

**ACSME 2019 Program – [www.ACSME.edu.au](http://www.ACSME.edu.au)**  
**Abercrombie Building (H70) – The University of Sydney**




THE UNIVERSITY OF  
**SYDNEY**



Australian Council  
of Deans of Science


<b>Day 1: Wednesday 2 October 2019</b>					
8:00-9:00	Registration open				
9:10-9:30 LT1110	<b>Welcome: Professor Iain Young, Dean, Faculty of Science and Professor Pauline Ross, Conference Chair</b>				
9:30- 10:00 LT1110	<b>Keynote 1 – Scholar Address: Student stories, and others yet to be created Ms Clare Birch, University of Sydney and Mr Fahad Khan, UNSW</b>				
10:00- 10:30 LT1110	<b>Keynote 2: Dr Amanda C. Niehaus – Empathy in the Science Curriculum</b>				
10:30-11:15	Morning tea				
11.15-12.15	<table border="1"> <thead> <tr> <th><b>Session 1: Theme 1</b></th> <th><b>Session 2: Theme 2</b></th> </tr> </thead> <tbody> <tr> <td> <p>13564: Digital literacy skills, student interactivity and academic performance in stem blended courses, UQ - Branda Le, Gloria Woods, Jack Wang, Gwendolyn Lawrie</p> <p>13615: Virtual reality for physics education, ANU - John Debs, Paul Wigley</p> <p>13558: Investigating the use of virtual reality in teaching chemistry to undergraduate students, USYD - Stephen Robert Daniel George-William</p> <p>13492: Avoiding the Science Stupidity Trap, Uni Newcastle - Bonnie McBain, Andrew Yardy, Frances Martin, Liam Phelan, Ian van Altenaa, Jill McKeowen, Claire Pemberton, Hollie Tose, Lindsey Fratus, Michael Bowyer</p> </td> <td> <p>13613: Creativity in STEM: Students’ and employers’ perspectives, Curtin Uni - Alexandra Yeung, Jesse Mullen</p> <p>13541: How do you define creativity? A qualitative study of undergraduate chemistry students’ perspectives, Monash Uni - Jue Theng Soo, Stephen Michael Danczak, Alexandra Yeung, Christopher D Thompson</p> <p>13625: First steps in realising interdisciplinarity, creativity, empathy and global perspectives in stem curriculum, Curtin Uni, UWA - Reva Ramiah, Joanne Castelli</p> <p>13616: The effect of an interdisciplinary science course on student perceptions of computer programming, UQ - Adam Piggott, Sara Herke, Timothy McIntyre, Michael Bulmer</p> </td> </tr> </tbody> </table>	<b>Session 1: Theme 1</b>	<b>Session 2: Theme 2</b>	<p>13564: Digital literacy skills, student interactivity and academic performance in stem blended courses, UQ - Branda Le, Gloria Woods, Jack Wang, Gwendolyn Lawrie</p> <p>13615: Virtual reality for physics education, ANU - John Debs, Paul Wigley</p> <p>13558: Investigating the use of virtual reality in teaching chemistry to undergraduate students, USYD - Stephen Robert Daniel George-William</p> <p>13492: Avoiding the Science Stupidity Trap, Uni Newcastle - Bonnie McBain, Andrew Yardy, Frances Martin, Liam Phelan, Ian van Altenaa, Jill McKeowen, Claire Pemberton, Hollie Tose, Lindsey Fratus, Michael Bowyer</p>	<p>13613: Creativity in STEM: Students’ and employers’ perspectives, Curtin Uni - Alexandra Yeung, Jesse Mullen</p> <p>13541: How do you define creativity? A qualitative study of undergraduate chemistry students’ perspectives, Monash Uni - Jue Theng Soo, Stephen Michael Danczak, Alexandra Yeung, Christopher D Thompson</p> <p>13625: First steps in realising interdisciplinarity, creativity, empathy and global perspectives in stem curriculum, Curtin Uni, UWA - Reva Ramiah, Joanne Castelli</p> <p>13616: The effect of an interdisciplinary science course on student perceptions of computer programming, UQ - Adam Piggott, Sara Herke, Timothy McIntyre, Michael Bulmer</p>
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12:15-1:30	Lunch				
1.30-2:00 LT1110	<b>Keynote 3: Professor Pip Pattison – Reshaping the Student Experience at the University Of Sydney</b>				
2.00-2:30 LT1110	<b>Keynote 4: Professor Susan Howitt – Improving Learning Outcomes from Undergraduate Research</b>				

