



The Crawford Fund Annual Conference SCHOLAR BIOS

August 2019

Paul Armstrong - I am the senior aquaculture technician and field co-ordinator at the Darwin Aquaculture Centre, which undertakes aquaculture research and development projects in the NT. I co-ordinate the field activities for the tropical rock oyster program which is working with Aboriginal communities in the NT to develop economic and employment opportunities through tropical rock oyster farming. I have a background in marine science and aquaculture and am particularly interested in the role of sustainable aquaculture in improving livelihoods and providing positive environmental and social outcomes in coastal communities here in Australia and overseas. I would like to attend the Crawford Fund 2019 Conference because it would be a great opportunity to learn more about important actions being taken and needed around agriculture, energy and water as climate change continues to pose increasing challenges to these areas. I am really interested to hear from and be involved in sessions, such as; “can we feed the world without wrecking the environment”, circular food systems, and the bigger picture of climate change challenges and food system solutions. The Crawford Fund 2019 Conference would provide a great opportunity for me to put the research, development and extension on tropical oyster farming in Aboriginal communities I am involved in, into a global context. I am keen to continue to develop a career in aquaculture research, development, and extension (R, D, & E). This conference would be a great professional development opportunity to expand my understanding of climate change challenges and food systems, learning from relevant presentations and also having the opportunity to meet people working in R, D, & E in related fields including; agriculture, aquaculture and fisheries. Opportunities to network with people who work cross-culturally in Australia and overseas are rare for me and it would be beneficial to my work to be able to discuss relevant issues with more experienced practitioners in this field.

Razlin Azman - I hold a BSc from University of Victoria, Canada, majoring in microbiology and genetics. Prior to my PhD, I was the BamYIELD programme manager at Crops For the Future, and engaged with researchers, farmers and governmental agencies. I am in my final year of a PhD, focusing on developing a research pipeline for better understanding of nutritional composition of underutilised crops. We are using bambara groundnut as an exemplar species, as it plays a vital role in subsistence farming for rural poor. My current interests are in food & nutritional security, underutilised crops and plant-microbe interaction. I am also passionate about scientific communication and community engagement.

Nickala Best - I have nearly completed a PhD at La Trobe University, which has involved adapting technology to DNA based field assays, for pathogen detection in animal health diagnostics. My research has also included investigating how industry and government veterinary services can use the technology. Through this I am interested in how governments, business, and academia can work more effectively to help with biosecurity, environmental and animal health outcomes in agriculture worldwide. I wanted to attend this conference to gain insight into the above, and to gain an idea of where I can put my time to help improve climate change outcomes.

Zoe Bridge - I am an Honours Student with a focus on heritage preservation. My thesis looks at exploring links between oral history and agricultural practices from the hill fort period in Fiji. The objective of my research is to understand how cultural identity is shaped in Fiji. I have a limited knowledge of science and agriculture as I am a BOA major.

Emily Bryson - I have a background in visual arts/graphic design and permaculture, with special interests in composting, ecological waste management, regenerative agriculture, and urban food production. I'm currently enrolled as a Master of Applied Science candidate and have applied for an extension to PhD. My research investigates the potential for home composting of domestic canine faeces as a way to reduce faecal pathogens and plastic bag waste while recovering soil nutrients and organic matter for small-scale food production. Plastic and organic wastes are huge problems globally, especially in regions that lack infrastructure to recycle them. This conference will

help me learn more about how the findings of my research can be applied to assist individuals and communities in regional Australia and developing nations improve their food security and resilience to climate change.

