



The 8th International Conference on Rodent Biology and Management

Canberra Rex Hotel, Australia
1st – 5th September 2025

Program

Sponsors:



SUNDAY, 31st August 2025

1500-1700h	Registration - Foyer	Provide PowerPoint presentations to AV technician
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MONDAY 1st September 2025

0730-0845	Registration - Foyer	Provide PowerPoint presentations to AV technician
0845-0915	Opening Ceremony	Lyn Hinds, Zhibin Zhang <i>Guest speaker:</i> Dr Wendy Umberger, ACIAR CEO
	Managing overabundant rodents	<i>Chair: Wendy Ruscoe</i>
0915-1015	Plenary: Steve Henry	Listening to farmers to improve house mouse management
1015-1050	MORNING TEA	
	Managing overabundant rodents	<i>Chairs: Tanya Strive, Leigh Nelson</i>
1050-1110	Matthew Rees	Forecasting mouse plagues in Australian grain growing regions
1110-1130	Jim Hone	In wildlife conservation and pest control, do management efforts cause the observed outcomes and show diminishing returns?
1130-1150	Peter Banks	Improving rodent trap success using information decoys
1150-1210	David Forsyth	Population dynamics of the non-native house mouse (<i>Mus musculus</i>) in pasture-cropping systems, New South Wales, Australia
1210-1230	Nyo Me Htwe	Population dynamics of rodents in Southeast Asian rice fields and their association with rainfall changes
1230-1245	Speed talks	(1) Ryan Sarre; (2) Jared Trask; (3) Todisoa Radovimiandrinifary; (4) Soanandrasana Rahelinirini; (8) Qinghua Li
1245-1330	LUNCH	
	Managing overabundant rodents	<i>Chairs: Peter Brown, Nyo Me Htwe</i>
1330-1350	Roman Fornesa	Evaluating the effectiveness of relative abundance techniques (RATs) for monitoring rodent abundance and predicting rodent damage in rice agroecosystems in the Philippines
1350-1410	Hashani Jayaweera	A comparative study on the trapping efficiency of five different types of traps for rice field rodents in Sri Lanka
1410-1430	Ryoko Koizumi	Understanding the behaviour of black rats: year-round diel activity pattern and trap responses on a livestock farm
1430-1450	Junhu Su	Outbreak mechanisms and prevention methods of a subterranean rodent in the eastern margin of Qinghai-Tibet Plateau
1450-1510	Siriwardana R. Sarathchandra	A study on Bg 403 rice variety as a trap crop on the management of <i>Bandicota bengalensis</i> (Lesser Bandicoot Rat) in rice cultivation, Sri Lanka
1510-1530	Speed talks	(10) Pauline Van Leeuwen; (11) Soanandrasana Rahelinirini; (12) Herwig Leirs; (14) Carly Hilbert; (16) Neena Singla
1530-1600	AFTERNOON TEA - POSTERS	
	Physiology	<i>Chairs: Dawei Wang, Lyn Hinds</i>
1600-1620	Hanyi Zhu	Gut microbes mediate rodent responses to environmental change
1620-1640	Chaoyuan Cheng	Dietary shift caused dramatic diversity loss and instability of gut microbiota in Brandt's vole
1640-1700	Jianshi Jin	Profiling the microbiota of wild rodents through high-throughput single-cell analysis
1700-1720	Zhenlong Wang	Fuel source shift or cost reduction: Context-dependent adaptation strategies in closely related <i>Neodon fuscus</i> and <i>Lasiopodomys brandtii</i> against hypoxia
1720-1740	Qinghua Li	GDF15 Up-regulation in Brandt's voles hippocampus under acute hypoxia: driving metabolic reprogramming
1815-1915	Welcome Reception, Canberra Rex	

