



The Royal Society of New South Wales

"for the encouragement of studies and investigations in Science Art Literature and Philosophy"

1288th ORDINARY GENERAL MEETING

WEDNESDAY 11 NOVEMBER 2020 AT 6.30PM

By ZOOM Webinar

AGENDA

1. **WELCOME** – President, Emeritus Professor Ian Sloan AO FRSN
 - 1.1 **Acknowledgement of country**
 - 1.2 **Diversity and Inclusion statement**
 - 1.3 **Minutes of the 1286th Ordinary General Meeting held on 7 October 2020**
2. **ANNOUNCEMENT OF NAMES OF CANDIDATES FOR MEMBERSHIP**

If no valid objection is lodged within two weeks of this Ordinary General Meeting, that is, by 6.30pm on 25 November 2020, the election of new Members and Fellows will take effect from the date of the meeting.

2.1 **Fellows**

Professor Stephen Douglas Bartlett
Professor Bernard Walter Balleine
Professor Lewis Albert Bizo
Professor Andrew William Blakers
Dr Elizabeth Margaret Deane
Dr Catherine Patricia Foley
Emeritus Professor Bruce Ian Henry
Professor Ian Bernard Hickie
Professor Kourosh Kalantar-Zadeh
Professor Geraint Francis Lewis
Professor Jennifer Helen Martin
Mr John McDonald
Professor Mary-Louise McLaws
Associate Professor Jill Maree Newby
Prof Angela Marissa Nickerson
Professor Martina Heide Stenzel
Professor Steven Ronald Weller
Professor Thomas James Whitford
Professor Jeremy Somers Wilson

2.2 Members

Dr Martin Fuechsle
Mr Calvin Manjarres-Wahlberg
Professor Janet Nelson
Dr Rebecca Soffe
Dr Lia Zambetti

3 REPORT FROM COUNCIL AND COMMITTEES OF COUNCIL

The President wishes to bring to members' attention the following matters.

3.1 Revised Rules

Voting on the revised Rules commenced on Monday 26 October and closes on Monday 7 December allowing 6 weeks for members to vote. The result will be announced at the December OGM.

3.2 Strategic planning

The draft strategic plan 2021 – 2023 is currently being considered by Branches and Council committees before going to the November meeting of Council for approval.

4 THIS EVENING'S PRESENTATION

WHERE HAVE ALL THE ULCERS GONE — LONG TIME PASSING?

Professor Thomas Borody FRSN, Centre for Digestive Diseases and Professor Adrian Lee FRSN, UNSW Sydney

In 1982 Robin Warren and Barry Marshall at the Royal Perth Hospital described the presence of squiggly bacteria in the gastric mucosa of patients with Peptic Ulcer Disease (PUD). *Helicobacter pylori* was on the map! They would deservedly be awarded the Nobel Prize for their discovery, which would change the world – medicine would never be the same again. It is not possible for even the modern generation of gastroenterologists to appreciate the way PUD dominated the lives of both patients and doctors 50 years ago — surgical lists were full of patients for gastrectomy, medical wards with patients with uncontrolled pain and complications. Twenty percent of men had a Duodenal Ulcer. Emergency rosters meant bleeding or perforated ulcers. Yet today, PUD is rarely seen – a recent analysis of the impact of *H. pylori* and its eradication over 25 years in Australia shows a saving of 19,000 deaths, and \$10 billion in costs.

Warren and Marshall would have struggled to develop their ideas without the professional support of Professor Adrian Lee, with a long history of study of “squiggly” bacteria in the gut. His experience in the growth of these bacteria, their role in animal models, and his contributions to diagnosis, vaccine development and the link to cancer, added to the biology and broad understanding of these bacteria, enabling interpretation of the Perth discovery in a biological context. Warren and Marshall understood the importance of eradication to prove causation, but were unable to develop sterilising therapy, so only an association could be claimed. Professor Tom Borody carefully trialed a series of antibiotics to develop the first effective antibiotic combination, enabling for the first time, proof of causation of duodenal ulcers. This began a long sequence of contributions to our understanding and treatment of PUD by Borody including addition of PPI's, and development of “escape” therapy. He worked with the Newcastle group to develop the first “near-patient” “yes/no” test, and identified a role for the host response in conditioning outcomes of the “host-parasite” relationship.

Adrian Lee will discuss *Adventures with spiral bugs and Helicobacter*. Adrian's adventure began in 1967 at the Rockefeller University in New York when he did a post doc with Rene Dubos one of the grandfathers of the gut microbiome. Moving to UNSW in 1969 as a lecturer in Medical Microbiology, he continued his interest in the bacteria of the mouse intestinal tract concentrating on the spiral/helical bacteria that colonised gut mucus. He also worked on the spiral pathogen, *Campylobacter jejuni*, and then on the organism that Barry Marshall and Robin Warren had grown from gastric biopsies using his culture techniques. Later, he developed the first animal models of *Helicobacter pylori* infection including the first vaccine studies and demonstration of H.pylori -induced gastric malignancy. For ten years, he travelled the world trying to convince clinicians to treat H.pylori infection. Progressing to Professor of Medical Microbiology in 1990, he also worked as a WHO consultant in medical education. In 2000, he left his beloved spiral bugs to cross to the dark side at UNSW becoming Pro Vice-Chancellor (Education) with a brief to improve the quality of teaching. Retiring in 2006, he carried out consultancies in tertiary education and now writes about his squiggly bugs and runs a choir.

Tom Borody will discuss *How we cured Helicobacter pylori infection in Australia*. Professor Borody is a world-renowned medical doctor from Australia with over 40 years experience in clinical research and practice, including at the St Vincent Hospital in Sydney and at the Mayo clinic in the US. In 1984 he established the Centre for Digestive Diseases in Sydney, overseeing its growth into an active clinical research institute with 65 employees. Professor Borody is most famous for his ground-breaking work developing the triple therapy cure for peptic ulcers in 1987, which has saved hundreds of thousands of lives, and the Australian health system more than \$10 billion in medical care and operations. Professor Borody is a leader in the clinical microbiota dating back to 1988 when he started performing what is now called Fecal Microbiota Transplantation (FMT). He holds over 150 patents in areas such as; treatment of *Helicobacter pylori*, Crohn's disease, bowel lavage, IBS and FMT.

5 VOTE OF THANKS AND CLOSE