



ARC TRAINING CENTRE FOR FUTURE CROPS DEVELOPMENT

IMAGE: MARY MA



Centre's third harvest season

By *Lauren DuFall and Julie Leroux*

The third harvest of the Centre is being celebrated with our fabulous next generation in the field today harvesting the GM field site. This follows the Centre's 2025 Training Retreat where this group of students have participated in the Centre's GM Stewardship course run by Deputy Director **Stuart Roy**. Thanks also to **Mel Pickering** for delivering training on the specific DIR notice for this trial.

Following our last newsletter where celebrated **Yiting Xie** submitting his thesis, we can confirm his thesis has been recommended for award of a PhD subject only to minor amendments. Congratulations to Yiting who has also started a role at Sugar Research Australia in the field of remote sensing. A fabulous achievement for the Centre's first graduation, Yiting has set a high bar for our others!

In another instance of successful training and capacity building across our industry, we congratulate **Mel Pickering** on a new role with Plant Synthetic Biology Australia. Congratulations! And we continue to recruit and build our initiative, welcome to Technical Officer **Nicole Chen**!

THINGS TO NOTE

FUTURE FRONTIERS FUNDS
EOI due in February 2026

[MORE INFO >>](#)

ANNUAL MEETING 2026

This will likely be a final showcase for the Centre, date under discussion, please reach out to the office if you have ideas!

HOT OFF THE PRESS TODAY:
CONGRATULATIONS TO
STUART ROY ON YOUR
PROFESSORSHIP

LET'S GET CONNECTED



Socials



NEW PEOPLE



Meet Ruiqi (Nicole) Chen

I'm Nicole Chen from Nanjing, China, and I completed my Master of Biotechnology (Advanced) at the Australian National University.

My research focused on improving the editing efficiency of Cas12f by incorporating nuclear localization signals and introns, and testing the outcomes in *Arabidopsis thaliana*.

I'm passionate about plant molecular biology and enjoy learning new techniques in the lab. Outside of the lab, I love exploring new stores in the city, going on nature walks, and spending time with my cat and bunny. I'm really excited to continue learning, growing, and contributing to the inspiring work at Centre.

FAREWELL (KIND OF)

A huge congratulations to **Mel Pickering** who is taking up a role at the Adelaide node of Plant Synbio Australia!

Mel has been so incredibly supportive of the Centre, particularly in her role with Centre students in Adelaide at the Waite campus with lab and field work.

It's been such a pleasure to work with Mel, organise events, take part in annual meetings and fun activities. Mel will continue to utilise her extensive knowledge and expertise in stewardship in her new role and so will still be interacting with many from the Centre as part of that, which we are very grateful for!

We wish you all the best with the exciting new role!



Centre operations were front loaded to support establishment, recruitment and kickstart events and communications. We have been incredibly lucky to have **Dr Julie Leroux** in this Project officer role. Julie has had an incredible impact on the Centre. Julie will take annual leave in December and finish up later this month, so more to come as we celebrate Julie's many contributions!



"As my contract comes to an end, I just wanted to say a big thank you to everyone. I've really loved working with you all — organising events, supporting students, and helping keep things running behind the scenes. A special shout-out to Lauren and Derek for giving me so many opportunities to learn over these past 2.5 years, and for trusting me even while I was still figuring things out!

I'll definitely miss putting these newsletters together and sharing all the great progress and achievements across the Centre." - Julie Leroux

Highlights from the Centre

Articles

Research Article

Hyperspectral-Based Classification of Individual Wheat Plants into Fine-Scale Reproductive Stages for Anthesis Prediction

Yiting Xie, Stuart J. Roy, Rhiannon K. Schilling, Bettina Berger, and 1 more

Congratulations to **Yiting, Stu, Bettina** and our partner **Rhiannon Shilling**, from SARDI!

for bringing evidence that transformed hyperspectral and RGB imaging can accurately and efficiently predict wheat flowering stages, offering a low-cost alternative to manual inspections that supports regulatory compliance and biosafety in biotechnology field trials.



Annual meeting (June 2025)

Thank you to everyone who attended our third annual meeting.

The highlights didn't quite make it into the last newsletter so please click the link below to access our article and revisit and reflect!



