

Foundation update

August 2019

Welcome to the Foundation's latest!

The Foundation is entering an exciting next phase: some of our initial investments are starting to deliver their work and sponsorships have been completed; our call for a second round of proposals is open until 30 August; the Board is about to meet again to assess proposals, undertake some professional development in IP and commercialization, and we are likely to welcome new members. Plus we are looking forward to the International Year of Plant Health, and the Australian Plant Pathology Conference in November that we are sponsoring. Read on ...

Call for investment Proposals

After our popular first round, the 2019 funding round will focus on the following areas, although all proposals will be considered:

- environmental biosecurity (with clear overlap with social and community biosecurity), and in particular myrtle rust (with clear linkages to the Draft National Action Plan);
- building on the social biosecurity program of the PBCRC, including indigenous engagement;
- urban and peri-urban biosecurity;
- opportunities to promote and celebrate the International Year of Plant Health; and
- scholarships to attend the APPS 2019 Conference or other similar biosecurity-related conferences, focused on Early Career Researchers and developing country links.

Further information and the Proposal Template can be found on our web-site.

Get your proposal in by 30 August!!

ABARES Review enhances CDU Masters Course

Dr Penny Wurm from Charles Darwin University joined forces with the ABARES Social Sciences team to review the current the 'ENV521 – Community Engagement for Biosecurity and Natural Resource Management' master's unit in order to update it with the latest academic literature about behaviour change and on approaches for involving communities in biosecurity and natural resource management. There have been many new insights into the application of behaviour change models and methods for gaining community support that have come to the fore in recent years, and these approaches can be used to strengthen the education of new biosecurity and natural resource management (NRM) professionals.

ABARES Social Scientists led the review and worked collaboratively with Dr Wurm, the CDU master's course co-ordinator, to identify the priority areas for reviewing the unit. The three areas of focus were: course topics, engagement tools and case studies. The output of the review is a series of recommendations for strengthening these areas in the Unit for CDU students starting in Semester 2 2019.

A number of the recommendations have been incorporated into the unit to date:

- a module of materials has been incorporated on monitoring and evaluation approaches that can be applied to community engagement activities
- the case study collection available for students to access at any time was expanded, with

- supporting learning materials integrated into the case studies
- the section of the unit on 'Engagement' has been strengthened by making available additional engagement tools and approaches.

The unit co-ordinator provided feedback that material from the new case studies, and suggested unit topics and tools will continue to be incorporated into weekly learning activities. These changes and some of those planned in the future are noted in the relevant sections of this review report.

The benefits of the collaboration between CDU and ABARES in reviewing the unit material were:

- The material provided valuable intellectual and practical input to the unit by not only recommending new references, but embedding those references in the context of specific case studies. These case studies were based on ABARES' in-house documents that would not otherwise have been available.
- The collaboration highlighted the value of curriculum materials as a mechanism for fostering research uptake by targeted research users.
- Feedback from the unit co-ordinator was that participating in the collaboration project was a stimulating process, which will inevitably impact on the approach to thinking about and teaching the unit.
- Unit development is an iterative process, so the review report provides rich new resources for an ongoing process of continuous unit renewal.

More information ([PBSF014](#)) and the report can be found on our [web-site](#).

Indonesian Regional Masterclasses results in publication of Biosecurity and Biodiversity concepts ...

The Indonesian Regional Masterclass project ([PBSF006](#)) has now published a report outlining the key concepts for a range of projects that are either completed, commenced or proposed that will add to biosecurity, biodiversity and food security in Indonesia. This Foundation Project continues to build biosecurity capacity and networks in Indonesia, strengthen ties between Australia and Indonesia, and ultimately reduce biosecurity risk and enhance food security.

More information and the publication can be found on the Foundation's [web-site](#).

Pursuing sensitivity limits of biochemical geographic discrimination as generic tool for high risk pest plants ...

The Plant Biosecurity CRC recognized the urgent need for a method of provenance determination of biosecurity samples, insect incursions in particular. Biogeochemical markers, which are non-inherited but linked to geographic variation, are presently the only viable option for this. However, the existing techniques are not fit-for-purpose, as they are too slow, expensive, and lack the required analytical sensitivity. A new method of Sr isotope analysis has been developed that allows for 88Sr/86Sr ratios to be obtained with 99.8% precision on 2-4 ng of Sr using a Thermo iCap TQ ICP-MS in MS-MS mode. In this study, David Murphy from the Queensland University of Technology built on previous PBCRC investments and assessed how variation in feeding styles affects the concentration of the provenance sensitive elements Sr and Pb in insects, and therefore if there were limits to the use of single specimens for measurement of their isotopes. The study ([PBSF010](#)) is now complete, and the report can be found on our Projects page, and a Journal paper is in preparation.