Lucy Cooper - I am a 20 year old UTAS student studying Agriculture and Business. I am Hobart born and bred and entered this degree with no prior agricultural industry experience. As a newcomer to the industry I am working very hard to get my 'foot in the door' and participate in as much work experience as possible which has so far included work on a berry farm, and numerous dairy farms. In terms of life outside of Ag and uni I enjoy playing and umpiring field hockey, as well as swimming, playing footy and going to the gym. I live at home with my parents, two younger siblings and our dog Golly. I look forward to continuing working in the Ag industry this summer. With so many opportunities available to me at the end of my degree, I am spoilt with choice. I have a number of areas I am interested in entering which include consultancy, vineyard and winery management, trade, among other areas. I also have a particular interest in working in international development in the area of sustainability. After witnessing the deforestation in Sumatra due to Palm Oil production, I believe that moving forward the way Agriculture operates in not only developing countries but developed countries must shift to sustainable operation. I wanted to attend the Crawford Conference because it was an opportunity to network with those in areas that I am interested in as well as those I have not yet discovered. As I have found, it helps when you know the right people in the industry so this event is a perfect opportunity to build professional relationships. I was also very interested in the topic of this year's conference and the chance to hear from a Nobel Prize Laureate is something to tick off the bucket list!

Jordan Cox - I'm a young forester who's interested seeing how agroforestry can contribute employment and livelihood options for lower income contexts. After studying agricultural resource economics at an undergraduate level, I spent 3 years working on a biomass to energy project in Lae, Papua New Guinea (pngbiomass.com) that is establishing new eucalyptus plantations for fuel supply. Spending time in PNG reinforced my appreciation of the import role that food production plays for lower income communities, particularly as a livelihood option. Although I have spent that past 18 months researching eucalypt genetics (specifically), I am interested better understanding how intercropping/co-planting in young plantations can improve environmental outcomes and increase income generation in lower income communities.

Natasha de Bondi - I am a final year veterinary student and am really interested in the role animal health plays in food and nutrition security. Before starting the vet degree I travelled through SE Asia and Central and South America for 18 months and became really interested in the importance of animal health to community development. I would love to investigate options for working in this area after I graduate and hope I can find more inspiration and advice during this conference.

Luke Dieters - I hope to gain from the Crawford Fund conference a much deeper education and understanding of aspects relating to agriculture, such as energy, water and climate change. These are all areas I have previously learnt about but this opportunity will provide a more realistic view on such topics. I also look forward to meeting other students similar to myself from across Australia, and networking with those that can assist me with what my future may hold. I look forward to the amazing opportunity I have been given and hope to gain everything I can from it.

Naomi Diplock - I am a plant pathologist with a particular interest in mushrooms, diagnostic work and international development. I have just completed a 2.5 year volunteer project in the Himalayan Kingdom of Bhutan working with local counterparts to improve mushroom spawn quality and local mushroom production. I am excited to further develop my career in plant pathology, particularly in diagnostics. I enjoy teaching and working with others, sharing knowledge and learning from each other's experiences. The theme of the conference is of great interest to me, both vocationally with the pressing issues facing agricultural production globally, and inspirationally with my dream since I was a young girl being 'to feed the world'.

Kazbek Dyussebayev - I am currently a PhD candidate in Agricultural Biotechnology at Griffith University. I finished my bachelor and master degree in Biotechnology at L.N.Gumilyov Eurasian National University, Astana (Kazakhstan). At the moment, I am working on my PhD project: "Development and application of a novel nano-biosensor to study the epidemiology of the causal agents of *Ascochyta rabiei*, the cause of ascochyta blight of chickpea". My research areas of interest are plant pathogen diagnostics and biosensors. The reason I am interested for attending The Crawford Fund Annual Conference 2019 is that I am really interested in new methods and technologies being applied in agriculture.

Francesca Earp - I have been working with the Mekong livestock research team since 2018 when I completed my honours project, conducting a cost-benefit analysis of FMD interventions. Since November of 2018 I have been based in Laos working as an in-country project officer. My role involves project facilitation, data collection and farmer training. In addition to my interests in smallholder

finances I am passionate about female farmer inclusion. I am also completing my PhD in country studying the economic impact of FMD mitigation. I believe a development project should engage all participants to ensure it is sustainable and results in farmer uptake. It is this passion that interested me in the Crawford Fund conference.

Riley Faulds - I'm a third-year student majoring in Agricultural Science and English & Cultural Studies at UWA. In my studies so far, I've particularly enjoyed soil science and pasture systems, although I consider myself to be in the early stages of study and find each new unit engaging and interesting. International study experiences have been particularly compelling; I've loved studying agricultural systems and markets, and rural development in Vietnam and Argentina, and plan to study in Indonesia for a semester next year. I'm especially looking forward to hearing from agricultural researchers and professionals working in development in South-East Asia and elsewhere at the conference, as this is a field I would like to perhaps have a career in in the future.