[Annual Meeting](#)

Research Article

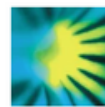
The infamous celebrities of Eagle Rest: regulating the coexistence of genetically modified and non-genetically modified crops in Australia ten years after *Marsh v Baxter*

Michail Ivanov

Received 10 Jun 2025, Accepted 13 Aug 2025, Published online: 18 Sep 2025

Congratulations to **Michail!**

for showing persistent inconsistencies in crop regulation and urging a more proactive, ethical framework to manage coexistence as biotechnologies continue to advance.



New Phytologist

Full paper | [Open Access](#) | [CC](#) | [BY](#) | [NC](#) | [ND](#)

Modulation of SAL retrograde signalling promotes yield and water productivity responses in dynamic field environments

Andrew F. Bowerman, Marten Moore, Arun Yadav, Jing Zhang, Matthew D. Mortimer, Zuzana Pišková, Estee E. Tee, Eng Kee Au, Derek P. Collinge, Gonzalo M. Estavillo, Crispin A. Howitt, Kai X. Chan, Greg J. Rebetzke, Barry J. Pogson ... See fewer authors

Congratulations to our Centre members and friends, including Andrew, Jing, Matt, Zuzana, Derek, Kai and Barry!

This article highlights how targeted retrograde-signalling modifications can boost both yield and stress tolerance.

We are pleased to announce GRDC's award of a mid-career fellowship to **Julian Greenwood** for the project:

"Establishing transient assays to rapidly assess resistance responses in canola and test engineered resistance receptors for improved blackleg resistance"

[Cultivating innovation: GRDC research fellows announced](#) | [GroundCover](#)

Congratulations again Julian! Julian will start on this project in the new year once back from parental leave.



Centre has turned 3!

(Adapted from Lauren's speech!)

Thank you to everyone participating in our celebrations, for the significant achievement of our Centre turning THREE!



Turning three has marked some really **significant achievements** for the Centre-Yiting has submitted his thesis!








The first of September also marked the three year point for a couple of our students who started on the Centre's birthday - Reshma and Ebtihal.. all of a sudden here we are already thinking about extensions for those who have completed internship opportunities, PhD exit seminars and writing up..

This year has held so many other achievements. **Field trials** are being completed, we have GM material in the field - even canola! Students have been representing at industry conferences, research conferences, undertaking placements and engaged research with Centre partners and beyond. I'm hearing great things from our collaborators and from the students/fellows who are making the most of these opportunities and really seeing the value.

There is a really unique opportunity for our students who have started more recently to speak to those who are more advanced and learn from their experiences too. I say this often, you get out what you put in. While we have online systems of communication they aren't foolproof and some opportunities only arise through engaging with people and on a regular basis. I've had a number of people recently comment on how **unique and valuable cohorts** like our Training Centre group are.

And in the spirit of celebrating that cohort, thank you to Julie for her idea to celebrate that with the awards below.

Thank you to those who contributed to celebrating their peers and congratulations to those nominated. Your contributions to the Centre are valued, recognised and will continue to be celebrated. But most of all you will realise the value of your efforts in your future roles and careers.

-  The Outspoken - Voting for the ECR who has most developed their communication skills. **Mary**
-  The Questioner - Highlighting the most thoughtful or curious question-asker. **Zuzana**
-  The Role Model - Recognising someone you look up to as a role model. **Hendry**
-  The Innovator - Designating the one who finds original ways to tackle challenges. **Julian**
-  The Collaborator - Highlighting the person who brings people together and lifts group projects. **Alex S**
-  The Resilient - Recognising someone who overcame obstacles with determination. **Ben**
-  The Supporter - Appreciating a peer who always offers help or encouragement. **Michail**



Well done everyone, thank you for your hard work in building our Centre initiative and supporting a bright future in Ag!

Awards

Round 2 Project Value-Add

As part of the round two of Project Value Add funding the Training Centre has so far made two awards. Congratulations to:

- **Sadia Majeed** on being awarded \$12,213 towards her project titled "**Dissecting regulation of pod photosynthesis and carbon dynamics during pod development**".
- **Olalekan Amoo** was awarded \$10,000 for his project titled "**Harnessing Whole Genome Sequencing to Accelerate Herbicide Resistance Discovery in Elite Wheat Cultivars**".

A big thankyou to the selection panel (Stu, Joanna, Kai, Lauren and Uli) for their continued help reviewing applications and providing applicants with constructive feedback.

ANU Vice-Chancellor's Citation for Outstanding Contribution to Student Learning

Congratulations to **Rachael Rodney Harris!** Most of you have met her during our annual meeting this year and we are grateful to have Rachael on board as a Centre affiliate.



