

MENTORING PROGRAM

FOOD SECURITY CAPACITY IN DEVELOPING COUNTRIES



BE A MENTOR - SUPPORT A MENTOR

Would you like to become a mentor and work with people in developing countries and the young Australian volunteers also working in these countries?

Would you like to donate funds to help mentors work in developing countries to support smallholder farmers, local agricultural specialists, and extension officers?

Your support could help build up local diagnostic laboratories with learning resources and supplies or help fund mentors to visit developing countries in need.

Or you may have resources, equipment and expertise that you'd like to share with an online mentor network.

Mentors help developing countries achieve a more sustainable and secure supply of food into the future. In the light of the success of our mentoring in Laos and elsewhere, we are keen to expand our mentoring program. We are actively exploring the availability of interested mentors and funding.

So please help our mentoring efforts by becoming a mentor or supporting our mentoring program.

Contact the Crawford Fund today:

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Cover: Lester Burgess finds mentoring the local researchers in Laos very rewarding **Inside cover:** Gerry Duckitt (centre) and Ric Cother (right) spend time as mentors to Laos scientists and volunteers

Thanks to all the mentors, volunteers and others who provided photos for this booklet. Many more photos of our work in Laos is on our Instagram site https://www.instagram.com/crawfordfundlaos/

Lester Burgess Crawford Fund Mentor © 02 9449 7551 Suburgess.international@gmail.com

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THE MENTORING PROGRAM

The Crawford Fund's Mentoring Program aims to complement our training program by placing experienced Australians with developing country researchers to help them develop their technical and organisational skills, and expertise.

Mentoring provides continuity of support, adding significantly to workshop training. This means such training will have a much longerterm benefit through ongoing communication.

Mentors also partner with local researchers to develop the capacity and skills of local farmers and offer advice to help them solve problems.

Professor Lester Burgess, former Dean of Agriculture and now Honorary Professor at the University of Sydney has mentored local people in Vietnam China, Indonesia, Tunisia, and Laos over the past 25 years. His most recent and current focus in our mentoring program is in Laos supporting a team of AVID volunteers in trade, crop health, biosecurity and food safety.

Other mentoring has seen the development of a laboratory manual suited to the conditions of the Cambodian Agricultural Research and Development Institute. The Crawford Fund supported University of New England's Professor Graeme Blair and Dr Nelly Blair's mentoring of this project.

David Lyons, formerly with the Queensland Department of Environment and Resource Management, has helped build the capacity of soil scientists in Timor Leste. This has included developing a soil test for plant-available phosphorus and mentoring laboratory staff employed by the Ministry of Agriculture and Fisheries.

Here we tell you about our mentoring program and why you should get involved or support it so it can be expanded.



Professor Lester Burgess mentors young Laos plant pathologists and Australia volunteers

Dr Len Tesoriero, Senior Plant Pathologist, Department of Primary Industries NSW, has been a long-time Crawford mentor and workshop presenter. Here he is with local colleagues in Laos.

WHAT DOES A MENTOR DO?

Crawford Fund mentor is someone with great agricultural science knowledge, experience and networks. They contribute to making a difference to agricultural production and food security in the developing world.

A mentor may be a retired or semi-retired scientist who is willing to volunteer their time to:

- Build the skills and knowledge of local agricultural scientists, technicians and government officials
- Work with local farmers trying to solve problems such as pests, diseases, soil fertility, low production, environmental impacts
- Help place, develop programs with, and encourage Australian agricultural volunteers (e.g. through the Government's Australian Volunteers for International Development or AVID) who work in developing countries to build local capacity

Here's what Lester Burgess says: "It's absolutely thrilling, particularly in retirement when I don't have all the added load of administrative duties, to be able to train young people and work with smallholder farmers. It's scientifically fascinating, because I've seen exotic diseases through these activities that I have never seen before, many of acute biosecurity importance to Australia. The personal enjoyment of working with smallholder farmers that you know is difficult to express. The volunteers also have a unique professional experience."

A Crawford Fund mentor may also be someone in Australia or another developed country who has full time work with access to sophisticated technology and resources. These 'E-mentors' interact with those in developed countries mostly online, but may also present training workshops in country with support from AVID volunteers.

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A third type of mentor is the volunteer, usually through the AVID program but others could be in country more short-term as New Colombo Plan scholars or as self-funded volunteers. They work with local staff and smallholder farmers to help them extend their knowledge and solve problems within existing projects.



Madam Kaisone, Lao fruit farmer with mentors Lester Burgess and Gerry Duckitt (rural adviser/interpreter), and AVID volunteer Sophia Callagan. Professor Graeme Blair mentors young agricultural researchers in Cambodia

HOW DO DEVELOPING COUNTRIES BENEFIT?

Mentors help those in developing countries to:

- Develop their own skills and knowledge in a specific agricultural area
- Link with experts worldwide who can assist them to solve current and emerging agricultural problems
- Access otherwise unavailable technology and equipment across the world

Lester Burgess spends two to three months in Laos each year helping volunteers settle in and learn the skills needed to work with limited resources on projects that support the broader aims of work underway.

His wife Jillian joins him in her school holidays to help with English training. They also work with local government staff and farmer groups.

