

A Look Back at the Launch of SIGNIFY

SIGNIFY (Singapore in Global Natural History Museums Information Facility) is a five-year project initiated by the Lee Kong Chian Natural History Museum (LKCNHM) at the Faculty of Science at the National University of Singapore (NUS). The project is supported by Mr Terence Anthony McNeice (in honour of Sir Percy McNeice), the Lee Foundation and Mr Goh Geok Khim. The project was officially launched on 10 August 2022. In preparation for the launch, SIGNIFY team visited the Natural History Museum in London in May and August 2022.

An international endeavour

SIGNIFY aims to document and digitise 10,000 historical specimens collected from Singapore's over the past two centuries. Several of these specimens, dating as far back as the 18th century, were collected by explorers and naturalists who visited Singapore during that time, and are currently housed in museums and research institutions across the world. Through this initiative, LKCNHM hopes to foster collaborations with these institutions in order to digitise Singapore's historical biodiversity to accelerate specimen-based research in the future.

SIGNIFY is the first international endeavour at this scale to make the historical biodiversity data of an entire country freely available online. The digital archive will also serve to bridge data gaps in the understanding of Singapore's historical biodiversity. Working with counterparts from the Natural History Museum in London and elsewhere, the project hopes to facilitate and strengthen research collaboration between scientists from Singapore and the United Kingdom in areas such as biodiversity, conservation and ecology.

Professor Peter Ng – the Principal Investigator of SIGNIFY – envisions that “at the end of this project, besides getting a huge digital archive of Singapore's historical biodiversity, we will reinforce and strengthen the collaboration and shared history that goes back hundreds of years ago”.

SIGNIFY was launched on 10 August 2022 in partnership with the Natural History Museum in London, in recognition of the large holdings of Singapore specimens that have been deposited in this institution over two centuries.

Launch event

The launch event was held at the Natural History Museum in London, with participants from LKCNHM in Singapore attending virtually. Speaking in London, Mr Tan Chuan-Jin, Speaker of the Parliament of Singapore and Chairman of the Advisory Committee of LKCNHM, highlighted the importance of the stories that these historical specimens can provide by their digitisation: “This project is a step towards fostering a deeper conservation between history and science – between the past and the present; and by bringing the scientists of both museums – and both countries, the United Kingdom and Singapore – together”.



(From left to right) Dr Tim Littlewood, Executive Director of Science, NHM; Mr Tan Chuan-Jin, Speaker of the Parliament of Singapore & Chairman of the Advisory Committee of the LKCNHM; Dr Douglas Gurr, Director, NHM; and Prof Peter Ng, Principal Investigator of SIGNIFY, LKCNHM, at the SIGNIFY launch event held physically at the Natural History Museum in London. Credit: © The Trustees of the Natural History Museum

This was echoed by Mr Alex Bamford, Chargé d’Affaires at the British High Commission in Singapore: “This valuable project is a testament to the strength and breadth of the

UK-Singapore partnership. It will further our understanding of Singapore's natural heritage as well as its natural environment and foster research collaborations between the two countries. I look forward to the ground-breaking discoveries made possible by this exciting venture".

Prior to the launch of SIGNIFY, the team had already been laying the groundwork by analysing old literature to compile lists of historically important Singapore specimens. This allowed them to make great headway in documenting and digitising some of Singapore's oldest animal specimens during two trips to the Natural History Museum in London in 2023. These specimens include those of the green broadbill, Hope's longhorn beetle and Raffles's banded langur. During the launch, some of the stories associated with these specimens were recounted by Prof Ng.

In his remarks, Dr Doug Gurr, Director of the Natural History Museum, conveyed the sense of the scale of the project: "We are delighted to embark on this pioneering digitisation and science project with our Singaporean counterpart. A collaboration of this vast scale will inspire a more in-depth dialogue between science, history and culture, connecting the ecology of the past to predictions for the future, and lead the way for more ambitious international science partnerships. By sharing the wonder of the Collection, together we can inspire the next generation of advocates for the planet."



(From left to right) Prof Peter Ng, Principal Investigator of SIGNIFY, LKCNHM, and Dr Tim Littlewood, Executive Director of Science, NHM, at the SIGNIFY launch event held physically in the Natural History Museum in London. Credit: © The Trustees of the Natural History Museum

Associate Professor Darren Yeo, Head of LKCNHM, said that: “Our two museums will combine our expertise and strengths to better study, understand, and contextualise natural history material from Singapore to answer scientific questions – both big and small – on biodiversity, conservation, ecology, population genetics, and paleoenvironments. Some of the knowledge gaps we will be filling use historical material that only older collections from overseas like the one in NHM can provide”.



Associate Professor Darren Yeo, Head of LKCNHM, speaking at the launch event of SIGNIFY held in LKCNHM at NUS. Credit: Lee Kong Chian Natural History Museum

A learning journey

Over the course of being 'grounded' due to the pandemic, the SIGNIFY team has worked towards building a database of Singapore's historical biodiversity, uncovering the stories and histories behind various museum collections and engaging (remotely) with various stakeholders in the National History Museum in London. This has allowed for a deeper respect and appreciation for natural history. Since travel resumed in 2022, the interactions and collaboration with staff at the Natural History Museum in London have better equipped and prepared the SIGNIFY team for future collaborations with other natural history museums in the United Kingdom and beyond.

For Research Associate Lydia Gan who co-manages SIGNIFY, the visits allowed her to learn about the curatorial and research work at other museums: "The visits to the Natural History Museum in London have offered me greater insights into natural history collections, and learning about how other institutions manage and curate their material. It was enjoyable to have discussions with various curators about how these materials

could be harnessed for research, to expand our knowledge beyond what is already known of the natural world”.

Two of Research Assistants on SIGNIFY also found that the experience of meeting with counterparts and collaborators at the Natural History Museum in London in person was an important part of learning and growing in their roles.

Shivaram Rasu remarked that: “Beyond the scope of digitisation, being able to network with the curators and researchers at the Natural History Museum in London has been very fruitful, as it enables us to discuss potential collaborations that will further strengthen our research ties in the future. On a more informal note, meeting like-minded scientists from different parts of the world is always a pleasure”.

Wendy Zhang recounts that: “Conversations with scientists from the Natural History Museum in London stretches far beyond the realm of science and natural history. I’ve had the pleasure of discussing and learning from the scientists at the Natural History Museum in London, having conversations about the relationship between art and science. Imagine my surprise when I learnt that they have written papers/books about art history and composed songs about science”.

The remarks from the three SIGNIFY team members reflects exactly what the Head of LKCNHM, Assoc Prof Darren Yeo, hopes will be the outcomes of SIGNIFY over and above the scientific aspects: “Beyond its five-year duration, the project will also provide a rich source of intangibles, including social networks, collecting stories, and snippets of how the scientific study of Singapore’s biodiversity was conducted over the last two centuries. These are invaluable not just in public outreach, engagement and education, but also in nurturing the next generation of scientists, artists, thinkers and shapers”.

Watch the livestreamed event here¹.

Text by Lydia Gan with the SIGNIFY team

¹<https://youtu.be/Vs3ujUxSA08>