Learn more about Rachael's achievement [here](#)

ARC Discovery Project

Congratulation to **Harsh Raman**, from NSW DPIRD, and collaborators.

Harnessing the Holobiont: Can We Evolve Microbes to Influence Their Hosts?

- Prof Mike McDonald, Chief Investigator (Monash) (\$652,206)
- Collaborators: Associate Professor Vanessa Wong, Dr Harsh Raman

Congrats again to **Hendry** on starting his **DECRA project** recently working on delivering new targets and strategies for engineering heat-tolerant crops to mitigate future climate challenges.

"**Decoding plant organellar signaling under heat stress.** This proposal aims to address a knowledge gap in how plants respond to heat stress, focusing on chloroplasts and mitochondria, essential compartments for photosynthesis and energy production. The key early events by which these organelles transmit signals to the nucleus during heat stress remain unknown. The project expects to unravel the dynamics of communication between plant cell compartments under heat stress, enabling discoveries across stresses and cell types. Anticipated outcomes include multi-faceted spatiotemporal maps of heat signaling in chloroplasts, mitochondria, and the nucleus. This will deliver new targets and strategies for engineering heat-tolerant crops to mitigate future climate challenges."



IMAGE: HENDRY SUSILA

WIP proteins are a plant specific subfamily of zing finger proteins and TOC64 is a pre-protein receptor at the outer membrane involved in protein translocation

The Day to Day of Fieldwork on Kangaroo Island



By Michail Ivanov



IMAGE: Michail Ivanov

In late September, I visited Kangaroo Island (KI) for the purpose of **conducting interviews with farmers** and a few other interested persons as part of my PhD.

My research involves the use of **filmed in-depth semi-structured walking interviews**. In essence, these are long conversations, often taking place **on farm with a farmer**, where I walk with said farmer around their workplace and talk to them about the work they do. While on KI, I conducted a total of 15 interviews – the exact number I'd aimed for.

My days followed a similar structure: start off by preparing for the interviews from home, go out and conduct the interviews, follow up with any prospective interviewees and arrange other interviews, return home and repeat.

Coming from Adelaide, I had a spreadsheet of **interviewees** I had already tentatively arranged interviews with following my earlier phone conversations with them. **These were people I had heard of, read about online, or who industry contacts had suggested to me.** Still, I had a lot of availability I sought to fill, so I would call farmers that I hadn't previously reached out to, with the view to arranging an interview with them. When conducting interviews on KI, some of my interviewees recommended others as appropriate contacts, so I was able to identify further prospective interviewees in that way. **Reaching out** (mainly by a phone call) can be a bit daunting because some don't answer, so you leave voicemails or texts in the hopes of them getting back to you. Some do, some don't. **Keeping track** of whom I was meeting when and where was essential – I did so in my **spreadsheet, notebook and Outlook calendar**, so as to ensure I've always got the information handy.

KI is around 150km wide and around 80km long, so it doesn't take too long to drive around. My interviewees were spread across the island, so I spent some time on the road. On average, I **drove around 150km per day**. The scenery as you might imagine (or know, if you've been) is beautiful, so the drive never felt like a chore.

When I met up with my interviewees (mainly on farm, with farmers), we'd walk around their farms, **talk about what they do, their ideas around regulation and their thoughts around GM and GE crops, and what coexistence entails.** The subject matter of the conversation often delved into seemingly-unrelated-but-actually-relevant topics, such as the nature of freight on the island and the tourism industry. **Most interviews took around an hour**, some going up to two or so hours, others down to around forty-five minutes.

I was beginning to think more comprehensively about my data analysis, so in my off-time I'd **read Clarke and Braun's 'Thematic Analysis: A Practical Guide'**. By the end of my trip I'd finished the book, which I'd long wanted to get through. I also **reflected on my interviews, writing down notes or making short voice recordings** as I went along. This will all be important in the next phase of my PhD: the data analysis.

Now that I've collected all this interview data (alongside the other interviews I've conducted throughout the year), I've a rich dataset that I intend to analyse later this year and into 2026. I find it to be a **rich data set**, so I look forward to seeing the findings I come to and the way in which they shape my research, as well as communicating my findings with you all in the near future.



