Conference Day 1 – Wednesday 1st October

Time	Session Details			
8:30	Registration			
8:40-9:00	**Kathleen Fitzpatrick Theatre – Chair: Lisa Godinho**			
	Welcome to Country Introduction & housekeeping Opening address: Prof Emma Johnson (Vice Chancellor, University of Melbourne)			
9:00-10:00	Keynote – Dr Claire Meaders Ripple Effects: From Individual Practice to Shifting Teaching Culture in STEM			
10:00-10:30	Morning Tea			
	Parallel Session			
10:30-10:50	**Session 1** **Room 253 (Level 2)** Chair: Suresh Krishnasamy	**Session 2** **Room 256 (Level 2)** Chair: Tracey Kuit	**Session 3** **Room 156 (Level 1)** Chair: Safieh Soleimannejad	**Session 4** **Forum Theatre (Level 1)** Chair: TriThang Tran
	Investigating quantitative skill preparedness when transitioning from stage 6 science to tertiary science studies. *Tingyue Hou**	Improving quantitative literacy skills for biomedical science students through targeted e-learning resources. *Mehansa De Alwis**	Experiences of sex and gender inclusivity in science classrooms. *Hendrika M. Duivenvoorden*	Promoting growth and excellence in data science education: developing a mentoring ecosystem. *Diane Warren*
10:50-11:10	What attributes best prepare students for specialist science secondary schools? *Sakol Warintaraporn**	Impacts of virtual team-teaching vs solo lecturing on the first year student experience in earch systems science. *Rory McNab**	Unlocking student potential with inclusive teaching strategies. *Leesa Sidhu*	Universal design for learning applied to an undergraduate statistics subject. *Adriana Zanca*
11:10-11:30	STEM education as a pedagogy that reveals primary student's 'super-powers'. *Jennifer Way*	Digital disruptions of student interactions during problem solving. *Kimberly Vo*	Sign language as a universally designed teaching and learning tool for 3D representation in chemistry education. *Anna Gonzalez**	Exploring generative AI's potential for curriculum mapping. *Emily Faulconer*
11:30-11:50	Links between perceived uncertainty and science confidence in high school students. *Maria M. Pettyjohn**	Longitudinal insights from students' science reports through AI-driven data analysis. *James D Cleaver*	Quiet classes: low-sensory teaching environments. *Melanie Robertson-Dean & Danielle Burgess*	Somewhere to hang your hat: the schema and scaffolding benefits of unit narratives and activity-level learning outcomes. *James Brown*
11:55-12:15	**Forum Theatre (L1) – Chair: Tom Hiscox**		**Room 156 (L1) – Chair: Anna Phillips**	
	Poster lightning talks Session A		Poster lightning talks Session B	
12:15-12:45	Lunch			
12:45-1:30	Poster Session			