Tara Garrard - I am a plant pathologist at SARDI working with Dr Hugh Wallwork. I have eight years of experience in soil mycology and have been working with cereal foliar pathogens for the past 12 months. My current role at SARDI is focused on service delivery to the Australian grains industry to provide relevant advice and research on plant diseases. I hope to develop my skills and use them in the future in international aid work. Lester Burgess's work in Laos is of particular interest and I have had preliminary discussions with him about joining him on one of his upcoming trips.

Josephine Ginty - I am currently studying Veterinary Medicine, specialising in production animals. I have a background in environmental and plant science, and biodiversity. My main motivation for attending the conference is to learn about the union of these sectors - the concept of farm animals as an ecosystem that needs to be sustainably managed alongside natural systems. I am especially interested in sustainable management initiatives for small-scale production systems, such as those in peri-urban regions of Australia. I believe such initiatives may also have applications in developing nations where fundamentally similar small-scale systems predominate.

Natasha Hallet - I am a third year bachelor of Agricultural science student who has a strong passion in developing country research. I currently work for CSIRO on a salt tolerance project in grape vines and have previously worked on a dairy farm in the UK. I have just completed a 4 week internship with Project Everest participating in their Farm Ed project which targets the pest and diseases in Fiji. After I finish my honors program next year I would like to work in a research environment which focuses on the development of Agricultural systems in developing countries.

Sajane Hene Kapuralalage - I have completed a Bachelor degree and Master of Philosophy degree in Agricultural Sciences majoring in Crop Science. While undertaking my Master's degree research on "Assessing the Nutrients Imbalance and Its Impacts on Forest Dieback in Horton Plains, an Upper Montane Forest in Sri Lanka", I developed a keen interest in environmental science especially related to soil pollution in agricultural areas. Since working as an academic at the Uva Wellassa University of Sri Lanka, I have worked on a variety of ecological agriculture projects in the Dry Zone of Sri Lanka. This work led to a major career turning point for me, as I became more passionate about soil contamination related studies. Currently, I am a PhD candidate at UNE conducting research on "Cadmium (Cd) and Arsenic (As) in Co-Contaminated Soils: Risks and Options for Management". I received an Endeavour Postgraduate Scholarship Australia which enables me to be able to work between Sri Lanka and Australia as I conduct my research.

Madi Hickey - I graduated with a Bachelor of Animal and Veterinary Bioscience (Hons) from the University of Sydney in 2017 before joining Animal Health Australia in 2018 as a graduate officer working in biosecurity and animal welfare. My interest in international agriculture R&D grew throughout my undergraduate degree and influenced my decision to pursue an honours project on the role of champion livestock farmers in promoting animal health and production activities in Cambodia. My time in Cambodia was an invaluable experience that highlighted the role international agriculture R&D has in improving the livelihoods of those in developing countries. Since completing my studies, I have maintained an eagerness to pursue my interest in this space. Having recently joined RAID, I am encouraged by the opportunities available through the Crawford Fund, and am looking forward to attending the conference to learn, create networks, and to find out more about how I can be involved in international agriculture R&D initiatives as an animal scientist.

John Humphrey - I am currently completing the final year of a double degree in environmental science and environmental engineering at RMIT university in Melbourne. I grew up in North East Victoria with a passion for the outdoors which developed into a desire to learn more about natural processes and the world around us. I was exposed to agriculture from a young age and worked for many years with beef, lamb and hydroponic lettuce production. Moving forward, I see myself working or completing further studies within the agricultural and environmental science sector, and have interest in hydrogeology, and land and water contamination and remediation.