The Day to Day of Plant Science Fieldwork

By Olalekan Amoo

Ola is a PhD student working with the Centre, in collaboration with **LongReach Plant Breeders** as an industry partner. His daily work involves field trials, glasshouse studies, and laboratory experiments. Ola's project, "**Developing Novel Herbicide-Tolerant Wheat Cultivars via Genome Editing and EMS Mutagenesis**", aims to create **elite wheat lines with enhanced tolerance to key herbicide modes of action** (Group 1 (ACCase), 10 (GS), and 14 (PPO) inhibitors) using both EMS mutagenesis and CRISPR/Cas9 gene editing.

Special thanks to LongReach Plant Breeders for helping develop EMS-mutagenized populations of the elite wheat cultivar Matador. These populations have undergone two rounds of field-based screening for ACCase- and GS-targeting herbicides, and M2 seeds from these populations were handed over to Ola for controlled screening in the glasshouse.

Ola is fully involved in **sowing large sets of EMS lines, applying precise herbicide doses**, and carefully **recording tolerant lines**. From the GS screens, Ola has identified several potential resistant lines, which he is now **bulking seeds** for additional **screening and analysis** of the resistance mechanisms at the molecular level.

Back in the lab, Ola's focus shifts from plants to DNA. He is **developing molecular assays** to detect and validate point mutations in the GS target gene that may explain the resistance observed in the glasshouse. In parallel, Ola is using information from herbicide-resistant weeds to **design CRISPR/Cas9 constructs** that introduce equivalent resistance-conferring mutations directly into wheat genes (GS2 initially, with GS1 and PPO to follow). These constructs are being used for **immature embryo transformation** of the elite cultivar Matador and the model wheat cultivar Fielder.

Currently, Ola has **over 220 transformed lines** generated across 2 elite cultivars and Fielder, and He is in the process of **genotyping these lines** to determine if they are edited. In the future, Ola is going to **develop a wheat protoplast system** to test sgRNA and construct editing efficiency.

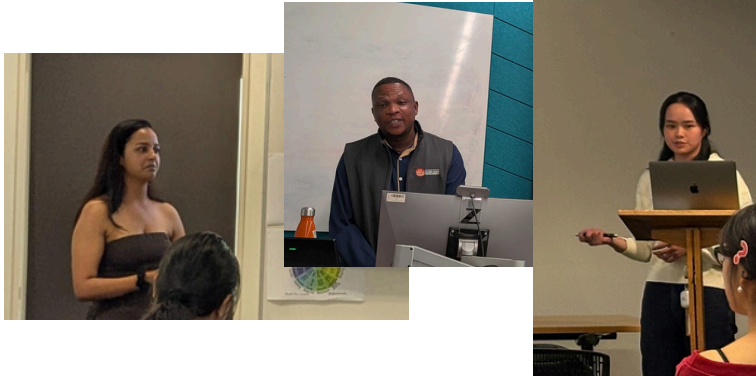
What makes Ola's project exciting is how closely the different scales are interconnected: field nurseries provide realistic selection pressure; glasshouse experiments enable careful phenotyping of promising lines; and molecular tools (mutation detection and CRISPR editing) help explain and recreate useful resistance mechanisms. Much of Ola's planning focuses on coordinating these timelines, ensuring that field seasons, glasshouse screens, seed bulking, and transformation/regeneration pipelines all align so that new data from one part of the project can help inform experimental validations in the others.



Student Milestones

Major Reviews/ Confirmation of Candidature

Congratulations to **Ola, Jamie, and Cara!**



Ola “Developing Novel Herbicide-Tolerant Wheat Cultivars via Genome Editing and EMS Mutagenesis.”

Cara “Molecular characterisation of the Rf4s restorer gene from *Aegilops speltoides*”

Jamie "Imagining Food Futures: Gene Technologies in Narratives of Australian Food System Transformation"

Exit Seminar

Congratulations to **James!**

“Elucidating the role of PGRL1 paralogs in cyclic electron flow of C4 photosynthesis” - a very engaging presentation (so we forgive you for the incorrect Centre logo)



HDR Seminars

Congratulations to **Zuzana, Arslan, Rose, Rita, Paolo, Bec, and Mary** for their annual 8-minute presentation in front of all the School of Biology.

Invited Lecture



Alex S. giving his first invited lecture to third year undergraduates in the course **Food Production in a Future Climate**. He covered:

- the difference between genetic modification and a Genetically Modified Organism;
- How new breeding technologies fit in;
- How the gene technology act regulates people working with GMOs and gene edited material;
- and the pros and cons of the technology.

