

1329th ORDINARY GENERAL MEETING Wednesday 5 February 2025 at 6:30pm

Metcalfe Auditorium, State Library of NSW

(enter from main Library entrance)

The 1329th Ordinary General Meeting of the Royal Society of NSW will take place at **6:30 pm on Wednesday 5 February 2025** in the **Metcalfe Auditorium, State Library of NSW**, followed by an open lecture. Registration and refreshments will be available in the anteroom to the theatre from 6:00 pm.

AGENDA

1. WELCOME AND APOLOGIES

President, Dr Susan Pond AM FRSN.

2. MINUTES

Minutes of the 1328th Ordinary General Meeting will be reviewed.

3. CONFIRMATION OF NAMES OF CANDIDATES FOR FELLOWSHIP AND MEMBERSHIP
The Council has not met since the last OGM, so there are no candidates to be announced
for Members' consideration at this meeting.

There are no membership certificates for presentation.

- 4. REPORT FROM COUNCIL AND COMMITTEES OF COUNCIL The President will update membership on the key activities underway for 2025.
- 6. OPEN LECTURE

"Inspired by Nature, Designed by Science"

Distinguished Professor Ian Paulsen FRSN FAA FASM

Director, ARC Centre of Excellence in Synthetic Biology

Macquarie University

Synthetic biology is a rapidly advancing field that treats genes and DNA as "Lego pieces" that can be used to construct novel biological systems. Developing novel synthetic microbes for the sustainable production of biochemical, biofuels and bioplastics is critical for the emergence of a new global bioeconomy. The ARC Centre of Excellence in Synthetic Biology is a consortium across nine Australian universities and twenty industry partners, that seeks to build synthetic microbes that can convert agricultural biomass or waste streams into high-value chemicals. Prof Paulsen's synthetic biology research program includes fundamental science, such as building the world's first synthetic yeast as part of the Yeast 2.0 consortium. He also leads applied industrial projects, including engineering microbial strains to grow on waste, to recycle plastics and to produce flavour and aroma molecules.

About the speaker

Distinguished Professor Ian Paulsen is a world-leading researcher in microbiology and a pioneer in microbial genomics and synthetic biology. He has developed the infrastructure and capabilities to harness the potential of synthetic biology, positioning Australia as a global leader in this transformative field.

As Founder and Director of the ARC Centre of Excellence in Synthetic Biology, Ian aims to catalyse a bioeconomy based on alternatives to fossil fuel-derived products. The Centre

develops microbes that convert agricultural biomass into high-value plastics, chemicals, fertilisers and fuels. In just three years, it has spun out nine companies, raising over \$180 million in venture capital and producing innovations such as a methane emission-reducing cattle feed supplement.

lan co-founded and directs the Australian Genome Foundry, a world-class facility for automated microbe construction and testing. He also co-directs Australia's node of Yeast 2.0, an international consortium building the world's first complex synthetic organism.

His work addresses critical global challenges such as food security, waste management, water quality and decarbonisation, with significant implications for NSW. Ian's research has the potential to create new economic opportunities by leveraging the state's rich biomass resources. His commitment to training future synthetic biology researchers fosters a skilled workforce driving innovation and growth across NSW.

Ian is a Fellow of the Royal Society of NSW and the Australian Academy of Science and a former ARC Laureate Fellow. His research has secured over \$100 million in funding and he has published over 380 journal articles, attracting over 100,000 citations with an h-index of 132.

7. VOTE OF THANKS

8. CLOSE

Dr Donald Hector AM FRSN Secretary