Humboldt Kolleg 2026
21st Biennial Conference of the Australian Association of von Humboldt Fellows

"Humboldtian Scholarship in the Age of Artificial Intelligence"

The Ship Inn South Bank, Brisbane | 13–15 November 2026

All times AEST Brisbane. Standard talks: 15 + 5 minutes. Flash talks: 5 minutes.

Friday 13 November 2026

The Ship Inn Function Room, Corner of Stanley and Sidon Streets, South Bank Parklands

Opening and Welcomes

Time	Programme
15:00 – 15:20	**Arrival and registration** Registration desk at the Ship Inn. *Humboldt Foundation information presentation throughout the Kolleg.*
15:20 – 15:25	**Introductions and opening remarks** A/Prof Thomas Haselhorst, Conference Chair, Griffith University
15:25 – 15:30	**Welcome from the German Embassy** German Embassy, Canberra, Jens Hoch
15:30 – 15:35	**Welcome to Griffith University** Professor Lee Smith is the Deputy Vice-Chancellor (Research), Griffith University
15:35 – 15:50	**Welcome from the Australian Association of von Humboldt Fellows** Prof Gabrielle McMullen AM, Australian Catholic University President Australian Association of von Humboldt Fellows
15:50 – 16:00	**Welcome from the New Zealand Association of von Humboldt Fellows** Prof Nancy November, University of Auckland's School of Music New Zealand Association of von Humboldt Fellows

Session 1: Science, Mathematics and Humboldtian Scholarship in the Age of AI

*Chair: **Dr Glen Wheeler** School of Mathematics and Physics, University of Wollongong*

16:00 – 16:20 Keynote	**Dietmar W. Hutmacher** | QUT and Max Planck Queensland Centre *Building an AI System Is Not Necessarily Science: Distinguishing Mathematics, Empirical Science and Engineering*
16:20 – 16:40 Invited	**Jean Jacques du Plessis** | School of Law, Deakin University *Humboldtian Bildung, Gen Z, and the Age of Artificial Intelligence*
16:40 – 17:00 Oral	**Hans Bachor** | Australian National University *University education in science, now with A-Intelligence or A-Dumbness?*
17:00 – 17:20 Oral	**Peter R. Wills** | Department of Physics, University of Auckland *The Origin and End of Natural Intelligence*
17:20 – 17:40 Oral	**Nancy November** | School of Music, University of Auckland *The Citizen-Scholar in the Age of Artificial Intelligence: A Humboldtian Perspective*
17:40 – 18:00 Oral	**Michael Fellows and Frances Rosamond** | Western Sydney University and University of Bergen *Creative Mathematical Sciences Communication: A Humboldtian Perspective in the Age of AI*

Panel discussion: Developing critical thinkers in a rapidly changing world

Chair: ***A/Prof Thomas Haselhorst*** *Griffith University*

18:00 – 18:45	**Prof Katherine Andrews** (*Institute for Biomedicine and Glycomics, Griffith University*) **Dr Anawaite Matadradra** (*University of the South Pacific, Fiji*) **Dr Wisam Dawood** (*Institute for Biomedicine and Glycomics, Griffith University*)
18:45 – 19:00	**Informal networking and reception changeover**
19:00 – 21:00	**Welcome Function** The Ship Inn

Saturday 14 November 2026

The Ship Inn Function Room, corner of Stanley and Sidon Streets, South Bank Parklands

Session 2: AI-Driven Discovery in Biology and Chemistry

Chair: ***Dr Michael Netzel*** *Queensland Alliance for Agriculture and Food Innovation, UQ*

Time	Programme
08:40 – 09:00 Keynote	**Volker Sieber** | Technical University of Munich, TUM Campus Straubing, Germany *Development of biocatalytic processes for the biobased production of chemicals and materials – HI, AI or brute force*
09:00 – 09:20 Invited	**Katherine Andrews** | Institute for Biomedicine and Glycomics, Griffith University *Application of AI tools to advance malaria drug discovery*
09:20 – 09:40 Invited	**Christoph** Nitsche | Australian National University *Peptide and Protein Drug Discovery*
09:40 – 10:00 Invited	**David McMillan** | Centre for Bioinnovation, University of the Sunshine Coast *The sea and the silicon: Pathways to antimicrobial discovery from natural products*
10:00 – 10:20 Oral	**Sarah Turpin-Nolan** | Monash Institute for Pharmaceutical Sciences, Monash University *From Humboldt's Vision of Nature to AI-Driven Biological Discovery*

