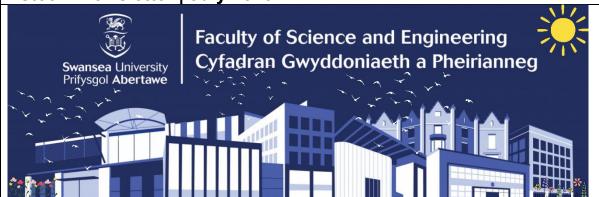
Esteem Newsletter | July 2025



Sent on behalf of Professor Perumal Nithiarasu, Associate Dean for Research, Innovation and Impact

Dear Colleagues,

Please read below about some of the Faculty's most recent success stories. We would particularly like to see more from our Professional Services staff for the next email!

## **Staff News**

Swansea University-led international projects supporting locally-manufactured solar in Africa, Asia, and the Indo-Pacific



Two Swansea University-led projects focused on global energy access are now in contract. Introducing <u>TEA@SUNRISE</u> and <u>REACH-PSM</u>: next-generation solar technologies for a just energy transition.

Building on the pre-existing SUNRISE project, TEA@SUNRISE is a collaboration between the UK and countries in Africa, Asia, and the Indo-Pacific. The project has amassed a network of over 170 experts to help identify opportunities for next-generation solar in emerging economies. TEA@SUNRISE is part of the <a href="Transforming Energy Access">Transforming Energy Access</a> (TEA) platform, which is funded by UK aid from the UK Government.

TEA@SUNRISE has also been selected by the Foreign, Commonwealth and Development Office (FCDO) to lead the Ayrton Challenge on Next Generation Solar. This is one of twelve challenges that are the focus of the Ayrton Fund. The Fund is a commitment by the UK Government to spend up to £1 billion on research and development for clean energy technologies and business models in developing countries.

<u>REACH-PSM</u> is supporting the local development and manufacturing of perovskite solar modules in Nigeria, Rwanda, Kenya, and South Africa. The project hopes to empower communities in Africa by promoting energy independence and creating jobs.

TEA@SUNRISE is hosting a series of monthly webinars on the themes of next-generation solar and transforming energy access. The next webinar, on August 5<sup>th</sup> at 09:30am, will feature Dr Dima Sirbu of Power Roll Ltd, a company that manufactures lightweight perovskite solar modules. His presentation will explore key benefits and challenges in commercialising microgroove-structured photovoltaics for a just energy transition. Register for the webinar here.

Join the TEA@SUNRISE network here.

Get in touch: sunrise@swansea.ac.uk
Follow the SUNRISE LinkedIn for updates

Swansea Biosciences Build Bridges in Behavioural Ecology and Evolution in Toulouse



Swansea team (from left: Lucia Pedrazzi, Andrew King, Cecile Sarabian, Ines Fürtbauer, Lucie Thompson, Jemima Frame, Oliver Davidson). Cecile Sarabian is based in Toulouse and will join the team as an incoming UKRI Marie Curie Research Fellow in the Autumn.

In June, members of the Behavioural Ecology and Evolution Research Theme in Biosciences visited the Centre for Integrative Biology (CBI) and the Institute for Advanced Study in Toulouse (IAST), supported by Taith funding. The visit focused on building new research connections and exploring emerging topics across behaviour, ecology, and evolution.

A highlight of the visit was a workshop where researchers across the three institutions presented their work (including Swansea researchers at all career stages ranging from Masters and PhD to Postdoc and Faculty), with lots of discussion laying the groundwork for future collaboration across institutions.



PhD student Jemima Frame using the VR system to explore termite mound architecture

### Swansea Professor Helps Shape Global Vision for Evidence-Informed Decision Making



Honorary Professor Kathryn Monk, Chair of the Collaboration for Environmental Evidence (CEE) and based in the Department of Biosciences, recently participated in a landmark international meeting in Cape Town for the Evidence Synthesis Infrastructure Collaborative (ESIC) on 24 - 26 June. Funded by the Wellcome Trust, ESIC is developing a global roadmap and charter to guide future investment in evidence synthesis infrastructure. Wellcome is expected to provide £45m of funding and looking to expand that to over £200m in partnerships.

Over the past six months, Professor Monk served as a member of the Demand-Side Engagement working group, one of several working groups that met weekly—alternating between midday and midnight timings to ensure truly global input. The group focused on how to better engage evidence users, from policymakers to citizens, to ensure that synthesis meets real-world needs.

In Cape Town, she also co-chaired the session on the UN SDGs Planet Pillar, addressing evidence needs for environmental challenges such as climate change, biodiversity, water and sustainable land use.



The meeting, attended by over 200 participants, concluded with the launch of the Cape Town Consensus Charter, already gaining traction among the UN, multilateral agencies and funders in attendance. The initiative is widely seen as a once-in-a-generation opportunity to achieve a global step change in how evidence is synthesised, shared, and used.

All working group papers and the draft roadmap can be accessed at: <a href="https://evidencesynthesis.atlassian.net/wiki/spaces/ESE/overview">https://evidencesynthesis.atlassian.net/wiki/spaces/ESE/overview</a> Final public consultation on the roadmap is expected soon.