Meg Humphrys - I am a Pastoral Extension Officer for the Northern Territory Department of Primary Industries and Resources. I work with mostly cattle producers in central Australia. Originally from Adelaide, I have been working in the Northern Territory on and off for 11 years. I studied environmental science at university with an aspiration to help understand the landscape and find how to improve its capacity to produce food. I am very passionate about food, particularly quality, locally produced food and I think everyone has the right to it. I have worked in various roles for the NT government in a rangeland ecology capacity over recent years but my strengths lie in networking, organisation and communication. I am very passionate about food security, and improved land management and farming practices; food production to feed the world without depleting our natural resources. One day I have career aspirations to work internationally in the agriculture/ community development space.

Faruq Shahriar Isu - I am an international student, currently enrolled in the Master of Applied Science (Agricultural Science) at UTAS, and due to start my thesis on "The prevalence of high oestrogen levels in subterranean clover in Tasmanian pastures in July 2019." I have completed my Bachelor's in environmental science in 2011 from Bangladesh. Since then, up until 2014, I have worked at the Center for Sustainable Development (CSD), University of Liberal Arts Bangladesh as the Assistant Operations Coordinator where I have picked up extensive field experience in a broad spectrum of research areas and observed the impacts of climate change firsthand. My precise areas of interest at the conference would be to see what changing pattern has been observed by esteemed researchers and scientist along the areas of "water scarcity, cross-border conflicts, and mass migration" created by this (aptly termed) "Perfect storm" and how these global phenomena reflect on the agriculture sector. I believe this conference will provide an immense opportunity for me to connect with people having similar interest and make some valuable connections for my future career prospects.

Ritesh Jain - I am a first-year PhD student at The University of Queensland, Brisbane. I am interested in the field of insect pest management. The main objective of my research is to develop novel nanotechnology-based strategies against insect pests of crop plants. This innovative technology will address the major limitations of insecticides toxicity and resistance. I want to attend Crawford Fund's 2019 Annual Conference since I will not only learn things outside my field of research, but conference attendance will also offer me an opportunity to meet with new people from a wide range of backgrounds.

Vithya Krishnan - I'm a current PhD student who is interested in plant-soil interactions and I'm looking at improving seedling quality for tropical restoration. My broad research interests include restoration and revegetation, plant ecology, soil nutrients, and statistics. I also like to keep up to date with global change in climate, politics, and life in general. In my free time, I like to keep active and play music. I'm looking forward to the conference and I'm hoping to meet a diverse group of individuals whom I can connect with, share, and learn from.

Joanne Lee - I completed a PhD in 2016 in plant epigenetics, after previously completing a Bachelor of Plant Biotechnology. In my current role with Plant Health Australia (PHA) I work on a broad range of biosecurity risk management projects. I am interested in improving policy to benefit plant market access outcomes and have a strong involvement in the national coordination of fruit fly. Building strong partnerships between PHA and their stakeholders is another aspect I enjoy about my role. The Crawford Fund Scholar Program will allow me to build my network and expand my knowledge of the food security system at an international level.

Amy Mackenzie - I am a PhD student undertaking studies on the genetics of leaf rust disease resistance in wheat at the Cereal Rust Resistance team, CSIRO Agriculture & Food, Canberra. My research focuses on the identification of genes conveying durable resistance to leaf rust disease, which threatens wheat crops in Australia and the world. I have a strong interest in food security and sustainable agriculture, as well as genetics, microbiology and pathology. Since my PhD and interests relate to food security, I look forward to meeting and networking with world renowned scientists and fellow students attending the Crawford Fund Conference.

Anna Mackintosh - I am currently studying my third year of a Bachelor of Agricultural Science at the University of Tasmania. I have a keen passion for both rural and international development and understanding how agriculture can assist in these efforts. As an undergraduate agricultural science student, the conference is of particular interest to me as the 2019 theme encompasses many areas that I am passionate in and I see it as a great networking event to meet influential and like-minded people in the industry. In addition, attendance at the conference would better my understanding of the future for agriculture in regard to availability of resources and how to combat these real issues.

