



# NATURAL HAZARDS

## RESEARCH FORUM

MELBOURNE, 1–3 MAY 2023

### PROGRAM

Storey Hall, RMIT University, Melbourne City Campus

**slido**  
SCAN TO PARTICIPATE  
CODE: **NHRF23**

Research with Impact –  
Provoke, Inspire,  
Challenge, Be Involved

## Participation at NHRF23:

Participate in person or online using Slido. Scan the QR code in this program to join. No app is required!

If you run into any technical difficulties, please contact Vaia Smirneos: 0413 419 428, [vaia.smirneos@naturalhazards.com.au](mailto:vaia.smirneos@naturalhazards.com.au)



Australian Government

We acknowledge the Traditional Custodians of the land on which the Natural Hazards Research Forum is being held, the Wurundjeri people of the Kulin Nations, and we pay our respects to their Elders past, present and emerging. We also acknowledge the Wurundjeri peoples' continued contribution to the life and culture of the Naarm-Melbourne region, and recognise that these lands and waters have always been places of teaching, research and learning. In the spirit of reconciliation, we extend this acknowledgment and respect to all First Nations peoples, including any First Nations delegates here today.

Join the conversation **#NHRF23**



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STOREY HALL, RMIT UNIVERSITY, MELBOURNE CITY CAMPUS, 1–3 MAY 2023

## Research with Impact – Provoke, Inspire, Challenge, Be Involved

Program includes keynotes, presentations, panel discussions, workshops and networking.

### Day 1: Monday 1 May

## #NHRF23

Time	Topic
<b>Private session: Student and Early Career Researcher professional development</b>	
10:00am	<b>Welcome and overview of Natural Hazards Research Australia</b> Prof Deborah Bunker, Natural Hazards Research Australia
10:15am	<b>Presentation: How to give your research impact</b> Dr Marco de Sisto, RMIT University
11:15am	<b>Research speed dating</b>
12:15pm	<b>Lunch and poster session</b>
1:15pm	<b>Presentation: How to communicate your research for impact</b> Bethany Patch and Radhiya Fanham, Natural Hazards Research Australia
1:45pm	<b>Workshop: Climate science for natural hazards researchers</b> John Clarke, CSIRO

Time	Topic
<b>Natural Hazards Research Forum: public sessions begin</b>	
2:00pm	<b>Registration desk opens</b>
3:00pm	<b>Introduction and welcome</b> Andrew Gissing, Natural Hazards Research Australia
3:05pm	<b>Presentations and Q&amp;A: Urban heat impacts</b> Tiffany Crawford, City of Melbourne Kelly Gee and Judith Bruinsma, Western Sydney Regional Organisation of Councils
4:00pm	<b>Workshop: Be ahead of ready: building our future on today's research</b> Martijn Gough, Aither
5:30pm	<b>Welcome drinks</b>

Program subject to change



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### Day 2: Tuesday 2 May

## #NHRF23

Time	Topic
8:00am	<b>Registration desk opens</b>
8:30am	<b>Welcome to Country and smoking ceremony</b>
8:45am	<b>Welcome</b> Prof Calum Drummond AO, Deputy Vice-Chancellor Research and Innovation, RMIT University Senator the Hon Murray Watt, Minister for Emergency Management (video)
9:00am	<b>Keynote</b> Brendan Moon AM, Coordinator-General for Emergency Management, National Emergency Management Agency
9:30am	<b>First Nations presentation: Cultural land management research and governance in south-east Australia</b> Dr Timothy Neale, Deakin University Dr Andrea Rawluk, University of Melbourne Oliver Costello, Jagun Alliance
<b>5-minute project presentations</b>	
9:45am	<b>Severe weather impact prediction</b> Liza Gelt, Collaborative Consulting <b>Flash flooding case studies to improve predictions and the communication of uncertainty</b> Dr Carla Mooney, Bureau of Meteorology <b>Developing an integrated predictive capability for extreme rainfall and inundation</b> Paul Fox-Hughes, Bureau of Meteorology <b>Long-range flood outlook for strategic preparedness</b> Dr Wendy Sharples, Bureau of Meteorology <b>This session will include short PhD presentations</b>
10:15am	<b>First Nations presentation: Healing Country through Wolgalu/Wiradjuri-led land management</b> Megan Considine, Brungle-Tumut Local Aboriginal Land Council A/Prof Lisa Slater, University of Wollongong
10:30am	<b>Morning tea</b>

