

MEDIA RELEASE

2 July 2021

ACES research into seaweed for clinical applications receives funding

A team including researchers from the ARC Centre of Excellence for Electromaterials Science (ACES) has been awarded \$59 Million in funding to fast-track the growth of Australia's next generation of marine bioproducts industries.

The ACES team based at the University of Wollongong, in conjunction with a consortium of 68 Australian and international partners, received the funding in the latest round of grants from the Federal Government's Cooperative Research Centres program.

ACES researchers will provide bioengineering and biomaterials expertise for the Marine Bioproducts Cooperative Research Centre (MB-CRC), bringing together the excellence of fabrication skills at the University of Wollongong with the growing research and industry activity in marine bioresources. In this way, UOW will contribute its core expertise to accelerate the development of new marine materials to an advanced manufacturing level for health or sustainable materials.

The MB-CRC includes research, industry and government partners working collaboratively to expand existing enterprises and drive new, high-value products, commercial technologies and employment opportunities around Australia to meet rapidly growing demand for certified, safe and sustainable products.

Long-term collaborator, Dr Pia Winberg from Venus Shell Systems has been an integral program leader in the CRC bid, and will work with ACES researchers to identify new molecules from seaweed for successful biofabrication in clinical applications. TRICEP – UOW's Translational Research Initiative for Cellular Engineering and Printing – as part of the ANFF Materials Node, will provide expertise in accelerating commercialisation opportunities in 3D bioprinting of seaweed molecules.

Dr Pia Winberg said the Marine Bioproducts CRC will provide a range of opportunities to develop marine bioindustries that are sustainably integrated with the coastal and marine environment.

"I am passionate about the marine farming opportunities we have in the ocean and I believe that sensitively and ecologically incorporating these practices into the ecosystem is a necessary way forward to achieving sustainable products across a number of industries," Pia said.

"It has been so exciting to begin the journey of unlocking molecules from seaweed to improve health outcomes for patients with wounds with ACES. Our continued partnership through the MB-CRC will allow us to build on our research and access advanced tools to develop, refine and validate marine bioproducts in an environmentally and economically sustainable way.

"This is such an opportunity for Australia and especially for the south east coast of NSW."

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ACES Director Prof Gordon Wallace said this funding would be a boost to the team's emerging activities in this area.

"We're thrilled to be a part of this exciting project, which brings together a multidisciplinary group of experts to translate opportunities in marine bioproducts," Gordon said.

"Our leadership and extensive expertise in bioengineering, biomaterials, 3D bioprinting, and the design and development of innovative fabrication hardware will allow us to further our exciting research in the field, and provide significant industry linkages for translation of this research."

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Media opportunity

Prof Gordon Wallace and Dr Pia Winberg are available for interviews. Please contact Lauren Hood at lhood@uow.edu.au to arrange any interviews.

About the ARC Centre of Excellence for Electromaterials Science (ACES)

Based at the University of Wollongong's Innovation Campus, ACES is a multidisciplinary research group with a focus on developing functional devices for applications including batteries, solar cells and systems that interact with living tissue.

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