

ANZSCP B Conference

University of the Sunshine Coast
12-14th December 2025



Sponsored By:



DETAILS

- All oral talks will be 12 minutes plus 3 minutes for questions
- Please bring your talk on a USB, such that we can upload these prior to your session
- Poster boards and pins will be available Saturday morning.

VENUES

- **Meeting** will be held in Lecture theatre 4 - Located on the Ground level of Building I - Faculty of Science, Health, Education and Engineering, UniSC, Sippy Downs Campus
- **Welcome Reception** will be held Friday 6PM at Brightwater Tavern, 15 Freshwater St, Mountain Creek
- **Conference Dinner** will be held Saturday 5:30PM at Ten Toes Brewery, Unit 4/127A Sugar Rd, Alexandra Headland

Conference Organizers:

Christofer Clemente, University of the Sunshine Coast, cclement@usc.edu.au

Taylor Dick, University of Queensland, t.dick@uq.edu.au

Friday December 12th

1800 Welcome Reception - 6PM at Brightwater Tavern, 15 Freshwater St, Mountain Creek

Saturday December 13th

900 Welcome

905 **KEYNOTE - Dr. Essie Rodgers** — *Saving Species with Science: How Physiology Can Future-Proof Conservation and Aquaculture (Murdoch University)*

945 *Understanding the Adaptations of Threatened Sand Yabbies to Extreme Acidity – Grace Smith (University of the Sunshine Coast)*

1000 *Fur the record: from arctic thick to desert slick—how fox coats vary with climate – Kelsey Graham (University of Melbourne)*

1015 *Too Hot to Fly, Too Cold to Buzz: How Jewel Beetles Handle Australia's Climates – Avichal Tatu (University of Melbourne)*

1030 *Climate change and the cost-of-living squeeze in desert lizards – Kristoffer Wild (University of Melbourne)*

1045-1115 **morning tea**

1115 *Conversion efficiency of flight power in the migratory bat *Nathusius' pipistrelle* – Shannon E. Currie (University of Melbourne)*

1130 *Implications of motor unit recruitment strategies on energetics of skeletal muscle contraction – Ryan Konno (The University of Queensland)*

1145 *Testing metabolic and life history theory – Craig White (Monash University)*

1200 *Impact of reproductive state on energy expenditure of an arboreal marsupial – Clare Stawski (University of the Sunshine Coast)*

1215 *Still on about the endothermies of birds and mammals having common ancestry – Gordon Grigg (University of Queensland)*

1230-1330 **lunch + posters**

1330 *The timing of embryonic skeletal calcification in the seahorse *Hippocampus abdominalis* – Arda Poda (The University of Sydney)*

1345 *Winter energetics and evaporative water loss of bridge-roosting *Myotis* in Australia: biophysical model, climate change, and conservation implications – Sanjeev Baniya (University of New England)*

1400 *Effect of a helox atmosphere on the thermal, metabolic and hygric physiology of the scincid lizard *Egernia kingii* – Christine Cooper (Curtin University)*

1415 *Understanding the bioenergetic processes that may contribute to cardiac mitochondrial failure at high environmental temperatures in cold-temperate Banded wrasse and tropical parrot fish – Alice Harford (University of Queensland)*

1430 *Peptide hormone discovery in the ornate spiny lobster, *Panulirus ornatus*: A multi-omics and functional analysis – Susan Glendinning (University of the Sunshine Coast)*

1445-1515 **afternoon tea**

1515-1600 **KEYNOTE - Professor Phil Withers** - *Surfing the Wave of Technology in Comparative and Animal Physiology (University of Western Australia)*

1600 day concludes

1730 Conference Dinner 5:30 pm at Ten Toes Brewery, Unit 4/127A Sugar Rd, Alexandra Headland

Sunday December 14th

900 **KEYNOTE - Dr. Blake Dickson** — *The Functional Anatomy and Biomechanics of Arboreality in Primates and Marsupials (University of New South Wales)*

945 *Human Trajectory Mapping in Ecological Contexts: A framework for Reliable Space-Time Localization – Raimundo Sanchez (The University of Queensland)*

