

# Crush 2024

## 25 - 26 September

Adelaide Convention Centre, South Australia



# Program

\*Program is subject to change

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# Program Day 1 **Session 1**

Wednesday, 25 September 2024 | Riverbank Rooms 2, 3 & 4

Chaired by Dr Christine Böttcher, CSIRO and Dr Dimitra Capone, University of Adelaide

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	09:00 AM	<b>Welcome to Crush 2024</b> Christine Böttcher, CSIRO (WIC Research Group Chair)
1	09:10 AM	<b>Keynote speaker + Q &amp; A</b> Prof. Kym Anderson, University of Adelaide
2	09:35 AM	<b>Remotely sensed crop coefficients of wine grapes for precision irrigation</b> Dr Vinay Pagay, University of Adelaide & Athena IR-Tech
3	09:42 AM	<b>The potential use of natural compounds to manage diseases in grapevines</b> Dr Tarita Furlan, SARDI
4	09:49 AM	<b>From rapid white wine shelf-life test to red wine mouthfeel prediction using the power of machine learning</b> Yingxin Miao, University of Adelaide
5	09:56 AM	<b>Factors affecting the formation of 'struck flint' aroma in wine</b> Dr Toni Cordente, AWRI
6	10:03 AM	<b>Bridging the learning gap between researcher-led field trials and producers own trials.</b> Professor Katherine Evans, University of Tasmania
7	10:10 AM	<b>Evaluating the potential for smoke from prescribed burns to taint grapes and wine</b> Song Yan, University of Adelaide
8	10:17 AM	<b>Pruning cut position affects the susceptibility of grapevine pruning wounds to <i>Eutypa lata</i> and natural dieback</b> Daniel March, University of Adelaide
9	10:24 AM	<b>Understanding the sensory gap between no and low alcohol (NOLO) wine and traditional wine</b> Huanhuan Li, University of Queensland
10	10:31 AM	<b>Cover crops to carbon stocks</b> Dr Joseph Marks, University of Adelaide
11	10:38 AM	<b>Closing the loop on grape marc using insect bioconversion</b> Chris Malcolm, Mobius Farms
	10:45 AM	<b>Q&amp;A</b>
	10:55 AM	<b>Morning Tea (25 minutes)</b>

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# Program Day 1 **Session 2**

Wednesday, 25 September 2024 | Riverbank Rooms 2, 3 & 4

*Chaired by Dr Vinod Phogat, SARDI and Dr Paul Boss, CSIRO*

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11	11:20 AM	<b>Keynote speaker + Q &amp; A</b> Jean Macintyre, Pernod Ricard Winemakers
12	11:45 AM	<b>Exploring the basis of drought resilience in grapevines of varying age</b> Grace Prayogo, University of Adelaide
13	11:52 AM	<b><sup>137</sup>Cs analysis by gamma spectrometry as a tool for dating old wines</b> Vasiliki Thanasi, University of Lisbon
14	11:59 PM	<b>Estimating long-term water demand of grapevine in the Barossa region under current and future climate projections</b> Dr. Vinod Phogat, SARDI
15	12:06 PM	<b>Optimising the use of membrane filtration and adsorbent resin to remediate smoke tainted wine</b> Yiming Huo, University of Adelaide
16	12:13 PM	<b>Grapevines naturally infected with trunk disease pathogens as a potential source of inoculum in the vineyard</b> Colin Starkey, Charles Sturt University
17	12:20 PM	<b>Investigation of the impact of biochar application on soil carbon and nitrogen pools as well as plant water and nitrogen use efficiency in Southeast Queensland vineyard trials</b> Kate Kingston, Griffith University
18	12:27 PM	<b>Consumer acceptance of novel foods and beverages: A systematic literature review and future research agenda for the wine sector</b> Syuzanna Mosikyan, University of Adelaide
19	12:34 PM	<b>Ecosystem monitoring of scale insect and mealybug vineyard pests</b> Dr Chris Ward, AWRI
20	12:41 PM	<b>'Shaken or stirred?' Virus cocktails linked to Shiraz disease impact physiological performance and defence responses in grapevine</b> Dr Vinay Pagay, University of Adelaide
	12.48 PM	<b>Q&amp;A</b>
	01.00 PM	<b>Lunch (1 hour)</b>

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# Program Day 1 **Session 3**