Daniela Medina Hidalgo - I have a BSc in agricultural engineering and an MSc in environment with a specialisation in climate change adaptation. Before beginning my PhD, I worked with the Inter-American Institute for Cooperation on Agriculture (IICA), engaging with policymakers and

governments in the development, implementation and evaluation of climate change strategies for the agricultural sector in the Americas and the Caribbean regions. My PhD research topic is on food and nutrition security and climate change adaptation in the Pacific. My research aims to assess the capacities of rural communities in Pacific Islands to adapt to climate change, placing emphasis on smallholder farming systems and their potential to implement strategies targeted at increasing food and nutrition security. My research is aimed to support the evaluation of policy implications for the improvement of the livelihood resilience of farming communities. I am also focusing on the adaptation of existing assessment frameworks to improve the understanding of the inherent factors that allow communities in remote Pacific Islands to cope with the impacts of climate change and thus to better direct future investments in climate adaptation.

Anita Milroy - I am a trans-disciplinary art, science, technology, engineering, mathematics industry academic, artist & head of funded research projects. I have high level translational research and management skills and utilise my diverse academic qualifications and work experience. I am results driven, and achieve high levels of success in the facilitation of complex projects through proactive collaborations with industry, institutions and communities. My immediate professional goal is to continue to deliver positive outcomes for all stakeholders using an innovative solutions-based approach to developing strategic and growth opportunities.

Angus Mitchell - I am currently a student at the University of Sydney, and work with Prof Salah Sukkarieh at the Australian Centre for Field Robotics developing robotic platforms for smallholder vegetable farmers in Australia and the Pacific. I will be pursuing further study by research where I will investigate how we can develop low cost appropriate technologies for smallholder vegetable growers. These technologies will decrease startup costs and improve efficiency for farmers, allowing more nutrient dense produce to be grown locally. I am passionate about promoting food sovereignty through regenerative agriculture and hope to boost the economic viability of sustainable agricultural practices.

Hayden Morris - Through my undergraduate degree studying public policy and development studies and my current postgraduate coursework on agribusiness, strategy and management I have gathered an interest in food and water securities and the strategies that will need to be developed in coming years to ensure that nations are prepared for the challenges that will be faced as a result of a changing climate. Through living in both the UK and Australia I have also developed a personal experience on the role that migration has had and will continue to have in relation to this issue. This event interests me as I hope to broaden my understanding of the issues facing Australia and the world in relation to the changing climate and its effects on food security.

Wesley Moss - I recently began a PhD in agricultural engineering after studying and working as a mechanical engineer. My research looks at improving pasture legume seed (sub clover and annual medics) harvesting methods and technology. I'm very interested in the way innovations are being applied to increase efficiency and adapt to the challenges of the future. This is why I'm very excited to attend the conference, to hear from leaders in different fields and understand what work is being done to weather "The Perfect Storm".

Duc Nguyen - I am a PhD student at Centre for Global Food and Resources, University of Adelaide and a lecturer in Agricultural Economics at Vietnam National University of Agriculture. I have been involved in several research and development projects funded by ACIAR in Vietnam from 2012. My research interest lies in agricultural economics, market research, value chain, and econometrics analysis. Upon completion of my PhD, I will return to Vietnam and continue to work in agricultural research and development. I hope to bring knowledge and experience from my PhD journey to contribute to the development of agriculture and the collaboration between Vietnam and Australia.

Lucy Noble - In 2020, I will be entering my final year at the University of Sydney completing Honours as part of a Bachelor's Degree in Animal & Veterinary Bioscience. I have been fortunate enough over the last 2 years to work with Project Everest Ventures (PEV). Hand-in-hand with local communities, governments and stakeholders, PEV builds socially beneficial, affordable and sustainable business solutions that are tailored to solving social issues around the world. My work with Project Everest has taken me overseas to Malawi and Fiji for >7 months over the last 2 years and has given me the opportunity to manage multiple agricultural projects as well as experience management of start-ups in the field of Nutrition, Microfinance, Med-Tech and Solar. Ultimately, I want to work in African livestock production, however, the umbrella of "food security" and even livestock production are such enormous areas of study and I believe the Crawford Conference would serve as an amazing opportunity to speak to and learn from some of those working on the forefront of research in this space (- more immediately, insight on direction for upcoming Honours).