1000 *Toe clearance in ratite birds – Pasha van Bijlert (Utrecht University / Naturalis Biodiversity Center)*

1015 *Using predictive musculoskeletal simulations to explore the effect of exoskeletons on locomotion in altered gravity – Ioana Oprescu (The University of Queensland)*

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| 1030 | <i>From Biology to Robotics and Back - Using Bioinspired Robotics to Test Biological Hypothesis – Robin Maag (University of the Sunshine Coast)</i> |
| 1030-1115 | morning tea |
| 1115 | <i>Stressed Out Bats: Developing Tools to Monitor Physiological Stress in Three Insectivorous Species – Robin Rowland (University of the Sunshine Coast)</i> |
| 1130 | <i>Thermal niche separation of solitary bees and their parasitoid associate – Sean Tomlinson (Curtin University)</i> |
| 1145 | <i>Evaporative water loss of the Motorbike Frog (<i>Ranoidea moorei</i>) – Philip Withers (University of Western Australia)</i> |
| 1200 | <i>Fire and Flood: Assessing the physiological impacts of wildfire and associated runoff on aquatic fauna – Craig Franklin (The University of Queensland)</i> |
| 1215 | <i>Same bats, different heat – Ruvinda de Mel (University of New England)</i> |
| 1230-1330 | lunch |
| 1330 | <i>Control of foregut contractions of the cricket – Paul Cooper (Australian National University)</i> |
| 1345 | <i>Effect of Body Size on Vectorial Dynamic Body Acceleration Energy-use Estimates – Oakleigh Wilson (University of the Sunshine Coast)</i> |
| 1400 | <i>Computing fine-scale behaviour and refuge-dependency in birds under heat stress – Michael Kearney (University of Melbourne)</i> |
| 1415 | <i>Does metabolic rate set the pace of life? Testing metabolic theory with experimental evolution – Lesley Alton (Monash University)</i> |
| 1430 | <i>Connecting Ecology, Thermal Physiology, and Biophysical Modelling for Conservation – Zenon Czenze (University of New England)</i> |
| 1445-1515 | afternoon tea |
| 1515 | AGM + awards + JEB |
| 1545-1645 | Workshop: IMU data for energetics, behaviour and movement ecology |
| 1645 | Meeting concludes |

POSTERS

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| p1 | <i>Thermal Ecology of Endangered Greater Gliders: Understanding Physiological Responses to Climate Change – Katrina Koutsellis (University of the Sunshine Coast)</i> |
| p3 | <i>Non-Invasive Estimates of Musculoskeletal Forces Using Ultra-Wideband (UWB) Radar – Chris Bird (The University of Queensland)</i> |
| p3 | <i>Hot in the City: How Warming Winters Influence Hibernation Patterns of European Hedgehogs Across an Urban Matrix – Leonie Neubauer (University of Hamburg)</i> |
| p4 | <i>Thermal Physiology of Urban Insectivorous Bats in Different Roosts – Kheva Walker (University of the Sunshine Coast)</i> |
| p5 | <i>Roosting in a Warmer World: Quantifying Roost Microclimates to Forecast Flying-Fox Heat Stress – Samantha Ross (University of the Sunshine Coast)</i> |
| p6 | <i>Exploring the Influence of Ankle Exoskeleton-Mediated Gait Perturbations on Lower-Limb Mechanical Energetics and Neuromuscular Control – Angus Cottrell (The University of Queensland)</i> |
| p7 | <i>Influence of body Center of mass in obstacle negotiation in lizards - Finn Rogendorf (University of Bremen)</i> |
| p8 | <i>Missing Terms in the Heat Balance of Flying Animals - Adam Reade (The University of Melbourne)</i> |
| p9 | <i>Does Skippy actually skip? Understanding gait modulation in free-roaming kangaroos - Jasmin Annett (University of the Sunshine Coast)</i> |
| p10 | <i>The impact of climate change and what animals can do to mitigate: purple-crowned fairy-wrens - Thaddeus Pev (Monash University)</i> |