ECR Flash Talks 1: Molecular Discovery and Functional Materials

Chair: ***Dr Ngoc N. Nguyen*** *School of Chemical Engineering University of Queensland*

Time	Programme
10:20 – 10:25 Flash	**Wisam Dawood** | Institute for Biomedicine and Glycomics, Griffith University *Integrating In Vitro and In Silico Tools for Antimalarial Drug Discovery*
10:25 – 10:30 Flash	**Michael P. Hassett** | School of Science, RMIT University *In-depth Structural Analysis of Thermotropic Liquid Crystals*
10:30 – 10:35 Flash	**Baishali Paul** | RMIT University *Metalloid and Non-Metal Functionalization of Janus WSeTe for CO and CO_2 Sensing: A DFT Study*
10:35 – 10:40 Flash	**Suchashrita Mitra** | BITS Pilani and RMIT University *Structurally Resilient MOF for Efficient CO_2 Capture from Flue Gas*
10:40 – 10:45	**Shared discussion and session changeover**
10:45 – 11:05	**Morning Tea**

Session 3: Mathematics, Physics and Molecular Dynamics

Chair: ***Prof Gary Bryant*** *School of Science, RMIT University*

Time	Programme
11:05 – 11:25 Oral	**Trevor Finlayson** | School of Physics, University of Melbourne *New Research on In-Tl Alloys in the Spirit of Humboldt*
11:25 – 11:45 Oral	**Glen Wheeler** | School of Mathematics and Physics, University of Wollongong *Pinch-off in the lab: from geometric evolution to singularities*
11:45–12:05 Oral	**Richard Humfry Henchman** | School of Public Health, University of Sydney *How to Quantify the Motion of Atoms and Molecules*
12:05 – 12:45	**Lunch**

Time	Programme
12:45 – 13:45	**Association Business Meetings** Australian and New Zealand Associations of von Humboldt Fellows. *Free time for other participants*
13:45 – 14:20	**Afternoon break and informal networking**

Session 4: Emerging Technologies: AI, Photonics and Quantum Science

*Chair: **A/Prof Trevor Finlayson** School of Physics, University of Melbourne*

Time	Programme
14:20 – 14:40 Oral	**Haoran Ren** | School of Physics and Astronomy, Monash University *Nanophotonics meets with AI*
14:40 – 15:00 Oral	**Le Chung Tran** | University of Wollongong *AI/IoT and Decision Support Systems for Flood Monitoring and Prediction*
15:00 – 15:20 Oral	**Benjamin Carey** | The University of Queensland and ARC Centre of Excellence in Quantum Biotechnology *Enabling next-generation biomedical instrumentation with photonic-chip magnetic sensors*

Flash talks 2: Emerging Technologies and Applications

*Chair: **Dr Ngoc N. Nguyen** School of Chemical Engineering University of Queensland*

Time	Programme
15:20 – 15:25 Flash	**Jaret Vasquez-Lozano** | RMIT University *Optimising quantum correlation microscopy by utilising Fisher information metrics*
15:25 – 15:30 Flash	**Jesper Leong** | CSSM, School of Physics, Chemistry and Earth Sciences, Adelaide University *Strange Hearts: Hyperons and H-Dibaryons Inside Neutron Stars*
15:30 – 15:35 Flash	**Phee Lep Yeoh** | University of the Sunshine Coast *Towards Intelligent, Secure, and Ultra-Reliable Internet-of-Vehicle Communications*
15:35	**Afternoon tea: Takeaway muffins and coffee**