TUESDAY 2nd September 2025

	Human-Wildlife-Diseases	<i>Chair: Steve Belmain</i>
0815-0915	Plenary: Chelsea Himsworth	From data to knowledge to wisdom: lessons learned from the Vancouver Rat Project
	Human-Wildlife-Diseases	<i>Chair: Herwig Leirs</i>
0915-1015	Plenary: Federico Costa	Rodent management in urban landscapes – developing country perspectives
1015-1040	MORNING TEA - POSTERS	
	Human-Wildlife-Diseases	<i>Chairs: Chelsea Himsworth, Vincent Sluydts</i>
1040-1100	Katherine August	Invasive species management strategies in a One Health system
1100-1120	Ko-Huan Lee	Disease profiling of mouse populations in grain cropping regions of Australia
1120-1140	Herwig Leirs	Rodentgate: future rodent management for pig and poultry health
1140-1200	Juan José Luque-Larena	Cyclic common vole populations drive recurrent risk of tularemia in mediterranean farmland
1200-1220	Algimantas Paulauskas	Rodents and their role in zoonotic disease transmission in a highly endemic European zone
1220-1240	Vincent Sluydts	Drivers of host-pathogen community assemblies in European forests and urban green spaces
1240-1330	LUNCH	
	Human-Wildlife-Diseases	<i>Chair: Grant Singleton</i>
1330-1430	Plenary: Steven Belmain	Putting rodents at the centre of One Health programmes - lessons and experiences
	Human-Wildlife-Diseases	<i>Chairs: Zhibin Zhang, Kevin Oh</i>
1430-1450	Marina Voinson	Rodent-borne pathogen dynamics and control in agricultural environments: an eco-epidemiological modeling approach
1450-1510	Voahangy Soarimalala	Ecological and zoonotic impacts of <i>Rattus rattus</i> in Madagascar: evidence from repeated trapping across diverse habitats
1510-1530	Noh Ismail	Environmental risk factors and hotspot identification for rat activity in Singapore
1530-1600	AFTERNOON TEA - POSTERS	
1600-1620	Yan Zhuang	Urban rats, hidden threats: direct genotyping of <i>Leptospira</i> using a multi-locus sequence typing approach
1620-1640	Soanandrasana Rahelinirina	Zoonotic risk at the edge: plague and leptospirosis in rodent populations in rural Madagascar 2022 - 2024
1640-1700	Egidius Rwebuga	Structure of small mammal communities in agricultural land and communally protected forest within a plague focus in Karatu District, Tanzania
1700-1720	Carly Hilbert	Mapping the harms of urban rats: a scoping review of social, economic and health impacts
1720-1740	Yukun Kang	Genetic differentiation and interspecific gene introgression in <i>Myospalacinae</i> : a study from grassland ecosystems on the Qinghai-Tibet Plateau

WEDNESDAY 3rd September 2025

	Emerging technologies	<i>Chair: Steve Henry</i>
0830-0930	Plenary: Paul Thomas	Developing CRISPR gene drives for invasive rodent population suppression
	Emerging technologies	<i>Chairs: Steve Henry, Ryan Sarre</i>
0930-0950	Kevin Oh	Toward translation of the world's first murine gene drive: from laboratory proof-of-concept to island deployment
0950-1010	Aysegul Birand	Evaluating the eradication potential of gene drives in invasive mice and rat populations
1010-1030	Chloe Faulks	Mouse surveillance case study using an autonomous sensing platform
1030-1100	MORNING TEA - POSTERS	
1100-1120	Charles Eason	Advancing the registration of norbormide as an alternative to broad-spectrum rodenticides
1120-1140	Xiao-Hui Liu	Application of seasonality in designing and optimizing the data acquisition framework for rodent pest monitoring and early warning
1140-1200	Dawei Wang	Application of intelligent monitoring technologies for wild rodents in agro-pastoral ecosystems in China: current status and development trends
1200-1220	Neena Singla	Nano-encapsulation of fertility control agents: a game-changer for long-term oral contraception in rodents
1220-1240	Speed talks	(16) Mathea Michie; (17) Karmadine Hima; (18) Yun Zhuang; (19) Desamarie Fernandez
1240-1400	LUNCH	
1400-1830	Half day field trip	Mulligans Flat Wildlife Sanctuary

THURSDAY 4th September 2025

	Parallel session (Room 2: AM only)	
	Evolutionary biology	<i>Chairs: Herwig Leirs, Matt Rees</i>
0930-0950	Zandile Fakude	Integrative taxonomy reveals diversity of commensal rodents and their co-occurrence with non-commensal small mammals in urban and agricultural habitats in the eastern Free State
0950-1010	Ying Song	Spread of a single anticoagulant resistance <i>Vkorc1</i> haplotype in Asian house rats across China
1010-1030	Wieteke Holthuijzen	Failed mouse eradication on Sand Island: a case of novel rodenticide resistance?
1030-1100	MORNING TEA - POSTERS	
1100-1120	William Breed	The reproductive biology of Australian hydromyine rodents
1120-1140		
1140-1200	Natalia Feoktistova	Genetic structure and parasitic load of striped field mouse (<i>Apodemus agrarius</i>) in a megacity
1200-1220	Alexey Surov	The genetic structure of semi-commensal rodents in urban areas (an example of the common hamster)
1220-1240	Speed talks	(20) Karmadine Hima; (21) Kong Yang; (22) Anamaria Lazar
1240-1330	LUNCH	