The Crawford Fund Conference ...

We were delighted to provide some very modest support to the Crawford Fund for their annual conference: this summary of an excellent event courtesy of Tim Reeves (on LinkedIn, Crawford Fund Director and legend, with permission).

The Crawford Fund (for a Food Secure World) has just conducted another very successful annual conference in the wonderful Great Hall at Parliament House, Canberra. This year the focus was again on the importance of nexus thinking and actions, 'Addressing the Agriculture- Energy- Water-Climate Change Nexus'. There was a range of international and national speakers including some excellent presentations from ACIAR's partners in regional countries. It was clear to many of us that ACIAR's work for food and nutritional security with our partner countries in the Pacific, in Asia and in Africa has never been more important than it is now and in the coming decades. A wonderful feature of the recent Crawford Fund conferences is the participation of young scholars, each of whom has an experienced mentor for the whole meeting as well as specific activities organised by RAID 'Researchers in Agriculture for International Development'. You can access all of the presentations for the conference on the Crawford Fund website.

Myrtle Rust Masterclass – Box Hill Biosecurity Centre of Excellence

The Foundation supports a range of activities focused on environmental biosecurity, and in particular Myrtle Rust ([PBSF009](#)). We are supporting a Myrtle Rust Masterclass to raise awareness and understanding ...

Dr Louise Shuey, Senior Forest Pathologist, Forest Production & Protection from the Queensland Department of Agriculture and Forestry Services is one of Australia's leading experts on Myrtle Rust. Dr Shuey will be talking, and answering questions about Myrtle Rust: a pest that is widespread along Australia's east coast and threatens native flora.

Please join the class either in person at the Box Hill Lilydale campus or online to learn about Myrtle rust in this 1-hour masterclass.

- Event: Myrtle Rust Masterclass
- Time: 11:00 am. 24-Sept-2019
- Duration: 1 hr
- Cost: Free
- Open to: All

Register: <https://www.eventbrite.com.au/e/myrtle-rust-masterclass-tickets-69161719565>

If you have any questions about this event or other activities run through the Biosecurity Centre of Excellence please contact:

- Dr Mick Blake
- Director, Biosecurity Centre of Excellence, Box Hill Institute, Lilydale, Victoria
- M 0466 477 808 | P +61 3 8892 2530

Director chat: Dr Gary Fitt

Dr Gary Fitt has had a long career with CSIRO and extensive research experience in agricultural sustainability and published more than 100 refereed publications and contributed to more than 20 books. He has held many positions, including Board Director of the Cotton Catchment Communities CRC and Chair of the Science Advisory Body of the OECD Cooperative Research Program. He is an Adjunct Professor at both the University of New England and the University of Sydney. The Foundation is delighted that Gary joined the Board earlier this year.

- *How important is the science that underpins Australia's biosecurity system?*

With such a close link to global trade, the implementation of biosecurity policy can create contention and emotive positions. Having well validated science underpinning how we assess risk, how we characterize pathways, and how we implement key aspects of biosecurity response is clearly critical to support the best possible decisions. Australia has a huge biosecurity challenge and we are fortunate to have a high calibre community of biosecurity practitioners.

- *Why did you nominate for the Foundation Board?*

Within CSIRO we discussed the concept of the Foundation and our long-term commitment to the Biosecurity CRCs. We are keen to see the success of the previous collaborative model continue and this motivated me to nominate. With past experience in leading a CRC and with a keen focus on ensuring outcomes from investments I felt I had a relevant skill mix for the role.

- *What do you hope the Foundation can achieve over the next four years?*

While the Foundation has a key role in nurturing some IP opportunities emanating from the CRC, it can play a broader and important role through key investments in areas which might fall between the cracks of the broader biosecurity system. The next four years should see consolidation of CRC outcomes and seeding of a few new directions.

2020 International Year of Plant Health ...

The Foundation is considering ways to celebrate the International Year of Plant Health in 2020. This great initiative from the United Nations is so important "to raise global awareness on how protecting plant health can help end hunger, reduce poverty, protect the environment, and boost economic development" ([IPPC website](#)). Well done and thank you to Australian officials, and especially Lois Ransom who supported this so strongly!

For more information on what Australia is doing, visit the [website being managed by PHA](#).