	Parallel Session			
	Session 1 **Room 253 (Level 2)** Chair: Brian Yates	**Session 2** **Room 256 (Level 2)** Chair: Januar Harianto	**Session 3** **Room 156 (Level 1)** Chair: Megan Taylor	**Session 4** **Forum Theatre (Level 1)** Chair: Amany Gouda-Vossos
1:30-1:50	Embedding Indigenous perspectives in IT innovation and entrepreneurship education. *Jack Li*	Practice Before Theory? Rethinking instructional order in undergraduate anatomy. *Suresh Krishnasamy*	Re-imagining assessment in a physics course for aviation students. *Sam Tuttle*	Australian DBER: Investigating the landscape and developing innovative training resources. *Elizabeth Yuriev*
1:50-2:10	Designing and evaluating place-based cultural immersions for transformative learning. *Rebecca Cross*	Measuring more than biodiversity: enhancing student engagement through field-based learning. *Francesca van den Berg*	Beyond the gradebook: assessing large student cohorts and reimagining the future of assessment in the age of AI. *Stephanie Wallace & Kylle Quinn*	Is it me? Why students don't turn up for class. *Katrina Blazek*
2:10-2:30	Engaging the Community in Science: A Student-Led Model for Inclusive STEM Outreach and Experiential Learning. *Joanne Jamie*	Enhancing nutrition physiology learning through Reality Bites™ VR. *Jessica Danaher*	Authenticity in physiology education. *Marwa Abdoul Ghayour*	Taking a program-level approach to curriculum design. *Mohammad Rafat*
2:30-2:50	ACDS Elevating Indigenous Science in Higher Ed - looking to the future. *Lisa Godinho & Angela Ziebell*	360-degree virtual lab and field trip inductions for science disciplines. *Michelle Spencer*	Exploring the impact of 'choose your own' assessment styles in large chemistry/biology units in a post AI world. *Michael Widjaja & Joy Ghrayche*	Investigating the influence of well-being and self-efficacy on motivation. *Daniel Andrews*
2:55-3:50	**Kathleen Fitzpatrick Theatre – Chair: Angela Ziebell**			
	Keynote – Prof Joe Sambono & Dr Katrina Wruck Indigenising the Curriculum and a First Nations Scientist's Perspective.			
3:50-4:20	Afternoon tea			
4:20-4:40	**Kathleen Fitzpatrick Theatre – Chair: Susan Howitt**			
	ACSME: A tale of 30 years of capacity building and steering a community. *Alexandra Yeung*			
4:40-5:00	Beyond the Network: How SaMnet Shaped a Generation of STEM Leaders. *Sarah-Jane Gregory*			
6:30-10:30	Conference Dinner			

Conference Day 2 – Thursday 2nd October

Time	Session Details			
8:30-9:00	Registration			
9:00-9:55	**Kathleen Fitzpatrick Theatre – Chair: Caroline Taylor**			
	Keynote – Professor Tracey Kuit Building environmental stewardship with a focus on interdisciplinarity and teamwork in STEM education.			
9:55-10:20	Morning Tea			
	Parallel Session			
	Session 1 **Room 253 (Level 2)** Chair: Jessica Borger	**Session 2** **Room 256 (Level 2)** Chair: Ritu Taneja	**Session 3** **Room 156 (Level 1)** Chair: Sophia Tsang	**Session 4** **Forum Theatre (Level 1)** Chair: Amber Willams-Jones
10:20-10:40	Scaling work-integrated learning in the corporate sector: enterprise WIL for enduring industry partnerships. *Daniel Czech & Thomas Gan**	The mathematics academic planner in action: tailoring diagnostics and support pathways for mathematical success in STEM and economics. *Andrew Chuter*	Adapting assessment in the GenAI era: an undergraduate physics case study *Emily Faulconer*	STEM futures: empowering students through career development learning that embraces critical reflection. *Tania McKiernan & Joanne Castelli*
10:40-11:00	STEM workplace case studies – an authentic scalable WIL activity. *Caroline Taylor*	Is 'Vibes-Based Grading' in first-year mathematics FAIR? *Adam Piggott*	BioLogic: new software to improve explanatory skills and facilitate feedback and assessment in large STEM classes. *Michael J. Murray*	Exploring Science Perceptions and Career Self-Identity in Late Primary Students. *Michael Kasumovic*
11:00-11:20	Laboratory and computational physics in third-year undergraduate coursework. *Christine Lee**	Layers of belonging: understanding the learning journeys of higher-level chemistry students. *Dilusha Munasinghe**	AI-powered, academic-driven: an approach for personalised student feedback and learning. *Andrew Cutting*	Towards an understanding of quality teaching and learning excellence in education and teaching focused roles in higher education. *Pauline Ross*
11:30-12:00	**Kathleen Fitzpatrick Theatre – Chair: Lisa Godinho**			
	Wurundjeri Education – *Uncle Bill Nicholson*			
12:00-1:00	Industry Panel *Daniel Czech & Angela Ziebell with Ian Lucas, Jennifer Hollands, Mubin Yousuf*			
1:00-2:00	Lunch			