THURSDAY 4th Sept

	Parallel session (Room 1)	
	Social attitudes	<i>Chair: Peter Brown</i>
0830-0930	Plenary: Rica Joy Flor	Scaling up rodent management: leveraging stakeholder networks, communication strategies, and innovative solutions
	Social attitudes	<i>Chairs: Peter Brown, Eva Moore</i>
0930-0950	Lucy Carter	Recognising the multiple, interrelated human and social impacts of an Australian mouse plague
0950-1010	Aditi Mankad	A model of psychosocial impacts during the 2021 NSW mouse plague
1010-1030	Walter Okelo	The economic impact of the 2021 NSW mouse plague
1030-1100	MORNING TEA - POSTERS	
1100-1120	Rebecca Paxton	Living with mice: perspectives on mice and mouse management from a South Australian community case study.
1120-1140	Sydney Newell	Pestilence and power: rat control, identity formation, and statecraft across Bermuda, Virginia, and New York City
1140-1200	Karmadine Hima	Walking towards EBRM within poor urban settings: a comparative analysis of knowledge, attitudes and perceptions on rodent issues in Benin, Madagascar and Niger
	Behavioural ecology	<i>Chairs: Wendy Ruscoe, Ko-Huan Lee</i>
1200-1220	Shanaz Masani	Black rats generalise across olfactory cues of different birds
1220-1240	Nikki Van de Weyer	Revealing burrow secrets: a short-term study of social organisation in free-living house mice
1240-1330	LUNCH	
	Behavioural ecology	<i>Chairs: Wendy Ruscoe, Ko-Huan Lee</i>
1330-1430	Plenary: Araceli Samaniego	Rodent eradications on islands: bridging strategic vision and operational success
1430-1450	Xianfeng Yi	The maintenance mechanism of spatial memory in hibernating food-storing rodents: a case study of the Siberian chipmunk
1450-1510	Laura Grant	Behavioural drivers of responses of introduced rats to management devices: effect of rat origin and bait station construction material
1510-1540	AFTERNOON TEA - POSTERS	
1540-1600	Catherine Price	Multimodal information use by foraging rodents – if, when, why?
1600-1620	Changlu Wang	Using game cameras to monitor Norway rat foraging and nesting behaviour in apartment buildings
1620-1640	Pei-Jen Shaner	Ultrasonic vocalizations in adult Taiwan voles (<i>Alexandromys kikuchii</i>)
1640-1700	Georgia Muller	Vocalisation library development for nine rodent species in Mpumalanga, South Africa