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## 5-minute project presentations

- 11:00am **Storing and sharing qualitative social data**  
Dr Deanne Bird, Monash University
- Understanding the resilience of lifelines for regional and remote communities**  
Prof Lauren Rickards, La Trobe University
- Natural hazards and resilience in complex urban systems**  
Dr Blythe McLennan, Natural Hazards Research Australia
- Community risk assessment**  
Dr Nader Naderpajouh, University of Sydney
- Modelling the impacts of sequential cascading natural hazards**  
Dr Matthew Mason, University of Queensland
- Fire studies at the Bureau of Meteorology**  
Dr Jeff Kepert, Bureau of Meteorology
- Identifying and defining landscape dryness thresholds for fires**  
Dr Thomas Duff, Country Fire Authority (Vic)
- Predictions in public: understanding the design, communication and dissemination of predictive maps to the public**  
Dr Chloe Begg, Country Fire Authority (Vic)
- Bushfire risk at the rural–urban interface**  
Prof David Bowman, University of Tasmania
- Integrated solutions for bushfire-adaptive homes**  
Dr Raphaele Blanchi, CSIRO
- This session will include short PhD presentations**

## 12:30pm Lunch and poster session

## 5-minute project presentations

- 1:30pm **Enhancing decision making in emergency management**  
A/Prof Chris Bearman, CQUniversity
- Translating extreme bushfire behaviours to improve bushfire prediction**  
Chris Morton, Department of Energy, Environment and Climate Action (Vic)  
Alen Slijepcevic, Country Fire Authority (Vic)
- What makes a good fire simulator?**  
Dr Hamish Clarke, University of Melbourne
- Reimagining emergency management volunteering: more than words**  
Dr Blythe McLennan, Natural Hazards Research Australia
- Awareness, education and communications for compound natural hazard events**  
Dr Gabi Mocatta, Deakin University
- Identifying water sources for aerial firefighting**  
Dr Caitlin Adams, FrontierSI
- Why fly: how do we know that aerial firefighting operations are effective and efficient?**  
Sandra Whight, National Aerial Firefighting Centre
- 2:15pm **First Nations presentation: Cultural land management**  
Shaun Hooper and Dr Mal Ridges, NSW Department of Planning and Environment

## 2:30pm Afternoon tea

- 3:00pm **Presentation: 2023 Disaster Challenge**  
Dr Blythe McLennan, Natural Hazards Research Australia

- 3:15pm **Yarn with First Nations research teams: challenge and opportunities for research utilisation**  
Jack Pascoe, Conservation Ecology Centre and University of Melbourne  
Shaun Hooper and Dr Mal Ridges, NSW Department of Planning and Environment  
Megan Considine, Brungle-Tumut Local Aboriginal Land Council  
A/Prof Lisa Slater, University of Wollongong  
Dr Timothy Neale, Deakin University  
Oliver Costello, Jagun Alliance

## 4:30pm Break

- 5:00pm–7:00pm **Networking function: drinks and finger food**

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## Research with Impact – Provoke, Inspire, Challenge, Be Involved