Excursion and conference dinner

Time	Programme
16:00 – 18:00	**Discover Brisbane: Gardens, Riverfront & City Highlights** *A guided walk with A/Prof Ralf Dietzgen* Join Ralf on a circular walk from South Bank, crossing the **Goodwill Bridge** to the **City Botanic Gardens**. Continue to **The Star Brisbane Sky Deck** for city views, then return to South Bank via the **Neville Bonner Bridge**. The meeting point is to be confirmed. Independent exploration is equally welcome.
18:00 – 18:30	**Free time and return for dinner** Azure Mediterranean, Shop 4, River Quay, Sidon Street, South Brisbane
18:30 – 19:00	**Optional pre-dinner drinks** Azure Mediterranean
19:00 – 22:00	**Conference Dinner and Awards Presentations** Azure Mediterranean

Sunday 15 November 2026

The Ship Inn Function Room, corner of Stanley and Sidon Streets, South Bank Parklands

Session 5: Climate, Energy and Sustainability

Chair: ***A/Prof Nathan L. Kilah*** *School of Natural Sciences, University of Tasmania*

Time	Programme
09:00 – 09:20 Keynote	**Bhabananda Biswas** | The University of Newcastle *Turning Silicate Minerals into Climate & Environmental Solutions*
09:20 – 09:35 Oral	**Ngoc N. Nguyen** | School of Chemical Engineering, The University of Queensland *Mineral processing as the enabler of energy transition and the emerging role of AI in this sector*
09:35 – 9:50 Oral	**Mohammad A. Rahman** | School of Agriculture, Food and Ecosystem Sciences, University of Melbourne *Humboldtian observation in the age of AI: designing cooler, more liveable cities*
09:50 – 10:05 Oral	**Animesh Gain** | Murdoch University *Global water security knowledge overlooks Indigenous Peoples*
10:05 – 10:20	**Morning tea**

Session 6: History, Technology and Humboldtian Perspectives

Chair: ***Prof Hans-Albert Bachor*** *Australian National University*

Time	Programme
10:20 – 10:40 Keynote	**Anawaite Matadradra** | University of the South Pacific *German and British Approaches to the Pacific Labour Trade: Experiences from Fiji and Sāmoa* *AAvHF Peter Gänssler Award Lecture*
10:40 – 11:00 Oral	**Kevin Burrage** | QUT and † Computer Science, Rostock, Germany *ODE Equation Learning for agent-based models of cancer dynamics*
11:00 – 11:20 Oral	**David G. Glynn** | Flinders University *Electromagnetism and Technology*
11:20 – 11:40 Oral	**Nathan L. Kilah** | School of Natural Sciences, University of Tasmania *A Deep Impression: Coins, Currencies and Collectables Honouring Alexander von Humboldt*

11:40 – 11:50	**Katherine Andrews** (*Institute for Biomedicine and Glycomics, Griffith University*) *Humboldt-Stiftung – The Humboldt Foundation: A Global Network for Research*
11:50 – 12:00	**Thomas Haselhorst** | Institute for Biomedicine and Glycomics, Griffith University, Humboldt Kolleg Conference Chair *Closing remarks and farewell*

UNTERSTÜTZT VON / SUPPORTED BY

Alexander von HUMBOLDT STIFTUNG

Abstracts

All abstracts are available online. Scan the QR code here:

Or type in this URL into your web browser:

https://tinyurl.com/Humboldt2026

Organising Committee

Thomas Haselhorst, Katherine Andrews, Klaus Bremhorst, Ralf Dietzgen, Michael Netzel, Lesley Lluka, Ngoc Nguyen.

Contact: t.haselhorst@griffith.edu.au or k.andrews@griffith.edu.au

Ph: 04323 79145

Venues

Friday afternoon, Saturday and Sunday events:

The Ship Inn Function Room, corner of Stanley and Sidon Streets

South Bank Parklands, South Brisbane QLD 4101.