Cristina Ocana Gallegos - I moved to Australia five years ago to study Plant biotechnology at the University of Queensland. I finished my honours year at QAAFI, UQ, where I worked with quinoa,

my favourite crop. I plan to keep working on quinoa and hopefully breeding, while spreading the knowledge of this wonderful crop to the rest of the world. I have strong interest in sustainability, food security and smart agriculture. Although biotechnology can be quite technical and science-y, I found myself liking plant breeding the most. I love to get my hands dirty and is what I want to keep doing in the future, but with a stronger background and application of plant genetics. I would also like to learn more about environmental law because without the right bills in place, little improvement can take place in large scale.

Rebecca Owen - As a final year Bachelor of Animal Science student at Charles Sturt University, I have developed a strong passion for international agricultural research and development. This interest was confirmed by a tour of the diverse agricultural systems of Papua New Guinea in 2018, which opened pathways to research the prevalence of gastrointestinal parasites in Samoan sheep as part of my current honours project. The Crawford Fund conference is an opportunity to meet, listen to and learn from academics and other scholars. I hope to come closer to discovering my research niche, so I may one day help tackle challenges of global food security. Throughout my degree, I have been most interested in the interaction between ruminant production efficiency and environmental sustainability, as well as livestock health and nutrition.

Sunita Pandey - I am highly motivated and hardworking PhD candidate in the School of Agricultural and Wine Sciences, Charles Sturt University, Orange Campus, NSW, Australia. My research is related to ecological pest management, more specifically on "Habitat management using native Australian plants to deliver insect pest suppression and other ecosystem services in brassica crops". I was awarded with Endeavour Post graduate Scholarship. I am near to completion of my degree, planning to submit my thesis on 31st October 2019. I have published four journal papers as author/co-author and one book chapter as co-author during my PhD candidature and working with two remaining manuscript at the moment along with my thesis write-up. Before joining PhD, I was working with Ministry of Agriculture and Livestock Development in Nepal as plant protection officer for five years.

Kai Peersman - I am twenty-five years old and a permanent resident of Australia. I grew up in the Netherlands, but I have lived in Australia for over six years. I am in my second year of an undergraduate degree at the University of Tasmania in Agriculture and Business. Before starting my undergraduate studies, I worked for a few years in mainland Australia and Tasmania on various farms as a farmhand. I have had an interest in International Development since high school. This interest was sparked by a trip I took with my sister to Zambia in 2012. My sister was inspired to raise money for an NGO to build a school in Mkushi, Zambia. I was involved in helping my sister raise money for the project and it would be my first experience with a development project. We had the opportunity to travel to Zambia together to see the project in action. In 2014 I went back for a year to the Netherlands to get a Propaedeutic certificate. I studied the Bachelor of International Development Management, at Van Hall Larenstein University of Applied Sciences. I have travelled in a range of developing countries in Asia and Africa, including: South-Africa, Zambia, Indonesia, Laos, Cambodia and Malaysian Borneo. Currently I am involved in volunteer work for the Migrant Resource Centre Tasmania. My ambition has always been to pursue a career that combines International Development and Agriculture. It is for this reason that I would be very keen to visit the Crawford conference and to learn about international development opportunities in Australia.

Jana Phan - I completed my PhD in agriculture science, plant genetics, at The University of Adelaide in 2018. Additional to my experience in fundamental research, I have also worked on projects addressing farmers' rights, access and benefit sharing, and conservation in the context of plant genetic resources for food and agriculture, at the United Nations Food and Agriculture Organisation. I am currently a science-policy analyst at the Australian Academy of Science. I believe that good policy has the power to influence and guide decision makers and bring everyone together to the decision-making table. I am excited about the future of sustainable agriculture development; as the research community moves forward with truly interdisciplinary collaboration, alongside the recognition and value of traditional knowledge and the experiences of local people, innovative solutions to our global challenges are, no doubt, just around the corner! I am interested in combining my passion in sustainable agriculture development with my experience in research and policy analysis and development. My ambition is to create a career where I use policy, as the tool, to support and help foster the creation of sustainable solutions for agriculture development. Outside of work, I can be found scaling up cliff faces or sharing food around a campfire with friends.