<p>2.30- 3.30</p> <p>Session 3: LT1110 <i>Chair: Adam Bridgeman</i></p> <p>Session 4: LT2080 <i>Chair: Rebecca LeBard</i></p>	<p><b>Session 3: Theme 1 (continued)</b></p> <p>13510: Student perceptions of effective feedback in psychology, ACU - Helen Aucote, Madeleine Ferrari, Kimberley Mallan</p> <p>13786: Prior learning factors impacting success in first year general chemistry, Deakin Uni - Anna Miltiadousa, Deepa Ram, Kieran Fergus Lim, Damien L. Callahan, Madeleine Schultz</p> <p>13486: Exploring opportunities to integrate systems thinking into chemistry education, Deakin Uni - Madeleine Schultz, Seamus Delaney, Joseph Ferguson, Jerry Lai</p> <p>13589: The "DEFT" Project, Uni Newcastle - Judy-anne Osborn, Joel Black, Naomi Borwein, Florian Breuer, Peter Ellerton, Jo-Ann Larkins, Malcolm Roberts</p>	<p><b>Session 4: Theme 3</b></p> <p>13622: All the World's A Two-Stage Exam: Transforming Final Exams into Authentic Learning Experiences, USYD - Timothy Lee, Francesca vandenBerg, Matthew Pye, Osu Lilje, Hong Dao Nguyen</p> <p>13489: 8 Ways of Knowing: Embedding Yunkaporta's Indigenous framework across the Faculty of Science, Uni Newcastle - Hollie Susan Tose, Mark Quinan</p> <p>13587: Using a rebuttal process to improve Ecology students' feedback experience, Uni Otago, NZ - Krishneel Reddy</p> <p>13592: Breathing life into Haswell's historic educational zoological collection, USYD - Rosanne Quinnell, Lindsey Jane Gray, Jude Philp</p>
<p>3:30-5:00</p>	<p><b>POSTER SESSION and afternoon tea – Abercrombie Building, University of Sydney</b></p>	
<p>5.30-7:30</p>	<p><b>Welcome drinks &amp; networking</b> <i>Nicholson Museum</i> <i>Sponsored by Cengage Learning</i></p> 	

## Day 2: Thursday 3 October 2019

<p>8:00-9:00</p>	<p>Registration open – 9.00-9.10 Announcements</p>		
<p>9.10-9.50 LT1110</p>	<p><b>Keynote 5: Professor Philippa Levy – Co-Creating the Student Learning Experience</b></p>		
<p>9:50- 10:30 LT1110</p>	<p><b>Keynote 6: Professor Ian Hickie – Mental Health and Well-Being of our Students: An Emerging Issue for University Education</b></p>		
<p>10:30- 11:00</p>	<p>Morning tea</p>		
<p>11:00-12:00</p> <p>Session 5: Room 2060 <i>Chair: Justin Ridge</i></p> <p>Session 6: Room 2050 <i>Chair: Samantha Clarke</i></p> <p>Session 7: Room 2240 <i>Chair: Jack Wang</i></p>	<p><b>Session 5: Theme 1 (continued)</b></p> <p>13467: Understanding the relevance of science in real life through group projects, UNSW - Nirmani Wijenayake</p> <p>13512: Quantitative assessments: encouraging surface learning in introductory physics? UNSW - Thomas Findlay Dixon, Christine Lindstrøm, Elizabeth Angstrom</p>	<p><b>Session 6: Theme 2 (continued)</b></p> <p>13505: Cross-disciplinary mathematics support from the students' perspective, LaTrobe - Deborah Cheryl Jackson</p> <p>13483: A degree for today's scientists: demystifying the more-than-single disciplinary journey for students, Uni Newcastle - Michael Bowyer, Bonnie McBain, Liam Phelan, Mark Quinan, Hollie Tose, Andrew Yardy</p>	<p><b>Session 7: Theme 4</b></p> <p>13480: Promoting team work in undergraduate research projects, Flinders Uni - Masha Smallhorn, Narelle Hunter</p> <p>13524: Investigating the impact of work integrated learning on science students' professional identity, Monash Uni - Daniel Peter Czech, Julia Choate, Jessica Jong, Maxine Bonham, Tracy McCaffrey</p>