GETTING TO YOUR EVENT

Directions

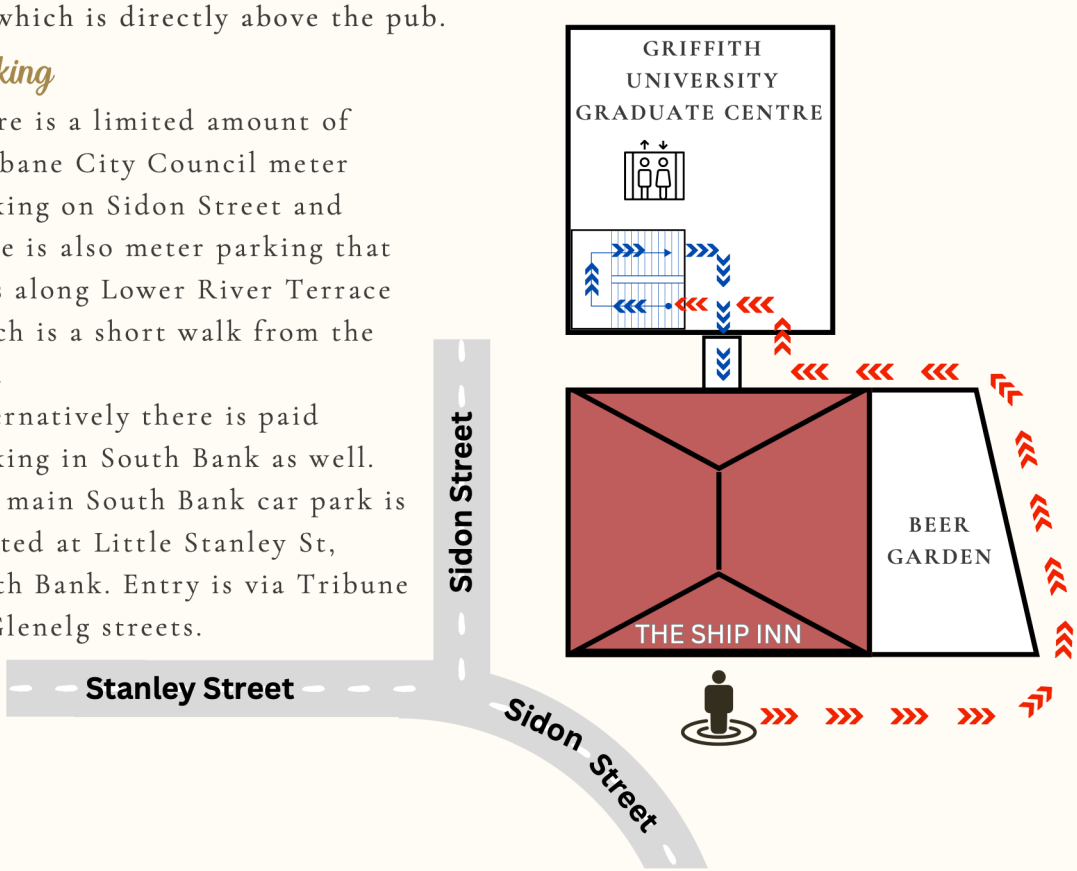
- Make your way to the corner of Sidon & Stanley Streets, South Brisbane.
- When you are standing at the front of The Ship Inn, follow the pathway around the pub to your right, make your way around the Beer Garden.
- Then you will see the Griffith Graduate Centre. Enter the glass sliding doors and you can take the lift to level 2 or walk up 2 short flights of stairs.
- You will then see an entrance to the Ship Inn Function Room which is directly above the pub.

Parking

There is a limited amount of Brisbane City Council meter parking on Sidon Street and there is also meter parking that runs along Lower River Terrace which is a short walk from the pub.
Alternatively there is paid parking in South Bank as well. The main South Bank car park is located at Little Stanley St, South Bank. Entry is via Tribune or Glenelg streets.