According to the course coordinator Alex was “awesome” and has a bright career as a lecturer, should he choose to go down that career path.

October Mental Health Month

October was all about taking care of ourselves and checking in with those around us.

A few celebrations and activities were run throughout the month including:

- Mental Health, Wellbeing & Respectful Relationships Workshop
- International Pronouns Day
- Grateful Wall
- Wear it Green
- Potluck



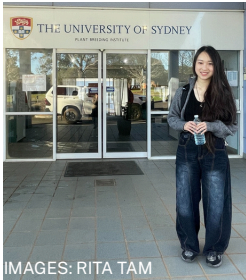
Check out our SharePoint page to find some resources and the contacts of our accredited mental health first aiders



Conferences

Australian Cereal Rust Control Program (ACRCP)

By Rita Tam



IMAGES: RITA TAM



I'm grateful for the opportunity to present at the ACRCP Spring Meeting in PBI Cobbitty end of August. I went with Schwessinger lab and Rathjen lab colleagues.

As of 2025, **stripe rust** continues to spread and remains one of the most concerning cereal diseases in Australia. It's been drier recently, so the spread is limited, yet pathotype diversity remains high. Still, there have been **many exciting updates and developments in technologies on rust resistance genes identification and breeding**, which is great to see.

I was able to present on a **pangenome for wheat stripe rust fungus** that I'm currently developing. It's a resource that combines reference genomes from different major pathotypes, including those currently circulating out there. It was wonderful to see many attendees engaged and interested in this resource. I'm especially excited and grateful that an attendee expressed interest in **collaboration**, and is willing to contribute more pathotypes, including one that has shown "host jump" to barley to help a deeper understanding of rust fungi's adaptive evolution to different host species. We were also invited to enter the **field** to look at some stripe rust infections, and their **rust disease imaging robot/device** which is very awesome tech and eye-opening.



Very grateful to PBI and the ACRCP team for hosting such an inspiring meeting and providing opportunities to connect and share research on countering rust diseases.

Crucifer Genetics Conference, Germany

By Reshma Roy

Wrapped up an exciting week at the 22nd Crucifer Genetics Conference in Giessen, Germany. It was such a warm and welcoming community, with a **diverse mix of Brassica researchers**. A highlight for me was connecting with so many early-career researchers from across the world, it was wonderful to interact, exchange ideas, and learn about their work in the Brassica space. I had the opportunity to **present my PhD work**, which sparked a lot of curiosity and engaging discussions.



After the conference, I also had the chance to **visit the CEPLAS labs** at the University of Cologne and meet Dr. Isabel Saur (UoC), who was recently awarded one of the prestigious European research grants for early-career researchers. She was so generous in sharing her experiences, and it was inspiring to learn more about her career journey.



A big thank you to the ARC Training Center for supporting my travel and facilitating these visits, and also to Lauren for making the connections especially with Isabel and helping organize things behind the scenes.

Seed Business Meeting – Christchurch, NZ

By *Sadia Majeed and Ava Wilkinson*



IMAGES: SADIA MAJEED

In September, Sadia and Ava had the incredible opportunity to attend the Seed Business Meeting in Christchurch, New Zealand, fully sponsored by the ARC Centre, Seed & Grain New Zealand, the Australian Seed Federation and Enza Zaden.

Read more about their experience, the key themes of the convention, and their personal reflections here:

[Article](#)

Gordon Research Conference, Maine, USA

Photosynthesis: Mechanisms of the Process Driving the Biosphere Through the Lenses of Experiment and Computation

By *S. James Nix*

I attended both the **Gordon Research Seminar (GRS)** and **Gordon Research Conference (GRC)** on Photosynthesis this year. The GRS ran over the weekend before the main meeting and brought together PhD students and postdocs in a really open and relaxed setting. One of the standout talks for me was by **Tyler Chapman** (Washington State University), who gave a great presentation on how glycine betaine helps protect PSII from damage under stress. It was a simple but clever study that tied together structure and physiology really well. The mentorship session with **Robert Blankenship** was also a highlight, he reflected on “Fifty Years of Photosynthesis,” which created a guideline for a successful career in science.