Wednesday, 25 September 2024 | Riverbank Rooms 2, 3 & 4

*Chaired by Dr Mango Parker, AWRI and Dr Tarita Furlan, SARDI*

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21	02:00 PM	<b>Keynote speaker + Q &amp; A</b> Stefano Poni, Università Cattolica del Sacro Cuore
22	02:25 PM	<b>Sensory and Consumer Insights of Australian Red Wines made from Non-Traditional, Emerging Red Grape Varieties</b> Jacob Long, University of Adelaide
23	02:32 PM	<b>Under vine living mulches improve soil physical properties on a Sodosol and Dermosol in Tasmania</b> Philippa French, University of Tasmania
24	02:39 PM	<b>Tracking the evolution of red wine maturation and ageing: Novel approach based on spectrofluorometric fingerprints</b> Shuyue Fan, University of Adelaide
25	02:46 PM	<b>Glutathione and cysteine bound disulfides as sources of 'struck flint' aroma compounds phenylmethanethiol and 2-furylmethanethiol in Chardonnay wine</b> Dr Deanna Langone, AWRI
26	02:53 PM	<b>Understanding salt uptake and accumulation in grapevines</b> Dr Yue Wu, University of Adelaide
27	03:00 PM	<b>The impact of water stress on Petri disease development in young grapevines</b> Dr Jared Hrycan, Charles Sturt University
28	03:07 PM	<b>Understanding the influence of shading on grapevine performance under a Vitivoltaic system</b> Haodong (Torian) Jiang, University of Adelaide
29	03:14 PM	<b>Source to table: Isotope analysis in irrigated agriculture and implications for grape origin traceability</b> Dr Ellyse Bunney, CSIRO
30	03:21 PM	<b>Controlling Brettanomyces: new approaches in wine spoilage management</b> Yanina Giordano, University of Adelaide
	03:28 PM	<b>Q&amp;A</b>
	03:38 PM	<b>Afternoon Tea (25 minutes)</b>

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# Program Day 1 **Session 4**

Wednesday, 25 September 2024 | Riverbank Rooms 2, 3 & 4

*Chaired by Dr Cristian Varela, University of Adelaide and Dr Agnieszka Mierczynska-Vasilev, AWRI*

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31	04:05 PM	<b>Keynote speaker + Q &amp; A</b> Rob Bramley, CSIRO
32	04:30 PM	<b>Physiological events that underlie berry cell death and shrinkage</b> Lishi Cai, University of Adelaide
33	04:37 PM	<b>Can spinning cone column distillation and activated carbon remediate smoke taint in wine?</b> Ysadora Mirabelli-Montan, University of Adelaide
34	04:44 PM	<b>Boosting vineyard biodiversity: Using sound and AI for improved bird monitoring</b> Callan Alexander, Queensland University of Technology
35	04:51 PM	<b>How can we best use statistical methods to quantify the impact of climate change on the wine industry? A case study for Australia</b> Dr German Puga, University of Adelaide
36	04:58 PM	<b>Developing strategies to monitor powdery mildew resistance to fungicides in Australian vineyards</b> Dr Ismail Ismail, SARDI
37	05:05 PM	<b>Innovative SPE technique for analysis of polysulfides in wine and beer</b> Yu Hou, University of Adelaide
38	05:12 PM	<b>Grapevine root distribution and implications for water and nitrogen uptake in cover cropped vineyards</b> Calvin Lam, Charles Sturt University
39	05:19 PM	<b>Comparing the drought resilience traits of traditional and emerging grapevine cultivars in Australia</b> Caoyang Wang, University of Adelaide
	05:26 PM	<b>Q&amp;A</b>
	05:36 PM	<b>Official closing of Crush Day 1</b> Dr Cristian Varela, University of Adelaide (Crush Planning Committee Chair)
	05:45 PM	<b>Pre-dinner Drinks</b> Foyer A/B <b>Sponsored by Jacob's Creek</b>
	06:15 PM – 09:00 PM	<b>Crush 2023 Dinner and Awards</b> Foyer A/B <b>Sponsored by Jacob's Creek</b>

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# Program Day 2

Thursday, 26 September 2024 | Riverbank Rooms 2, 3 & 4

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	11:00 AM	<i><b>Morning Tea</b></i>
1	11:30 AM	<i><b>Welcome to Crush Day 2</b></i> Dr Eveline Bartowsky, ASVO, Director, Lallemand
2	11:35 AM	<i><b>Australian research priorities</b></i> Dr Paul Smith, Wine Australia, General Manager, Research and Innovation
3	11:55 AM	<i><b>Australian wine research in a global scientific context</b></i> Dr Mark Krstic, AWRI, Managing Director
4	12:15 PM	<i><b>Wine research perspectives - opportunities</b></i> Dr Chris Ford, University of Adelaide, Deputy Dean of Graduate Studies
5	12:35 PM	<i><b>The future of the journal publishing experience... and how we get there</b></i> Tamara D'Mello, Wiley, Associate Publisher, Research
	12:55 PM	<i><b>Q&amp;A</b></i>
	01:05 PM	<i><b>Lunch</b></i>
6	01:35 PM	<i><b>Increasing your research impact</b></i> Ashlinn Theroux, Wiley, Journals Marketing Manager
7	02:05 PM	<i><b>Communication - the forgotten critical skill of a research professional?</b></i> Libby Tedstone, Wine Australia, National Extension & Adoption Manager
8	02:25 PM	<i><b>The rise of AI</b></i> Dr. Hong Zhou, Wiley, Director of Intelligent Service Group and AI R&D
	02:45 PM	<i><b>Q&amp;A</b></i>
	03:00 PM	<i><b>Official Closing of Crush 2024</b></i>
	03:10 PM - 04:00 PM	<i><b>Afternoon tea</b></i>

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Crush 2024 is supported and coordinated by contribution from the following:

## WIC Research Group, Crush 2024 Program Committee, ASVO

### **WIC Research Group**

Christine Böttcher (Chair)  
Kerry Wilkinson  
Paul Petrie  
Markus Herderich

### **Crush 2024 Planning Committee**

Cristian Varela (Chair)  
Dimitra Capone (Co-Chair)  
Christine Böttcher  
Paul Boss  
Vinod Phogat  
Tarita Furlan  
Mango Parker  
Agnieszka Mierczynska-Vasilev  
Cerys Colquhoun (WIC EO)

### **ASVO**

Chris Waters