Public Transport

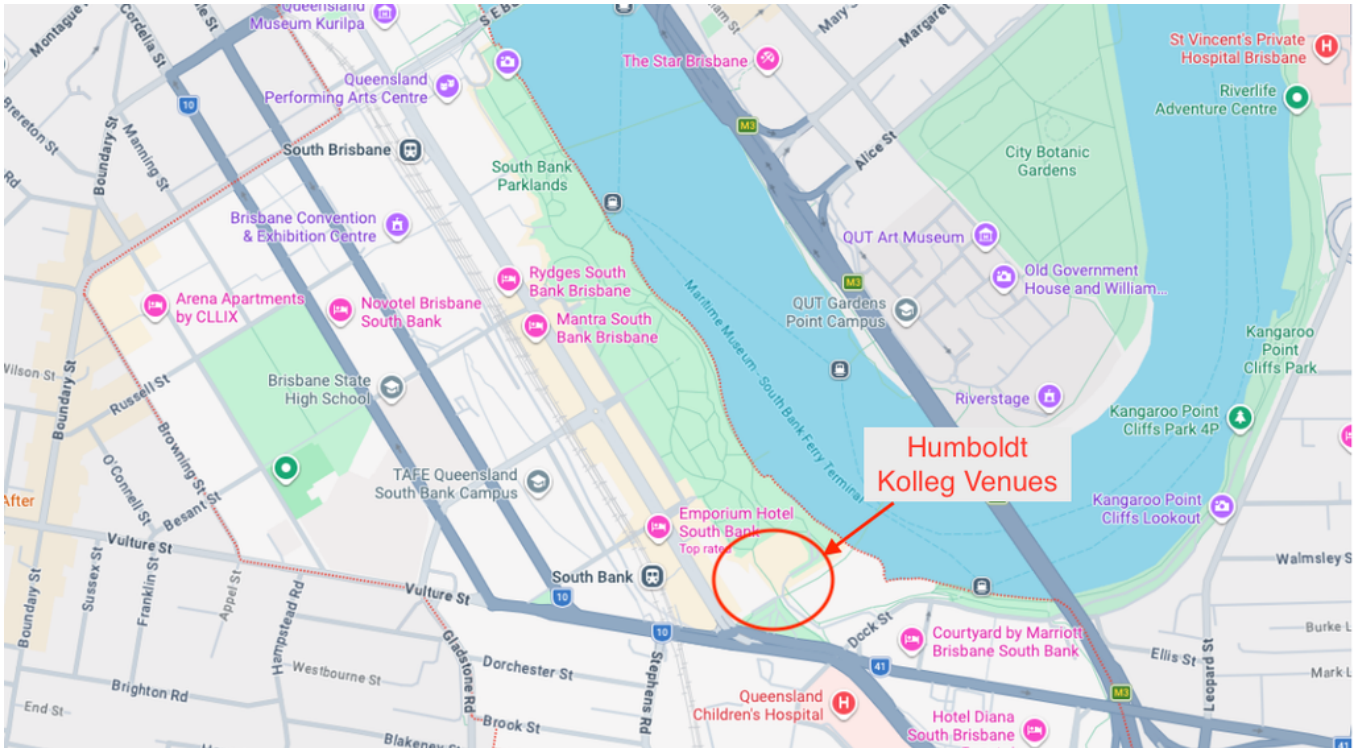
The Ship Inn is centrally located between all public transport options. It's less than 5 minutes walk from South Brisbane Train Station, the Grey Street bus stop and the Maritime Museum Ferry Terminal.