During the main GRC, **I presented my poster on cell-specific cyclic electron flow in C₄ photosynthesis**. A few people stopped by who are working on very similar problems, **Lauri Nikkanen** (University of Turku), who studies PGR5 and ATP synthase regulation, and **Kenta Retta** (Jan Ingenhousz Institute), who’s doing modeling work on PSI redox kinetics. Those conversations gave me some fresh ideas for how to connect my own data with modeling approaches, and it was nice to see my work resonating with others.

Talk-wise, **Toshiharu Shikanai’s** presentation on luminal acidification as a control point for electron flow really stood out. I also enjoyed talks from **Emilie Wientjes** on dynamic thylakoid structure and Scott Miller on far-red PSI evolution, both did a great job linking mechanism to bigger picture ideas.

Outside the sessions, the atmosphere was exactly what you’d hope for from a GRC, casual, communal, and full of good science conversations over meals or coffee. I met a bunch of other PhD students working on light harvesting, redox regulation, and even phototrophic modeling, and we’ve kept in touch since.

Overall, the GRC was a great mix of learning, presenting, and just connecting with people who get what you’re doing. I came back with new ideas, some friends, and a clearer sense of how my work fits into the broader field.

Innovation Generation 2025

By *Ava Wilkinson*

In July, Ava attended Innovation Generation 2025 in Fremantle, Western Australia, an event hosted by **GrainGrowers** that brought together young growers, researchers, and agribusiness leaders to share ideas, hear from inspiring speakers, and connect with individuals shaping the future of the grains industry.

Read Ava’s reflections in her article on our website:

[Article](#)

Emily Buddle went to the **National Farmers Federation conference** on the Gold Coast end of September. She was on a panel about Sustainable and Healthy Communities

Grain Immersion Tour, SA

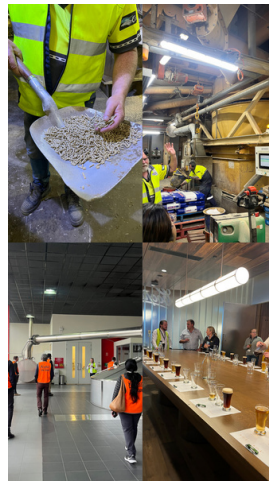
By Ava Wilkinson



I recently took part in the Grain Immersion Tour, organised by GrainGrowers, across Adelaide and nearby areas, where we examined various parts of the local grain supply chain.

We started at Andrew Barr's family farm, where generations have combined grain, pulse, and oilseed production with pioneering plant breeding research and leadership. From there, we visited AGT to see how new innovations and scientific breakthroughs are shaping productivity and quality across wheat, lupin, durum, barley, and canola. The tour also emphasised the importance of downstream processes. At Laucke Mills in the Barossa Valley, we learned about innovation in stock feed and pet food manufacturing, while our visit to Coopers Brewery showcased how a family-owned business has integrated science-backed innovation with a 160-year legacy. On the second day, we explored the complexities of export logistics at Bunge's Outer Harbour Port Loading Facility, where biosecurity and supply reliability are central, before concluding with a visit to the Bunge Grain Quality Lab in Thebarton, which ensures food and feed safety through advanced analytical capabilities.

What I found most valuable was seeing the entire value chain in sequence. My research takes a systemic view, so observing how the different actors, technologies, and processes connect and depend on each other helped me think about markets as whole systems rather than isolated parts. It was a reminder that shaping or governing one part of the chain inevitably has ripple effects elsewhere, and that opportunities and challenges must be understood in their broader context. This experience will influence how I frame and analyse my PhD research, helping me ground theoretical insights in the real-world operations of grain markets from start to finish. It also highlighted how shared visions of innovation, sustainability, and quality are communicated across different actors and mobilise engagement throughout the system. These insights are crucial to understanding how market-shaping processes emerge, gain momentum, and influence the behaviour of diverse participants.



[Support for Canola Trade to Pakistan - Grain Trade Australia](#)

"This outcome follows extensive advocacy and technical engagement led by the Department of Agriculture, Fisheries and Forestry (DAFF) and the Government of Pakistan. The Department's efforts in preparing detailed technical submissions and conducting plant-related engagement activities with Pakistan have been central to this positive result.

GTA CEO Pat O'Shannassy said the decision strengthens opportunities for Australian exporters and growers.

"The Pakistan market has tracked at just over half a million tonnes annually over the past five years. This progress presents a valuable opportunity for Australian canola in both volume and value. Importantly, as more Australian growers adopt genetically modified canola in their rotations, this new market access effectively opens Pakistan to a larger pool of Australian supply."

