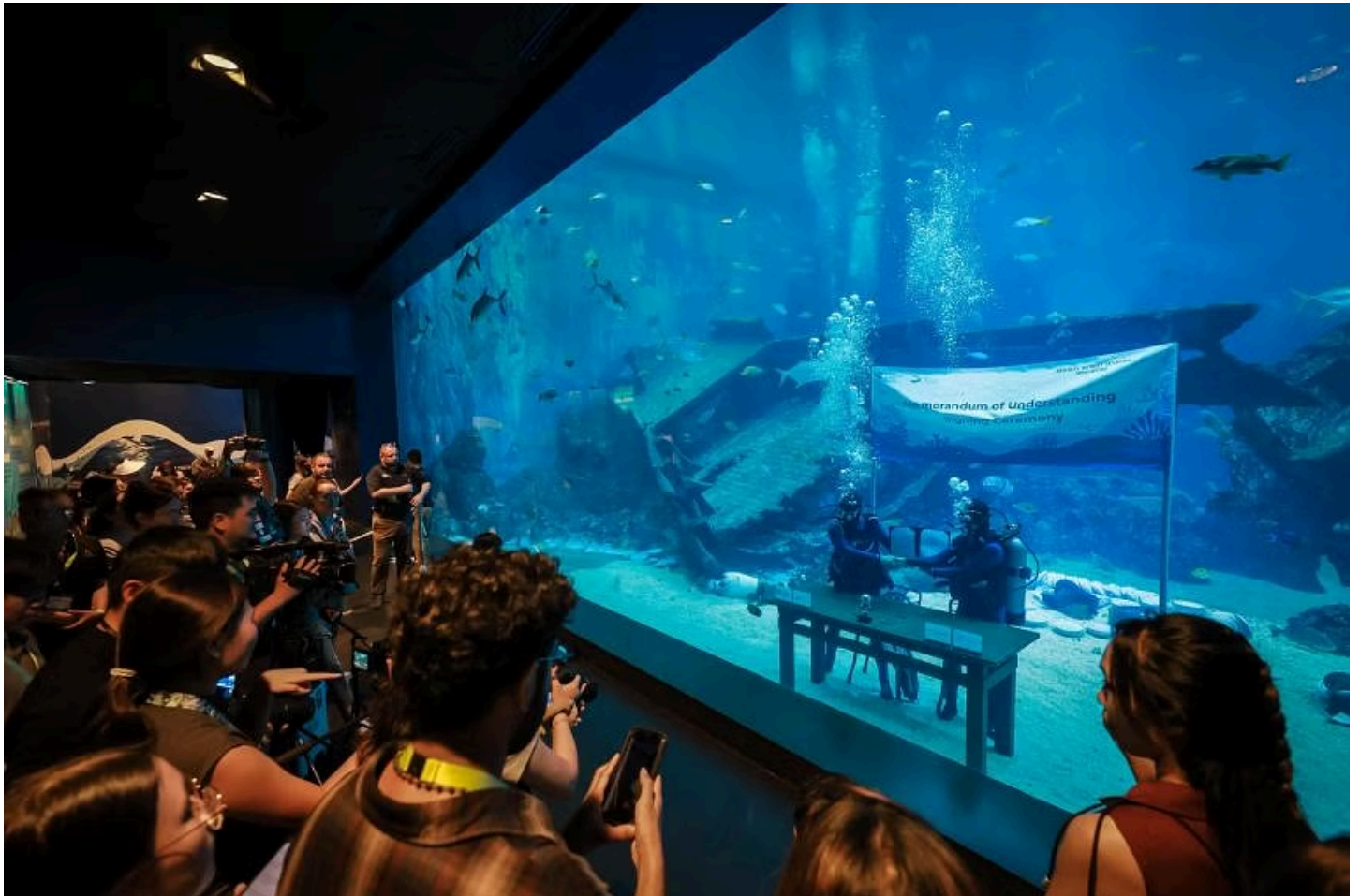


THE STRAITS TIMES

NTU and S.E.A. Aquarium to collaborate on climate research and marine conservation



Assistant Professor Kyle Morgan from NTU (left) and research and conservation executive Abel Yeo from S.E.A. Aquarium signing a memorandum of understanding underwater. ST PHOTO: GAVIN FOO

[Leow Wen Xuan](#)

UPDATED APR 30, 2024, 11:09 PM ▾

SINGAPORE - Delegates from the Nanyang Technological University (NTU) and S.E.A. Aquarium dived underwater to sign a document that marked a collaboration between the two institutions, paving the way for future projects for the conservation of marine biodiversity.

Using laminated paper and a pencil, Assistant Professor Kyle Morgan from NTU's Asian School of the Environment (ASE) and research and conservation executive Abel Yeo from S.E.A. Aquarium signed a memorandum of understanding (MOU) on April 30 in the Aquarium's Shipwreck Habitat exhibit.