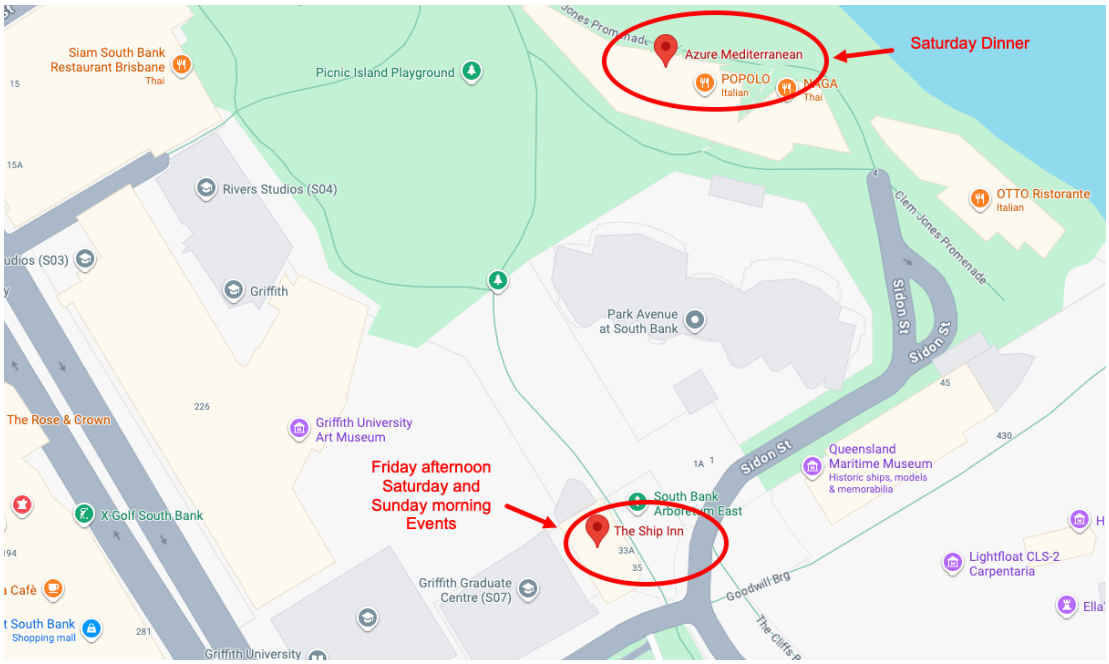


Saturday dinner:

Azure Mediterranean, Shop 4, River Quay, Sidon Street, South Brisbane QLD 4101.

Maps





Security

Griffith University security is on campus 24/7, Ph: 3735 6200 in case you need it

Excursion and independent visits

Ralf Dietzgen has offered one guided walk on Saturday afternoon. The remaining activities below are independent options suggested by Ralf, with Sky Deck and river sightseeing also supported by Ngoc. Participants can choose an alternative or explore before Friday registration or after Sunday's close.

Saturday guided walk

16:30 – 18:00 with **Ralf Dietzgen**. Join Ralf for a circular walk from South Bank, crossing the Goodwill Bridge to explore the City Botanic Gardens. Continue to The Star Brisbane Sky Deck for city views, then cross back to South Bank via the Neville Bonner Bridge. The meeting point is to be confirmed; the walk will finish in time to return for dinner at 19:00.

Independent options near South Bank

- **Sky Deck at The Star Brisbane.** Cross the Neville Bonner Bridge near the Wheel of Brisbane to Queen's Wharf, then follow signs for the viewing platform.
- **City Botanic Gardens.** Walk over the Goodwill Bridge beside the Queensland Maritime Museum.
- **Roma Street Parkland.** Cross the Kurilpa Bridge beside GOMA and continue through the city to the parkland.
- **Brisbane River and Felons.** Take a CityCat sightseeing trip or make your own way to Felons at Howard Smith Wharves near the Story Bridge. Check ferry stops and return times.

Cultural visits before Friday registration or on Sunday afternoon

- **Gallery of Modern Art.** Make, Believe, Magic: The Worlds of The Jim Henson Company is showing during the Kolleg. The exhibition is ticketed, with last entry at 16:00 and closing at 17:00; it cannot be visited after the Saturday excursion begins at 16:30.
- **Queensland Museum Kurilpa.** Explore the museum independently; check opening hours and any exhibition entry requirements.
- **State Library of Queensland.** Try the self-guided architecture audio tour. Main public spaces close at 17:00 on weekends, so allow time for the visit.

Further afield or for a spare evening

- Brisbane Botanic Gardens at Mount Coot-tha, including the Tropical Display Dome and Japanese Garden.
- Mount Coot-tha summit for views across Brisbane.
- CityCat to Northshore for Eat Street on a spare evening; allow time for the ferry journey and check opening hours.

Check current opening hours, entry arrangements and ferry services before setting out. Any entry tickets, transport and refreshments for independent visits are arranged by participants.

Notes

Notes