

## **New library archives marine life for future generations**

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**Western Australia** has taken its first step towards creating a sample library to house marine specimens, some of which may have useful anti-cancer compounds.

The WA Marine Bioresources Library was launched at the WA Museum this month by the Chairman of the WA Marine Science Institution (WAMSI), Dr Peter Rogers.

It is a joint WA Museum-Australian Institute of Marine Science development and is one of WAMSI's 87 research projects.



***Checking the marine specimens at the launch of the new marine library were (from left) WA Museum technician, Oliver Gomez, Chairman of the WAMSI Board of Directors, Dr Peter Rogers, and Curator of the WA Museum's Invertebrate Section, Dr Jane Fromont.***

Dr Rogers said it would be of enormous benefit to medical researchers, the aquaculture industry and others to be able to access a large number of marine specimens.

"Discoveries in some unique sponges and sea squirts found off the WA coast are now being found to have anti-cancer compounds, and research and collections are continuing the push to find new agents, new cures and new applications," he said.

"There are 5000 species collected to date being catalogued," Dr Rogers said, adding that collections began in WA 25 years ago. He is hoping that State legislation to enable the collections to be accessed by researchers with clear benefit sharing arrangements for chemical development will be forthcoming

“Once this happens the library will be the cornerstone of future research for new compounds and opportunities in aquaculture projects and for the medical, cosmetics, pharmaceutical, fuel and industrial enzyme industries.”

Dr Rogers said WA was a hotspot in terms of endemism, or unique species found nowhere else in the world.

“Three types of marine samples – a sponge, a sea squirt and a soft coral – all having different anti-cancer compounds, have already been collected. There exists a real opportunity for ongoing development for commercial applications should WA introduce biotechnology legislation.



***Curator of the WA Museum’s Invertebrate Section and leader of the WA Marine Bioresources Library, Dr Jane Fromont (front left) and the Museum’s Acting Chief Executive Officer Diana Jones (front right) with (back row, from left) WAMSI Communications Manager, Sue McKenna; leader of the WAMSI projects associated with WAMBL and Manager of the Department of Fisheries’ (DoF’s) Aquaculture Sub-Program, Fiona Vom Berg; DoF Acting Executive Director, Stuart Smith; Chairman of the WAMSI Board, Dr Peter Rogers; Australian Institute of Marine Science senior scientist, Dr Libby Evans-Illidge; WAMSI Chief Executive Officer, Dr Steve Blake and museum technician, Oliver Gomez, at the WAMBL launch.***

“This is about making WA a clever state and making the best use of our natural resources.”

The marine samples – many frozen – are now being identified to species by WA Museum staff (this process is known as taxonomy) and catalogued so that if a sample is found to have high bioactivity and likely commercial value, its location and time of collection are known, and the potential for it to become part of a new industry, which will help the community, is increased.

Acting Chief Executive Officer of the WA Museum, Ms Diana Jones said the library would be a central repository for people wanting marine samples for biomedical and related research.

The Curator of the Museum's Marine Invertebrate Section, Dr Jane Fromont, said the WA Marine Bioresources Library was creating a georeferenced biodiversity database and establishing a central reference point for WA marine specimens.

She said it was exciting to have a new repository for WA marine species.

"It will have frozen and chemically extracted materials," she said, adding that one of the areas producing some of the most interesting specimens was the deep water off Ningaloo Reef.

"It is a biodiversity hotspot and has an untapped wealth of species," she said.

"The library is a value-adding project because we can build on our knowledge of pharmaceutical and aquaculture benefits while at the same time understand the biodiversity and richness of our extraordinary marine environment."