

## Biography

### Professor Gordon G. Wallace AO, FAA, FTSE

#### Position

Executive Research Director of the [Australian Research Council Centre of Excellence for Electromaterials Science](#).

Director of the [Australian National Fabrication Facility, Materials Node](#).

Director of [TRICEP](#)



[Professor Gordon Wallace](#) is involved in the design and discovery of new materials for use in Energy and Health. In the Health area this involves using new materials to improve human performance. In the Energy area this involves use of new materials to transform and to store energy, including novel wearable and implantable energy systems for the use in Medical technologies.

He has contributed to more than 1,000 refereed journal publications, accruing citations in excess of 40,000 with a google scholar *h* index of 109 and a Scopus *h* index of 94.

He is committed to fundamental research and the translation of fundamental discoveries into practical applications. He was instrumental in the establishment of TRICEP, a translational facility for 3D Bioprinting in Wollongong. He made a significant contribution to the establishment of Aquahydrex, a spin off company based on UOW and Monash technologies and the transfer of UOW IP on graphene processing to Imagine, another new commercial enterprise.

By coupling world-class research expertise with quality facilities and equipment the ACES-ANFF partnership has positioned itself as an outstanding commercial partner. The partnership has successfully transferred fundamental breakthroughs into commercial opportunity for established companies such as Cochlear and SMR automotive as well as emerging companies such as Venus Shell Systems and Romar Engineering.

Gordon has been listed as a co-inventor on more than 20 patents and was acknowledged as one of Australia's most influential inventors ([Nicola Lake Maxwell Patent Attorney](#), Nov 2017). In 2015 Malcolm Turnbull PM listed Gordon as one of the 'Knowledge Nation 100'. The Knowledge Society defines the Knowledge Nation 100 as 'the visionaries, founders and game changers building the industries and institutions that will underwrite this nation's future prosperity.'

He is a passionate communicator, dedicated to explaining scientific advances to all in the community from the lay person to the specialist. He led the development and presentation of a MOOC on 3D Bioprinting with [FutureLearn](#) and was instrumental in the development of a world first on-line Graduate Certificate Course in Biofabrication.

He was appointed as an Officer of the Order of Australia 26 January 2017. He received Wollongong's award for Innovation in 2017 and served as Wollongong's Australia Day Ambassador. Gordon was named NSW Scientist of the Year 2017. He received the Eureka Prize for Leadership in Science and Innovation in 2016. He was appointed to the Prime Ministers Knowledge Nation 100 in 2015.

Gordon is a Fellow of the Australian Academy of Science, Australian Academy of Technological Sciences and Engineering (ATSE), Institute of Physics, and Royal Australian Chemical Institute (RACI). He is a corresponding member of the Academy of Science in Bologna.

## **Candidate Statement**

Gordon is committed to the translation of advances in fundamental research into applications in areas of need and facilitating commercial opportunities that might arise from this process.

In pursuit of this vision I have established an extensive clinical connections network in Australia. This includes St Vincent's Hospital (Melbourne), Royal Adelaide Hospital, Royal Perth Hospital, Royal Prince Alfred Hospital (Sydney), Wollongong Hospital and Sydney Eye Hospital. I have worked alongside materials scientists to develop novel bio ink formulations and alongside mechatronic engineers to develop customized bioprinters to address challenges articulated by the clinicians that network.

These activities have led to numerous important publications in the area of 3D Biofabrication including the development of customized bioinks and bioprinters for use in cartilage regeneration, 3D printed ears and islet cell transplantation as well as for wound healing.

Recently I have led the establishment of TRICEP – a translational research facility focused on the realization of commercial opportunities arising from advances in 3D Bioprinting.

Gordon is the Director of a National Centre of Excellence comprising of investigators from seven Australian Universities. As such he has access to an integrated national research network.

I have established an extensive and highly effective global collaborative research network that includes ongoing projects with Dublin City University (Ireland), University of Texas at Dallas (USA), University of British Columbia (Canada), Hanyang University (Korea), Yokohama National University (Japan), Beihang University (China), Tampere University (Finland) and University of Auckland (New Zealand).

I have extensive experience on Advisory Boards including current positions on

- Institute Frontier Materials, Deakin University, Australia 2012-2020
- I-Form, Advanced Manufacturing Research Centre, Dublin City University, Ireland
- ARC Centre of Excellence for NanoBio Science, Monash University, Melbourne, Australia

As a Fellow of the Australian Academy of Science and the Academy of Technological Science and Engineering. I am well placed to advocate on behalf of emerging areas of science and technology.