	<p>13572: Pedagogical behaviour in pre-service teachers drops with increasing content knowledge, UNSW, Cambridge U, U Alberta - Christine Lindstrom, Vinesh M Rajpaul, Megan C Enge</p> <p>13627: Weaving webs: Creating instructional interdependency in blended, active learning environments, UQ - Jeanette Stok, Gwendolyn Angela Lawrie</p>	<p>13461: Does working in academically diverse groups influence student perceptions? UQ - Montana Samantzis, Kay Colthorpe, Louise Ainscough, Judit Kibedi</p> <p>13617: A Walk in The Park? Engaging First Year Biology Students Through Autonomous Authentic Research Experiences and Partnerships with Industry, USYD – Charlotte Taylor, Matthew Pye, Francesca van den Berg, Sophie Golding</p>	<p>13559: Skills reflection in the undergraduate science curriculum: what, why and how, Monash Uni - Michelle A Hill, Tina Overton, Chris Thompson</p> <p>13551: Writing in a 'popular science' style: a paradigm shift, UTS - Yvonne Davila, Neela Griffiths, Maurizio Labbate</p>
12:00-12:45	<b>Keynote 7: Professor Pauline Ross – Stories from the Front: Science Academics in a Changing Higher Education Landscape</b>		
12:45- 2:00	<b>Lunch and POSTERS continued</b>		
2:00-3:00	<p><b>Session 8: Theme 5</b></p> <p>13498: Distributed leadership to embed scholarship in stem teaching teams, UTAS - Tina Acuna, Jo-Anne Kelder</p> <p>13532: The invisible academics, Uni Newcastle - Karen Elizabeth Mate, Judith Weidenhofer, Josephine Smith, Zoe Yates, Suzanne Evans</p> <p>13608: Sessional staff training for improved student experience, Deakin Uni - Madeleine Schultz, Lisa Chiavaroli, Jillian Healy, Siva Krishnan, Kieran F Lim, Janine McBurnie, Tricia Wevill</p> <p>13469: Investigating the trajectories of academic staff who identify as DBER scholars, USYD - Reyne Pullen, MaryKay Orgill, Manju Sharma</p>	<p><b>Session 9: Theme 4 (continued)</b></p> <p>13477: Choose your own adventure: experiencing research through first-year group projects in data science, USYD - Diana Warren, Samantha Louise Clarke</p> <p>13523: Addressing discrepancies between assumed, expected and actual levels of mathematical competencies: a learning design model of networked partnerships, QUT - Iwona Czaplinski, Dann Mallet, Henk Huijser</p> <p>13631: Students' transition to university life: Learning, lectures and other activities in the first year, Victoria Uni, Wellington - Suzanne Boniface, Amanda Gilbert</p> <p>13574: Building scientific skills in First Year Biology Undergraduates, Uni Melbourne - Dawn Gleeson, Jennifer Fox, Lisa Godinho, Lyn O'Neill</p>	
3:00-3:30	Afternoon tea		

<p>3:30-4:45</p> <p>Session 10: Room 2060 <i>Chair: Clare Birch</i></p> <p>Session 11: Room 2050 <i>Chair: Sara Herke</i></p> <p>Session 12: Room 2240 <i>Chair: Reyne Pullen</i></p>	<p><b>Session 10: Theme 6</b></p> <p>13462: The stories of women in Australian undergraduate science degrees, Monash Uni - Camilla Rose Fisher, Christopher Thompson, Rowan Brookes</p> <p>13598: The path to science student leadership at UQ, UQ - Lydia Kavanagh, Susan Leonie Rowland, Eimear Vallely, Sarah Campbell, Aimee Clarke, Amanda Cooke, Melissa Fitzgerald, Jamie Jones, Talia Sellars</p> <p>13470: Measuring academic agency in university students, UQ - Izaak Rutenberg, Louise Ainscough, Kay Colthorpe</p> <p>13553: Investigating Cognitive Overload in the Undergraduate Chemistry Laboratory Through the Lens of Decision-Making, Monash Uni - Nathan Sos, Chris Thompson, Angela Ziebell</p> <p>13600: Assessment literacy: Exploring institutional, teacher and student perspectives, Monash - Nirma Anandi Samarawickrema, Ester Villvanathan, Osuri Manaatunga, Klaudia Budzyn, John McInerney, Swati Mujumdar, Maxine Bonham, Christopher Thompson, Elizabeth Davis</p>	<p><b>Session 11: Theme 6</b></p> <p>13570: An online resource for evaluating teaching developed by a community of practice, UNSW - Rebecca LeBard, Adrienne Torda</p> <p>13472: Co-creating inclusive science curricula with students as partners, UTS - Lucy Mercer-Mapstone</p> <p>13591: A co-creation research project for determining study preferences and creating study resources, Uni Adelaide - Hannah Andrews, Angela Joy, Michelle Ruth Coulson</p> <p>13537: The science consultancy project-improving students perceived employability skills through a school placement unit, UWA - Dino Spagnoli, Megan Ellyard, Lauren Moorhouse, Samantha Andrews, Brendan J Waddell</p> <p>13526: Perceptions and realities of factors affecting retention and success of first year students at the University of Adelaide, Uni Adelaide - Hilary Coleman, Natalie Williamson</p>	<p><b>Session 12: Theme 6</b></p> <p>13644: Thanks for the feedback: Multiple perspectives in group design processes, ANU - Chris A Browne</p> <p>13646: Evaluating different feedback approaches in a diploma level science report assessment, JCU - Carol Leza Conway, Kerry Aitken</p> <p>13645: Using learning reflection reports to foster metacognition and deeper learning in science students, Monash Uni - Jasmina Lazendic-Galloway, Juan Fischer, Kate</p> <p>13577: You can take a horse to water: reflections on the effectiveness of a teaching development program for research-focused staff, Macquarie Uni - Ian Paul Johnson, Lyn Collins</p> <p>13597: Declining Enrolments in Senior Secondary Mathematics Courses: Staff and Student Perceptions, University of Notre Dame - Gregory Hine</p>
<p>4:45-5:00</p>	<p><b>ACSME 2020 announcement</b> – closing remarks and thanks</p>		
<p><b>6.30pm~ arrival for 7.00pm - 11.00pm</b></p>	<p><b>ACSME 25th Anniversary Conference Dinner</b> <i>The Loft, Level 3, Doltone House</i> <i>Pirrama Road, Jones Bay Wharf, Pyrmont</i></p>		 <b>doltone house</b> <small>VENUE + CATERING COLLECTION</small>

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