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### Day 3: Wednesday 3 May

Time	Topic				
8:00am	<b>Registration desk opens</b>				
8:30am	<b>Welcome</b> Andrew Gissing, Natural Hazards Research Australia				
8:40am	<b>Findings launch: Community experiences of the Jan-July 2022 floods in NSW and Qld</b> Key agency representatives A/Prof Mel Taylor, Macquarie University				
9:15am	<b>Research utilisation: Rigour, relevance and relationships – child-centred bushfire education for 21<sup>st</sup> century schools</b> Dr Briony Towers, Leadrrr Neil Munro, Country Fire Authority (Vic)				
<b>Project workshops</b>					
	<table border="1"> <thead> <tr> <th>Stream 1: Risk mitigation – bushfire and prediction</th> <th>Stream 2: Next generation capability – decision making and data</th> <th>Stream 3: Risk mitigation – flood and extreme weather</th> <th>Stream 4: Land-use planning and urban design and resilient recovery</th> </tr> </thead> </table>	Stream 1: Risk mitigation – bushfire and prediction	Stream 2: Next generation capability – decision making and data	Stream 3: Risk mitigation – flood and extreme weather	Stream 4: Land-use planning and urban design and resilient recovery
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11:05am	<b>Morning tea</b>			
11:30am	<b>Workshop: Bushfire risk at the rural–urban interface</b> <b>Facilitators:</b> Prof David Bowman, Dr Grant Williamson, Dr Stefania Ondeï, Dr Sharon Campbell, Amila Wickramasinghe, University of Tasmania; John Gilbert, Country Fire Authority (Vic); Melissa O’Halloran, NSW Rural Fire Service; Jeremy Little, Department of Energy, Environment and Climate Action (Vic)	<b>Joint workshop: Bushfire information database</b> <b>Research data management</b> <b>Facilitators:</b> Prof Deborah Bunker, Natural Hazards Research Australia; Dr Nader Naderpajouh, University of Sydney	<b>Workshop: Severe weather impact prediction</b> <b>Facilitators:</b> Dr Mike Rumsewicz; Liza Gelt, Rosie Tran, Collaborative Consulting; Dr Harald Richter, Bureau of Meteorology; Craig Arthur, Geoscience Australia	<b>Workshop: Awareness, education and communication for compound natural hazards</b> <b>Facilitator:</b> Dr Gabi Mocatta, Prof Kristy Hess, Dr Erin Hawley, Deakin University
12:10pm	<b>Transition</b>			
12:15pm	<b>Workshop: Integrated solutions for bushfire-adaptive homes</b> <b>Facilitators:</b> Dr Raphaele Blanchi, Laura Kostanski, CSIRO; Dr Mittul Vahanvati, RMIT University; Mark Holland, Dr Chloe Begg, John Gilbert, Country Fire Authority (Vic); Peter Kamstra, University of Melbourne	<b>Workshop: Storing and sharing qualitative social data</b> <b>Facilitators:</b> Dr Deanne Bird, Monash University; Lyndsey Wright, Don Sharples, Altometer Business Intelligence	<b>Workshop: Modelling the impacts of sequential cascading natural hazards</b> <b>Facilitators:</b> Dr Matthew Mason, Dr David Lange, University of Queensland	<b>Workshop: Community-led recovery: evidence, dimensions, and supports for Community Recovery Committees</b> <b>Facilitators:</b> Dr Kate Brady, Dr Colin Gallagher, Hannah Morrice, University of Melbourne
12:55pm	<b>Lunch</b>			
	<b>Public event</b>			
1:45pm	<b>Keynote: Social infrastructure’s critical role in mitigating shocks</b> Prof Daniel Aldrich, Northeastern University, United States			
2:30pm	<b>Panel: Disaster resilience and leadership: ensuring that research has impact</b> Prof Daniel Aldrich, Northeastern University, United States Christine Ferguson, Department of Energy, Environment and Climate Action (Vic) Hannah Wandel, National Emergency Management Agency			
	<b>Closing session</b>			
3:00pm	<b>Wrap-up</b> Iain MacKenzie, Natural Hazards Research Australia Prof Deborah Bunker, Natural Hazards Research Australia			
3:30pm	<b>Forum closes</b>			

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