



THE UNIVERSITY
of ADELAIDE

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**Research Institutes
Quarterly** A summary of key
happenings in University of
Adelaide research institutes

FEBRUARY 2020

Research institutes contributed to the generation of \$56m p.a. in research income, or 32% of the University of Adelaide's HERDC Income 2017-2018, at an average leverage of 9.4x their support from the University (from five of the research institutes, income is pre-AIML).

The University of Adelaide's seventh research institute, the Stretton Institute, commenced 1 January 2020 under Director, Professor Adam Graycar, Professor of Public Policy.



AUSTRALIAN INSTITUTE FOR MACHINE LEARNING

- In December AIML hosted a meeting of Australia's leading researchers in the field to discuss the formation of a nationwide Machine Learning network.
- A \$2m research contract was recently signed with BHP on 'Deep Learning for Mineral Resources'.
- AIML won 'Best Industry STEM Initiative' from the 'Electronics Industry Development Adelaide' for school outreach attracting young women into STEM.

Image: In December, Computer Science and AIML moved 140 staff and students into their new flagship premises as anchor tenants in Lot Fourteen.



INSTITUTE FOR PHOTONICS AND ADVANCED SENSING

- \$620k CRC ORE grant awarded to Prof Nigel Spooner for 'Real-time fluorine mineral identification using novel fluorescence technology'.
- \$753K NHMRC Development Grant awarded to Prof Robert McLaughlin for 'Development of a smart needle for safer, faster brain biopsies'.
- IPAS & DST hosted a 'Precision & Quantum Sensing' workshop on potential leaps in accuracy from next-gen sensing technologies for 85 global leaders.

Image: IPAS ECRs won 2019 Winnovation Awards. (L to R) Prof Andre Luiten, Prof Heike Ebendorff-Heidepriem, Dr Jiawen Li (Winnovation Award in Engineering), Dr Katharina Richter (Winnovation Award in Science), Elodie Janvier & Prof Anita Mahadevan-Jansen.





ENVIRONMENT INSTITUTE

- \$1.34m ARC Linkage Project for Aboriginal rock art and cultural heritage management in Cape York Peninsula awarded in November.
- Planetary Health research planning workshops held in November to develop a research capability document.
- EI membership has increased from 49 in 2018 to 71 in 2019, strengthening EI's capacity for multi-disciplinary approaches to environmental challenges.

Image: The EI has been assisting with the UoA's response to the bushfires including with capability statements, roundtable meetings, engaging new members and providing support to access relevant funding.



ROBINSON RESEARCH INSTITUTE

- \$8.2m JDRF (diabetes) funds awarded to Prof Jenny Couper and ENDIA (Environ. Determinants of Islet Autoimmunity) team to define early life origins of T1D.
- \$10m joint submission to MRFF on novel endometriosis diagnostics from A/Prof Louise Hull and team, in collaboration with AIML and national partners.
- Prof Brandon Wainwright to commence as new Chair of the RRI Advisory Board in February.

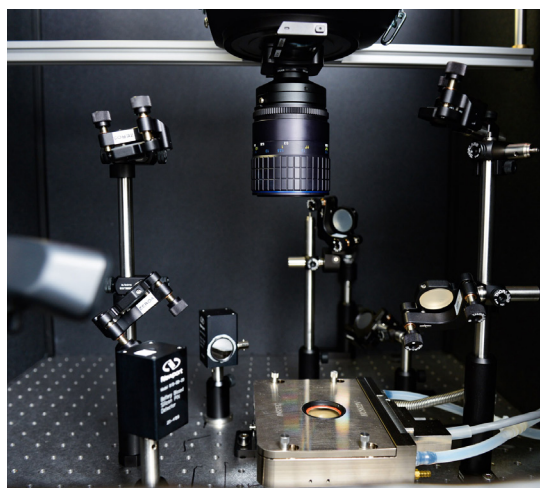
Image: RRI Research Leader A/Prof Louise Hull (second from right) leads national Endometriosis Digital Platform team awarded \$1.5m MRFF funding (Dec 2019).



INSTITUTE FOR MINERAL AND ENERGY RESOURCES

- Prof Alan Collins' \$1.2M ARC Linkage Project on 'World's Oldest Petroleum' held third annual meeting in Nov with Santos, Origin, Imperial O&G & NT Geol. Survey.
- Prof Nigel Cook's 'Unlocking Complex Resources' Consortium held its Annual Assembly in Dec with ~50 researchers from BHP, OZ Minerals, UoA & UniSA.
- IMER is developing a Low Carbon Heavy Industry CRC bid, led by UoA (Prof Gus Nathan) and leveraging IMER's expertise in energy & mineral resources.

Image: IMER and IPAS are enabling Prof Spooner's cutting edge research in the CRC for Optimising Resource Extraction (CRC ORE) looking for novel fluorescent mineral signatures (see also IPAS highlight).





WAITE RESEARCH INSTITUTE

- Prof Mike McLaughlin has been awarded \$5.5M funding to 2024 from the Mosaic Fertiliser Company for the UoA's Fertiliser Technology Research Centre.
- >260 staff, HDR students and external research partners working across agriculture, food and wine attended the WRI Research Showcase in November.
- 25% UoA's WoS 2019 high-cite researchers are WRI members: Dabing Zhang, Matt Gilliham, Andrew Smith & Sally Smith (who sadly passed away in 2019).

Image: New Year's Day Announcement by the Hon. Tim Whetstone announcing the lifting of the Genetically Modified Organisms Moratorium in South Australia at the Plant Research Centre, Waite Campus.



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