Joshua Philp - I am a postdoctoral researcher with The University of Adelaide, funded by the Australian Centre for International Agricultural Research project: Management Practices for Profitable Crop-Livestock Systems in Cambodia and Lao PDR. Previously, I researched smallholder farming systems in western China as an Australian Youth Ambassador for Development whilst studying with Western Sydney University. My primary professional interest is smallholder ruminant

and forage production, which has expanded to include related topics of adoption, climate resilience and social development. I am excited to join the conference so that I can learn more about the future direction of agriculture for international development.

Yolanda Plowman - I am a final year PhD Candidate at the University of Sydney researching agricultural microbiology. Since early 2018, I have led the Joint Academic Microbiology Seminars in Sydney, and I am a New Colombo Plan Alumni. I am interested in the intersection(s) of policy, science and economics relating to food security and I write about these topics on my website, www.yolandaplowman.com My aim is to work in leadership and advisory roles in food security R&D. I wish to attend the 2019 Conference for the invaluable opportunity to develop my knowledge, connections, and opportunities within the area of food security R&D. This opportunity would open the door for me to network with like-minded peers within this field as well as potential employers and collaborators.

Abdur Sarker - I am an HDR student in Environmental and Rural Science at University of New England, Australia. I have graduated with a Bachelor of Science in Zoology and a Master of Science in Wildlife Biology from University of Dhaka, Bangladesh. My research aims to understanding how to better manage rivers with increasing pressures of climate change and anthropogenic extraction. My project will determine how to most effectively monitor frog populations over long periods and determining how frogs respond to environmental flow.

Sohraab Singh - I am an international student hailing from India, studying in the 3rd year of Bachelor of Agricultural Science (Hons.) at UQ, Gatton, seeking to make a career as a scientist in the field of plant science. As a recipient of the highly competitive Undergraduate Research Scholarship by QAAFI/UQ (AUD 3600), I got an opportunity to work with Associate Professor Bhagirath Chauhan on Weed Ecology and Management as a research scholar where I studied the competitive nature of weeds with crops and its evolving mechanism leading to herbicide resistance. Moreover, I now have the experience of working on various weeds and their ecology and have undertaken a study as the lead researcher under the supervision of my mentor. I am also in the process of submitting my first research paper in the Journal of Crop and Pasture Science with my first draft being examined by my supervisor. Over the course of two years, I seek to enhance my knowledge on rice production by taking courses at IRRI, Philippines and study the competitive effect of rice varieties with varying weed management and techniques. Furthermore, I am also inclined towards studying the effects of climate change on weed and crops whilst projects based on varying CO₂ level are under discussion for future projects. My motivation for applying for this scholarship is being driven by a strong desire to develop an understanding and exposure towards the systemic upliftment of current agrarian state in under-developed countries at par with international development. I believe sitting alongside visionaries and like-minded youth with diverse background and experiences at the conference will provide me with an apt opportunity to broaden my knowledge of international agriculture, establish networks with aspiring scholars for future collaboration and chisel my overall personality and communication skills.

Peta Stockwell - I am a 4th year agricultural science student, currently completing my honours project supervised by Simon Quigley and Dennis Poppi on phosphorus metabolism related gene expression in weaner cattle. I come from a cattle station in the Northern Territory, and this is where my passion for agriculture originates from. I have always been interested in the role Australia plays in the global food market, as most of our cattle are sold via live export to south east Asia. I am particularly interested in tropical production systems, beef cattle and ruminant nutrition, and smallholder production systems.

Isabella Suleski - I am a second year student at UWA majoring in genetics, and am interested in exploring how I can apply a genetic knowledge and techniques to help lessen the impacts of food, water and energy insufficiency. I am aspiring to have a career in research and would love to learn more about the relationship between plants and microbes, with research into protecting food crops against pathogens being extremely important. Ultimately, I wish to attend the Crawford Fund's Annual Conference as I am very passionate about the intersection between the environment, conservation, agriculture and genetics, and how an interdisciplinary understanding can further research into food and nutrition security.