The waterproof laminated paper was roughened with sandpaper so that the pencil mark would transfer and stay on the surface. It was the first time an MOU was signed underwater in S.E.A. Aquarium at Resorts World Sentosa.

The two-year collaboration aims to bring together the expertise and resources of both S.E.A. Aquarium and NTU's Earth Observatory of Singapore (EOS), a research institute that centres on natural hazards and climate research.

Joint research projects undertaken by the S.E.A. Aquarium and EOS will focus on climate science and super corals – corals that can tolerate or recover from stress and successfully reproduce after stressors such as ocean warming.

By further understanding the genetics of super corals, scientists can breed more heat-tolerant corals and replace the ones that are dying and ensure a healthy ocean, said Professor Benjamin Horton, who is the director of EOS and a professor of earth science at NTU's ASE.

This is crucial as coral reefs are increasingly dying with warmer temperatures and are hence unable to support marine life.



Evening Update

Catch up on the news that everyone's talking about

Enter your e-mail

Sign up

By signing up, I accept SPH Media's [Terms & Conditions](#) and [Privacy Policy](#) as amended from time to time.

Yes, I would also like to receive SPH Media Group's marketing and promotions.

The collaboration will also create internship opportunities at the aquarium for ASE undergraduate students to learn about marine science and conservation as well as scuba-diving skills and how to interact with marine animals.

Through the collaboration, students and staff at NTU's ASE will also have access to S.E.A. Aquarium's Rainbow Reef – a coral habitat that features more than 20,000 reef inhabitants – as a teaching facility and to test field equipment during planned visits.

In a safe and controlled environment in the aquarium, students can practise using their field equipment before heading out to the open seas without worrying about making mistakes with their equipment, said Mr Nicholas Derbyshire, director of visitor experience at S.E.A. Aquarium.

Prof Morgan, who is also a principal investigator at EOS, added that in Singapore, it is difficult for students to access coral reefs offshore as there are strong currents and high amounts of sediment in the water, which lower visibility.

Having the aquarium allows the students to see marine biodiversity first-hand, such as corals, mangroves and other marine ecosystems, easily.

EOS will also deploy sensors in Singapore's seas and the South China Sea to observe the sea's surface temperature, salinity and pH or acidity levels, said Prof Horton.

"In and around Singapore and the South China Sea, there are a lot of data gaps. So it's really critical that we fill them," he said.

“We hear about these marine heatwaves, what you want to be able to do is project when they’re going to occur, how hot they’re going to be and how long they’re going to last. But if you have no data, you don’t know how accurate your models are.”

MORE ON THIS TOPIC

[Want to save the world and fight climate change? Saving nature is the key, experts say.](#)

[OceanX research vessel to study marine life in South-east Asia](#)

S.E.A. Aquarium will provide a space to showcase the data collected by EOS through the sensors.

Mr Derbyshire said the aquarium plays a key role in allowing a “story to be told” by using the data collected by EOS to raise awareness on how climate change is affecting waters.

Prof Morgan added: “We have a number of collaborations with other universities and with non-governmental organisations. How this is unique is the huge amount of engagement we can get from the community. It’s a really good avenue to promote and showcase the work we’re doing for research, be it on coral reefs or other marine systems; we can communicate that to lots of people that are coming and visiting (the aquarium) every day.”

Visitors can look forward to ocean webinars and short educational videos developed by EOS for use in S.E.A. Aquarium’s programmes, exhibitions, festivals and more.

Enjoying ST’s content? Become a subscriber to access premium articles

FEATURED PLANS

ST ONE DIGITAL - ANNUAL

~~\$9.90~~ **\$4.95**/month

Get offer

\$59.40 for the first year and \$118.80 per year thereafter.

ST ONE DIGITAL - MONTHLY

\$9.90/month

Subscribe today

No lock-in contract

Unlock subscriber-only benefits

All subscriber-only content on ST app and straitstimes.com

Easy access any time via ST app on 1 mobile device

Other subscriber-exclusive perks like e-paper access with a 2-week archive and more!

Join **ST's WhatsApp Channel** and get the latest news and must-reads.



Subscribe today

Get unlimited access to exclusive stories and analyses by the ST newsroom

[Choose your plan](#)

E-paper

Newsletters

Facebook

RSS Feed

Instagram

Telegram

Twitter

Youtube

LinkedIn

TikTok

- SINGAPORE
- ASIA
- WORLD
- OPINION
- LIFE
- BUSINESS

- TECH
- SPORT
- VIDEOS
- PODCASTS
- MULTIMEDIA

[About Us](#)

[Need help? Reach us here.](#)

[Terms & Conditions](#)

[Advertise with us](#)

[Privacy Policy](#)