FRIDAY 5th September 2025

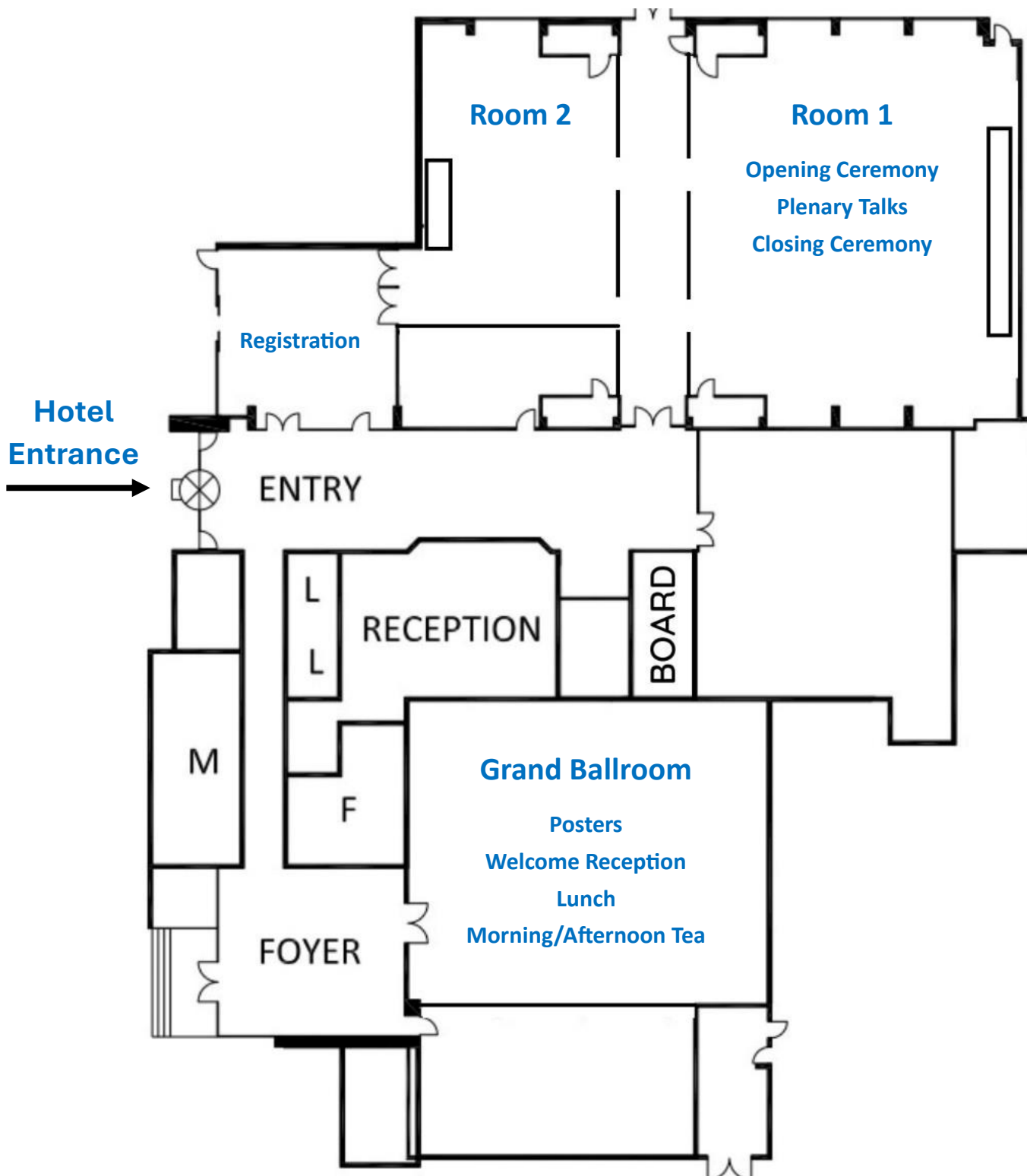
	Ecology and conservation	<i>Chair: Peter Banks</i>
0830-0930	Plenary: Xavier Lambin	Conserving an endangered cultural icon, the water vole, in the face of American mink invasion of Britain: ecology, management and people
	Ecology and conservation	<i>Chair: Chris Pavey</i>
0930-1030	Plenary: Aaron Greenville	Contrasting dynamics of small desert mammals and the implications for conservation and management
1030-1100	MORNING TEA - POSTERS	
	Ecology and conservation	<i>Chairs: Peter Banks, Nikki Van de Weyer</i>
1100-1120	Zhibin Zhang	Broad-scale climate change drives population dynamics of rodents
1120-1140	Mmatsawela Ramahlo	Minimally invasive data collection techniques for long-term monitoring of ecosystem health using free-ranging southern African rodents as biological indicators
1140-1200	Maria Oosthuizen	Rodents in the Anthropocene: the importance of temporal niches
1200-1220	Nico Avenant	Reimagining small mammal monitoring: a non-invasive approach using footprint identification technology
1220-1240	Justin Ladia	Effects of habitat characteristics on the diversity and abundance of rodents in the forest ecosystem of Mt. Mangan, Dingalan, Aurora, Northern Sierra Madre, Philippines
1240-1330	LUNCH	
	Ecology and conservation	<i>Chairs: Federico Costa, Nico Avenant</i>
1330-1350	Aris Reginaldo	Small-mammal community structure in disturbed landscapes in upland Central Cordillera, Luzon Island, Philippines
1350-1410	Emerson Vieira	Differential use of a keystone plant resource by small rodents in the sub-tropical Brazilian Atlantic Forest
1410-1430	Risnelli	Foraging behaviour of rice-field rats (<i>Rattus argentiventer</i>) in the presence of barn owls (<i>Tyto alba</i>) in Aceh, Indonesia
1430-1450	Lehlohonolo Mofokeng	Ectoparasite communities of small mammals from different habitats in the eastern Free State, South Africa
1450-1510	Diane Castillo	From traps to maps: Integrating optimized habitat and distribution modelling to advance ecologically rodent based management in the Philippines, with special reference for <i>Rattus</i> species
1510-1530	Minoarisoa Rajerison	Plague in small mammals from an endemic focus of the Malagasy Central Highlands: A longitudinal survey with a special reference on black rats (<i>Rattus rattus</i>)
1510-1545	AFTERNOON TEA	
1545-1630	Closing Ceremony/Awards	<i>Grant Singleton/Lyn Hinds, Peter Brown et al</i>
1800-2200	Conference dinner	Gold Creek Station, Hall