Rosemary Richards, AOF Chair, said the decision is an important step in supporting ongoing market confidence in Australian canola.

"Science-based, rules-driven market access is critical to maintaining strong and reliable trade pathways for Australian canola. This outcome supports growers and exporters by ensuring our production systems, including the adoption of GM canola, continue to be recognised and accepted in key international markets."

While final import arrangements are still being clarified, GTA understands that Pakistani importers may request a licence or permit to import GM canola. GTA advises any members engaging with counterparties in Pakistan to be aware of this requirement when entering trade discussions."

Outreach

School of Ag, Food and Wine

School of Ag, Food and Wine hosted 150(!) year 10 boys from Prince Alfred College. The visitors learnt about new breeding technologies, robotics and sensory activities. The training centre was heavily represented with Qiwei, Alex, Ciara, Ola, Ben, Bettina and Mel helping with all of the activities.



UoA's Ingenuity Day

And we're back building terrariums again! Today is UoA's Ingenuity Day (School of Ag, Food and Wine hosted 150(!) year 10 boys from Prince Alfred College. The visitors learnt about **new breeding technologies, robotics and sensory activities**. The training centre was heavily represented with **Qiwei, Alex, Ciara, Ola, Ben, Bettina and Mel** helping with all of the activities.), where Honours and Masters students (mainly in engineering and technology) present their projects to industry and high schools. Ola and Stu were here to talk **agriculture/biology/biotech** to the visiting schools, as well as engage with the engineering and technology uni students about the need for their skills in agriculture.



[APPN Blog Article](#)

Adelaide Show

Ciara, Ben, Ola and Stu run a stall for the Royal Adelaide Show



The ANU team - **Asma, Jamie and Zuzana** - are planning great activities for the Canberra Show in February 2026.

If you would like to participate to the event, or help in the logistics or bring ideas, please let them know!

Canola project fieldwork

APPN ANU node field season is in full swing. Teams have travelled to field sites in Wagga Wagga and Greenthorpe (near Young) to contribute a range of unique plant phenotyping infrastructure and expertise to the canola research project 'Determining Source to Sink Relationships in Canola and Identifying Exploitable Genetic Diversity'. The project is part of a \$21 million dollar investment by **NSW Department of Primary Industries and Regional Development (NSW DPIRD)** and **Grains Research and Development Corporation (GRDC)** million to increase the size and stability of Australian canola yield.

APPN ANU Node Director Dani Way (PS) is leading the research effort at ANU alongside **Bob Furbank**, with input from **Florence Danila**, **Andrew Scafaro** and **Owen Atkin**.

Nay Chi, Sadia and Julie in the canola field - Greenthorpe.



I didn't know counting to 5 was that challenging! - Julie



Visits

DD Industry and CEO touching base briefly at each campus

Lauren recently spent a weekend in Adelaide and flew down early in the day to spend the afternoon at the Waite campus with Prog 2, 3 and 4 students. It was so great to see all of our students progress and talk about placements, publications, internships, conference opportunities and careers.



Likewise, Stu managed to pop into the ANU on a visit to the Boorowa Agricultural Research Station for a GRDC meeting recently. Lauren and Stu have been bouncing ideas around for future Centre initiatives and dealing with the (good) problems of having staff be successful in moving into new initiatives.

Media Release

\$4.5m invested in hi-tech drones, sensors to deliver better crops



A major new GRDC investment will significantly expand Australia’s national phenotyping capability through APPN, enabling researchers to **measure crop traits faster, more accurately, and at larger scales** than ever before

[Read more](#)

This nationally coordinated mobile phenotyping network will **accelerate research in plant physiology, disease detection, agronomy, and genetics**, keeping Australian crop science at the forefront of global innovation.

GRDC Proof of Concept

Congratulations to **Dr Florence Danila, Dr Kai Chan and Professor Robert Furbank** on award of a GRDC Proof of Concept grant: “Programmable crops: developing a synthetic biology toolkit to climate-proof crop production”. Stayed tuned for more news on this project soon.

Chickpea Breeding Program Visit and Tamworth Agricultural Institute

Following our previous newsletter, we compiled more information and reflections about our visit on our website:

[Article](#)

CSIRO Boorowa Agricultural Station (BARS)

Thank you to our partner CSIRO for organising tours at the BARS site and supporting our students.

See more here:

[BARS visit](#)