"We have helped set up diagnostic laboratories for local staff, and worked with smallholder farmers covering over 50 crops. Through the efforts of volunteers, more than 250 crop diseases and numerous pests have been identified."

Farmers also benefit and Lester and Jillian enjoy working with smallholder farmers in Laos:

"One of our loveliest memories is of a smallholder farmer called Madame Kaisone who owns a fruit farm. It started as a durian farm and we were invited to visit with her because her trees were dying from what we later determined was Phytophthora dieback.

We brought in phosphonate and injectors to help her start injecting with phosphonate. She caught on very quickly and since that time she's taken up every piece of advice we've given her. We suggested she use lots of chicken and cow manure to improve the fertility.

She adopted that advice. She adopted our recommendation for inter row planting with other fruit trees that were resistant to phytophthora. And because cow manure became in short supply, she started a small cattle herd, which she's done with great success. She's now up to ten cows worth \$400 each. It's a little farm that's now flourishing and the cattle are bringing in more money than the durians."

The Crawford Fund supported workshops on managing Phytophthora dieback for other smallholder farmers. Volunteers helped source funds and to build a greenhouse to raise disease-free durian seedlings Dr Denis Persley is part of Lester Burgess' E-mentor network providing resources for Laos from the electron microscope in his lab.

Dr Ric Cother discussing the isolation of plant pathogenic bacteria with Laos trainees at a workshop sponsored by the Crawford Fund

WHO SHOULD GET INVOLVED?

f you have the knowledge, experience, passion and time on your hands, we want to hear from you about the possibility of becoming an active mentor, visiting countries and supporting farmers, locals and volunteers onsite.

If you are working fulltime or are not able to travel overseas but want to help by providing access to resources and expertise that could help, you can become part of the wider mentor E-network.

Dr Denis Persley from the Queensland Department of Agriculture and Fisheries is working with Lester Burgess to identify a devastating virus affecting watermelons in southern Laos. He's part of Lester's 40plus E-mentor network across five countries. Denis says:

"In almost all laboratories in South East Asia they don't have access to the range of sophisticated equipment we have in Australia. Within our laboratory we can handle molecular and serological testing. We are also one of the few plant pathology laboratories within Australia to have an electron microscope.

"And of course, everything we do with samples from Southeast Asia certainly increases our knowledge as to what the potential pest and disease problems can be for Queensland and Australia. It is certainly a two-way street in providing this type of assistance."

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If you have the resources that could support and expand the Crawford Fund mentorship program, you can help increase the spread and impact of the program.

If you are a volunteer working in agriculture you can make the most of your time to mentor local people and farmers.



Madaline Healy was mentored by Lester Burgess as a young AVID volunteer in Laos. She's now gone on to mentor other volunteers and young agricultural researchers in Laos.

Harriet Brickhill and Jillian Lyall are young Australian volunteers investigating Fusarium Wilt on watermelons, with the help of Lester Burgess in Laos.

WHAT CAN MENTORS EXPECT?

B ecoming a mentor can change your life as you gain knowledge, build new friendships and explore places and cultures that few tourists ever experience.

But being a mentor is not without its challenges. You may need to deal with:

- Poor levels of literacy
- Inadequate laboratory supplies and technology
- Difficult political situations
- Living in remote areas with poor infrastructure
- Problems that can only be solved with low cost solutions

Madaline Healey worked for six months as an AVID entomology volunteer in Laos during 2014. Lester Burgess mentored her before, during and after her visit and says:

"She accomplished a great deal, trained several young people and ran a marvellous workshop on integrated pest management and identification of insects. She now helps succeeding entomology volunteers. So our young volunteers become mentors themselves when they return to Australia." Madaline says she found Lester's mentoring invaluable:

"It's led to this fantastic job I now have working at the Sunshine Coast University on an ACIAR project. Lester Burgess is the rock star of the plant pathology world.

Becoming a mentor can change your life"

He pushed me to work harder and is definitely someone I aspire to be one day. He's such an important person in his field, but he never once made me feel like I was this silly little grad person who hasn't got any experience. He treated me as an equal. We're partners. We're a team. But we are doing all this incredible work together."



MENTORS NEEDED IN ALL AGRICULTURAL FIELDS

Mentors with expertise in any agricultural field are needed in all developing countries where the Crawford Fund is active.

Here's what Lester Burgess says:

"There are many opportunities for mentors, particularly people who have just retired and want to continue an association with their field, whether it be plant pathology, entomology,

HOW TO DONATE

The Crawford Fund is a not-for-profit organisation and a registered charity authorised to receive tax-deductible donations. Donations to the Fund to support our mentoring

agronomy, food safety or whatever. All of the developing countries have a great need, which are different depending on their level of development. For example, in a country like Vietnam most of our mentoring is done at a high level in diagnostics and trade issues. But in Laos, a least developed country, we're still at the early stage of development and adoption of improved farming practices."

program are tax deductible. You can donate online or contact us to discuss your donation plans.



The Crawford Fund is a non-profit non-government organisation that works to raise awareness of the benefits to Australia and developing countries from international agricultural research. The Crawford Fund Building 7 Unit 7, 1 Dairy Road Fyshwick ACT 2609 Australia

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