	Parallel Session			
	Session 1 **Room 253 (Level 2)** Chair: Yinyan Liu	**Session 2** **Room 256 (Level 2)** Chair: Jennifer Fox	**Session 3** **Room 156 (Level 1)** Chair: Diana Warren	**Session 4** **Forum Theatre (Level 1)** Chair: Chris Thompson
2:00-2:20	Integrating Generative AI into science education via custom GPTs: construction, deployment, and student interactions. *Jae Pyun*	Experiential learning for STEM futures: designing transformational museum experiences to develop young people's futures thinking. *Lisa Bailey*	Distracting distractors: Exploring the role of options in a multiple-choice question exam. *Rashika Agarwal**	Increasing interactivity in small-group teaching: implementing new technology in a statistics course. *Paul Fijn*
2:20-2:40	Embracing not avoiding Generative AI to enhance scientific writing education. *Jody Gorman*	Transforming an entire physics advanced laboratory sequence. *Benjamin Pollard*	Do questions interspersed in short online instructional videos improve short- and long-term student recall? *Adrian Hunter*	Supporting diverse women in STEM: lessons from a PhD internship initiative. *Helen Georgiou*
2:40-3:00	Evaluating the effectiveness of a Gen-AI first maths & stats support centre to develop numeracy skills. *Luis Camacho*	Undergraduate students' perceptions of practical experiences. *Susan Howitt*	Interactive by design: elevating student engagement. *Rahini Ragavan*	What does success mean to chemistry students? Exploring definitions, supports, and barriers. *Siobhán S. Wills*
3:00-3:20	How students use the scientific writing assistant chatbot to support scientific writing. *Osu Lilje*	Reflections and learnings from an interdisciplinary subject. *Jiang-Li Tan*	Impact of machine learning computer vision phenotyping tools on students. *Callum J Vidor*	Enhancing student learning through video feedback and structured reflection. *Thomas Murphy & Liam Scarratt*
3:20-3:40	**Kathleen Fitzpatrick Theatre – ACSME 2025 OC**			
	ACDS Announcements & Conference Close			
3:40-4:30	Afternoon tea and networking			

Thank you for being part of ACSME 2025

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Conference Posters

Lightning talk Session A

Designing extension questions: mathematical communication and creativity to assist with secondary-tertiary transition
TriThang Tran

A bibliometric review of the impact of Generative AI on statistics education for non-quantitative learners
Mitra Jazayeri

Virtual laboratory activities
Stephan Levonis

Bridging knowledges: microbiology and indigenous plant medicine in science enabling education
Sharon Gough & Julie Sartori

Reimagining maths pedagogy in NQ
Shaun Belward

Getting lost without a map – creating A Zoology Atlas for undergraduate students to navigate the animal kingdom
Kelly Merrin

Gene editing practical activities for plant science undergraduates
Jennifer Fox

Patterns of retention into second year physics and astrophysics
Abdulla Alseiari

Exploring student perceptions and acceptance of artificial intelligence (AI)-generated videos in tertiary chemistry: a pilot study
Alexandra Yeung

Insects shaping society: using an interactive and multidisciplinary teaching approach to engage students deeply
Laura A Brannelly

Enhancing chemistry education through technology-enhanced learning: supporting effective student learning
Stephanie S Schweiker

Lightning talk Session B

Student and teacher perceptions of empathy in tertiary STEM classrooms: a systematic review of qualitative research
*Alan Chen**

Developing a student assisted learning approach for report writing and oral presentation
Shuo Li

Connecting students to mathematics as a modern human endeavour
Christopher Duffy & Sally Kuhlmann

Analysis of how stress affects learning outcomes during the learning process
Katsuyuki Umezawa

Improving student experience and engagement in first-year physics
Silvia Behar Harpaz

Development of a landscape scale virtual tour of northern Victoria
Stuart Barber

Baseline motivational factors of first-year science students: insights from the spires framework
*Pavani Halpelage**

Assessment practices in STEM higher education – what does the literature say?
*Agnes Bersee**

Enhancing student engagement in mathematics studies with low-barrier interactive tools
Anthony Cheung

Scaling up: A scaffolded placement program at the university-industry interface
Stefan G. Huth