Poster list

Please mount your poster on the board with your allocated number.

(1) Ryan Sarre	Rapid assessment of mouse abundance across Australia to predict house mouse outbreaks
(2) Jarad Trask	PESTMAP: Development of an Agent Based Model to simulate rodent movements in agricultural settings
(3) Todisoa Radovimiandrinifarany	Preferred habitat and reproduction of introduced small mammals (<i>Mus musculus</i> , <i>Rattus rattus</i> and <i>Suncus murinus</i>) in rural villages of Analavory, highland of Madagascar
(4) Tahiana Randrianirina/ <u>Soanandrasana Rahelinirini</u>	Rodent mobility within vulnerable urban socio-ecosystems: a study in Antananarivo, Madagascar
(5) Florian Huels	Improving effectiveness in the management of Norway rats through adaptations of non-chemical alternatives
(6) Mian Gul Hilal/ <u>Dawei Wang</u>	Variations in microbial function along density gradients in soil and the Brandt's vole gut
(7) Huanhuan Wang/ <u>Dawei Wang</u>	Gut microbiota are potentially involved in postnatal development and photo-refractoriness of gonadal activity under different photoperiodic exposure in male Brandt's vole, <i>Lasiopodomys brandtii</i>
(8) PanPan Lu/ <u>Qinghua Li</u>	Studies on the role of microglia in hypoxic injury of hippocampi of <i>Lasiopodomys brandtii</i>
(9) Jiahui Song/ <u>Zhenlong Wang</u>	Molecular mechanism of Timp2 mediated liver hypoxia tolerance in Brandt's voles (<i>Lasiopodomys brandtii</i>)
(10) Pauline Van Leeuwen	Microbiome insights into zoonotic risk at wildlife-human interfaces in a transitioning landscape in Thailand
(11) Rija Z. Andrianarisoa/ <u>Soanandrasana Rahelinirini</u>	Rickettsial diseases as an under-documented infectious risk in disadvantaged urban areas: a case study in an observatory site in Antananarivo, Madagascar
(12) Joachim Marien/ <u>Herwig Leirs</u>	Biodiversity changes in African forests and the emergence of infectious diseases: should we worry?
(13) Adedayo Awoniyi/ <u>Federico Costa</u>	Improving urban rodent management through movement assessment in high-risk communities
(14) Carly Hilbert	From rat counts to risk counts: applying the Rat Risk Index to urban rodent management in Richmond, British Columbia
(15) Dimple Mandla/ <u>Neena Singla</u>	Tiny particles, big impact: extended reproductive suppression via Quinestrol nanobait
(16) Mathea Michie	Establishing a wild house mouse colony to support translational research for gene drive
(17) Karmadine Hima	Biological invasions of rodents in West Africa: Introducing the Wan@bi Network as a multi-stakeholder science-society interface tool
(18) Erica Sena Neves/Yan Zhuang	From whiskers to DNA: unravelling <i>Rattus</i> diversity and its implications for urban management in Singapore
(19) Desamarie Fernandez	Spatial ecology of endemic squirrels in Puerto Princesa Subterranean River National Park, Palawan Island, Philippines
(20) Karmadine Hima	ObsMiCE, West African Observatory of small mammal indicators of environmental changes
(21) Kong Yang	Effect of bioturbation by plateau pika (<i>Ochotona curzoniae</i>) on soil carbon and nitrogen stocks in alpine meadows
(22) Anamaria Lazar	Structural and functional responses of small mammal communities to land abandonment in a region of high biodiversity

Venue map



For parking information, please visit the conference venue page (<https://icrbm2025.org/venue/>) or speak directly with the hotel reception.