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# FOOD AND NUTRITION SECURITY

The biosecurity, health, trade nexus

## The Crawford Fund 2021 ANNUAL CONFERENCE

QT Hotel, Canberra ACT, Australia  
and Online

**13-14 December 2021**

Editor A. Milligan



# The Crawford Fund

The Crawford Fund was established by the Australian Academy of Technological Sciences and Engineering (ATSE) in June 1987. Named in honour of the late Sir John Crawford, the Fund commemorates his outstanding services to international agricultural research.

The Fund seeks to increase Australia's engagement in international agricultural research and development, which is designed to benefit developing countries' farmers, environments and economies, and to foster mutual understanding. We raise awareness of the benefits – for both Australia and developing countries – of investment and involvement in work for food and nutrition security and the many other impacts of agricultural research.

Our training and mentoring programs build capacity with practical, highly focused training by Australians and partners across a variety of topics in agricultural research and management in Australia and the developing world.

With support from the Australian Centre for International Agricultural Research (ACIAR), the Crawford Fund offers a growing set of programs, scholarships, scholar activities, and student awards, to encourage passionate next generation 'nextgen' students, researchers and farmers in their studies and careers in agriculture for development. We also deliver opportunities through our partnership with the Researchers in Agriculture for International Development (RAID) Network.

The Fund promotes and supports international R&D activities in which Australian research organisations and companies, including ACIAR, are active participants. It supports the work of the CGIAR Consortium and other international research centres. Through collaboration and training, we can achieve more productive and sustainable agriculture, less poverty and hunger, and a more secure world.

The annual conference is a key part of the Fund's public awareness campaign, and each conference addresses a key issue related to food security and the importance and potential of international agricultural research.

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# Acknowledgements

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## CHAIRS

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Chair, The Crawford Fund

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## Foreword and Welcome

Hon. John Anderson AO

Chair, The Crawford Fund

Welcome to this Crawford Fund conference for 2021, 'Food and nutrition security: the biosecurity, health, trade nexus'. The conference was planned originally for 2020 and has been almost 24 months in the making, because of the COVID pandemic.

Biosecurity is all about protecting plants, animals and humans from known pests and diseases, and also about predicting risks from emerging pests and diseases. This timely conference is a great opportunity to hear about current risks, factors enhancing pest and disease risks across the globe, and technologies important in recognising and finding these threats; and also about how governments, at all levels, and the private sector may respond.

Agricultural biosecurity is critical, not only to food supply but also because the boundaries between environment, agriculture, nutrition and human health are increasingly blurred. Considering the links between them is now often described as taking a One Health approach, or using a One Health lens.

It would be easy to despair at the challenges, the potential for upsets, that confront us. However, two great Australian scientists at this conference (photo below) – Dr Brian Keating and Dr TJ Higgins – have made their contributions by confronting various challenges using calm, reasoned and thoughtful approaches, rather than as if catastrophe was brewing. We will do well to follow their example in the global fight for food and nutrition security.

There is nothing new about massive challenges in life. We should learn from our forefathers that the way to approach these things is with an air of positivity,



Dr Brian Keating (left) was awarded the Crawford Fund Medal for 2020, and Dr TJ Higgins was awarded the Crawford Fund Medal for 2021, at the conference dinner on 13 December.



of collaboration, of cooperation, and by working together. That approach is what we shall hear about today. Let us not be demotivated, but rather let us be stimulated to work together.

The speakers at this conference will help us recognise the key issues in biosecurity, and the scientific and technological policy solutions, and they will show us that Australian R&D is really important and globally significant. It is an area where Australia ‘punches very far above our weight’. Australia is one of the seven biggest contributors to the work of the international agricultural research consortium CGIAR. Internationally there are six nations and Bill Gates, and during the last decade Australia has been one of those six nations.

We recognise that the number of conference delegates attending in-person this year is well down on previous conferences, because of COVID. However, we are delighted that so many could make it; that so many have been keen to see it happen; and that so many of our sponsors have come forward and guaranteed that we can make this conference a success. We are also delighted that there are many delegates attending the conference online, from around Australia and over 20 other countries. Welcome also to those attending the special events being held by our Crawford Fund committees in Western Australia, the Northern Territory and Tasmania.

In today’s audience, in-person and online, are the group of around 40 university students who were the Conference Scholars\* this year; they will now have that full experience in 2022. Those young eager people are keen to confront the challenges of today and to overcome them; not be overcome by them. Delegates also include members of the Researchers in Agriculture for International Development Network (RAID). Two of them – Rebecca Cotton, who is here, and Madaline Healey, who is online in Queensland – are our designated ‘keynote listeners’. Their report on the event will be on the Crawford Fund website\*\*. Thank you to them, in advance.

And thank you again to our sponsors, many of which have stayed with us despite all the contortions around getting the conference to physically happen. That loyalty is greatly appreciated.



Hon. John Anderson AO  
Chair, The Crawford Fund

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\* Conference Scholars are asterisked in the Participants list, pages 136–145.

\*\* <https://www.crawfordfund.org/news/2021-cf-conference-keynote-listeners-report/>