Emma Taylor - I am a second-year student studying a Bachelor of Agriculture at The University of Melbourne, majoring in Production Animal Science. I am passionate about the future of agriculture, and how we will face the many challenges ahead. I am always eager to learn and experience new things wherever possible. I gained a love of travel through a World Challenge trip to Cambodia and Laos, which is exemplified by my subsequent three-month solo trip around Europe during my gap year. With my passions for the future of agriculture, learning and travelling I believe this conference will greatly benefit me both personally and professionally.

Valentin Thepot - I am a keen aquaculturist originally from France but living in Australia for the past 11 years. I'm very concerned about the environment and our effect on the planet (climate change, fish/animal farming gone wrong...) so if I can have an impact on how we grow fish in the "first world" and help people in developing country grow what they need and in a sustainable manner then I would consider myself successful. I have worked and studied in aquaculture since 2008 and I am now doing a PhD on seaweed as functional ingredients for finfish. The goal of the project is to be able to boost immune functions and growth in fish to reduce the impact of climate change (sea temperature rise) and culture intensification on cultured fish which is leading to disease outbreaks and huge financial losses (US\$6 billion/yr). So basically, stronger fish don't get sick so they don't need antibiotics, and because they grow faster they also need less feed to achieve the same weight. Bottom line is less chemical (antibiotics), less fish food (so less waste going to the environment) and less financial losses. Considering the results from my experiments so far, we are on the right track.

Sanjaya Timilsina - I am currently working on the spice and condiment crops namely: sesame, caraway, kalonji and fennel. My research aims to assess drought tolerance in mentioned crops for the purpose of cultivation in semi-arid regions. I am equally fascinated by rural economies and would love to know more about rural trade and effective ways to transform rural economies. In my past, after completing my bachelors' degree in agriculture, I worked under USAID funded non-profit to promote drip irrigation and drought tolerant seeds for the purpose of improving rural economies in water deficit villages of my home country, Nepal. I am looking forward excitedly, to learn and share with fellow researchers especially working on the likes of plant physiology and rural development.

Lily Tran - I am a 2nd year PhD candidate working on molecular detection of livestock parasites and their vectors, looking at adapting conventional lab-based detection for real time field deployment in low-resource settings. My research areas of interest: veterinary epidemiology, molecular biology, host-pathogen interactions. Outside of research, I have 3 rabbits, enjoy computer games and cars. I am looking forward to attending the conference to learn about different aspects of agriculture and how climate change affects my research.

Duncan Wells - I grew up in Zimbabwe for the majority of my life before migrating to Perth. I grew up on a family farm and have always been interested in agriculture. I am interested mostly in horticulture and new innovative urban farming techniques but am also really interested in any other cropping type enterprise. I believe having the opportunity to attend the Crawford Fund conference would be greatly beneficial to me to not only meet like-minded professionals who offer an abundance of knowledge and experience, but to also learn what other pathways and sectors of agriculture may be available for me begin to focus more of my energy towards.

Antoinette Wichmann - I am a third year Doctor of Veterinary Medicine Student attending the University of Melbourne. I grew up in country SA on a hobby farm but surrounded by many friends whose parents were farmers or involved in the agricultural industry around farming. In recent years I have spent many placements with farmers and large animal veterinarians to get exposure and experience of especially the animal welfare and medical needs. The environment, and especially our role in climate change, has been an interest of mine for a while now and I feel an obligation to be more educated in the ways that agriculture and ultimately the people and animals I will work with play a role in it.

Olivia Woodiwiss - I am currently in my final year of a Bachelor of Applied Science (Agriculture & Business), with the opportunity to complete a full-time Honours project in 2020. My interests lie in extension, pest & disease management and international development. In 2017, I was the recipient of the Crawford Fund Award where I was able to join an ACIAR/TIA project in Vietnam focussing on intensifying beef cattle production in Dien Bien. This opportunity sparked my keen interest in the chance to make a positive impact in the face of our towering nexus and has been my inspiration in identifying where I can help make a difference. The opportunity to attend the conference and hear from inspirational keynote speakers, while meeting other like-minded passionate students and mentors, would help to identify pathways in demand and make connections to start my journey towards contributing to a more secure and equitable world.