## From Swansea to Sub-Saharan Africa: CAPTURE's Global Reach



It has been an exceptionally successful year for CAPTURE, a Centre of Expertise in energy materials and systems at the FSE. CAPTURE brings together researchers working across energy storage, fuel cells, and electrocatalytic technologies, with a strong foundation in sustainable design and circular economy principles. As a group, we have secured over £1m in external funding this year from sources including the Royal Society, Innovate UK, UKRI, the Faraday Institution, the Henry Royce Institute, and industrial

partners, reflecting the innovation and impact of our research.

A particularly noteworthy success is the recent award of **StamiNa**, funded through the Faraday Institution's Ayrton Challenge on Energy Storage (ACES). This challenging project, delivered in partnership with Coventry University, Batri Ltd, Strathmore University (Kenya), AceOn Group, and the Federal University of Technology Owerri (Nigeria), builds on a sodium-ion technology developed at SU and aims to establish an African-led energy storage ecosystem supporting clean mobility.

CAPTURE has also formed a new collaboration with **University of Limerick** to drive innovation in advanced battery technologies, through a project supported by the Wales-Ireland Research Alliance Award. The partnership was marked by a recent visit to our labs from the Irish Tánaiste Simon Harris TD and the First Minister of Wales Eluned Morgan.

All CAPTURE staff, including our early-career researchers **Yuanting Qiao**, **Rui Tan**, **Ashley Willow**, **and Mengnan Wang**, have received competitive grants this year and are leading projects with both academic and industrial partners. The group has also expanded its collaborations with Taisan, GNN, AceOn, and Leaf Tech, and by October 2025, we will welcome eight new PhD students across several funding schemes and projects, further strengthening our research capacity with a shared vision for sustainable and equitable innovation.

### Student News

#### **Best Paper Award for Swansea at eCSCW 2025**

A journal paper from Swansea has been awarded the David B Martin prize for best paper at the European Computer Supported Cooperative work conference. The lead author, Ben Wilson, included the main work as a chapter in his PhD thesis completed within the EPIC CDT at the Foundry, supervised by Matt Roach. The award is bestowed once a year on a full paper accepted to ECSCW that particularly contributes to the multidisciplinary understanding of society and work from a CSCW perspective.

Addressing the "Al chasm" in healthcare, a globally recognised gap between expectations and societal benefit, the paper highlights a key critique – that strong bench-top performance of Al models rarely translates into clinical impact. It convincingly argues for more situated, workflow-embedded evaluation – and for such evaluation to be undertaken early and often.

Drawing on foundational ideas from Suchman, Dourish, Winograd & Flores, and Weiser, the paper carefully grounds its argument within the socio-technical tradition that emphasises alignment, contention, convergence, and an understanding of the 'work-asdone'.

The eight "contextual dimensions" (agents, control dynamics, temporal patterns, taskoverlap, informational proximity and overlap, input influence and output representation coverage) provide a fine-grained operational framework with which to examine and support the design of hybrid decision systems.

This is a contribution to the clinical AI literature as well as the general literature on hybrid human-AI decision-making. It stands out as moving beyond standard performance metrics and into the nuances of human–AI collaboration in real-world settings.

# Congratulations to the our SEDS team as Winners of the UK's MACH-25 Rocketry Competition 2025!



We extend our warmest congratulations to all the students who participated and contributed to a triumph at this year's MACH-25 Rocketry Competition & Conference, held from July 1st–5th at the historic Machrihanish Air Base.

This is second year in a row that our students win the competition in their chosen category - Innovation - the hardest one, and as overall Winners!!!

Your outstanding performance in designing, building, and successfully launching rockets is a testament to your innovation, technical skill, and collaborative spirit. We will try our best to support student to participate in future MACH competitions and beyond. SEDS society continues to be a unique platform for hands-on experience in aerospace engineering, and your achievements have set a new benchmark for excellence. I advise all Aero student to join!

With support from Aerospace Department mentors, Faculty and sponsors, you've demonstrated the future of Swansea, Welsh and UK rocketry is bright and in capable hands.

Well done on your success — we look forward to seeing where your talents will launch you next!

Amy Fitzgerald – Recipient of Aquaculture, Fish and Fisheries Young Author Award 2025



Amy Fitzgerald, a biosciences PhD student, is the inaugural winner of the Aquaculture, Fish and Fisheries Young Author Award for her paper: "Machine vision applications for welfare monitoring in aquaculture: challenges and opportunities" with co-authours: Christos C. Ioannou, Sofia Consuegra, Andrew Dowsey and Carlos Garcia de Leaniz.

This paper reviews how machine vision has been utilised in aquacultural research and potential next steps for development in the field. The paper was praised for its originality and potential impact on the field. The paper can be found here: https://doi.org/10.1002/aff2.70036"

## **REF2029 Canvas Hub**

A reminder that a new Canvas hub has been published. Developed by the REF Officers team, this is a central repository for the REF2029 documentation, guidance, resources and news.

The joining link is <a href="https://canvas.swansea.ac.uk/enroll/BDY36G">https://canvas.swansea.ac.uk/enroll/BDY36G</a>. Please enable notifications as this site will be updated with guidance, news, consultations etc as they are received.

## **Keep in Touch!**

If you are aware of any recent achievements to share, either for yourself or for any members of your team, we would love to hear about them! We're interested in stories from academic and professional services communities. Please email any news to FSE Research (<a href="mailto:fse-research@swansea.ac.uk">fse-research@swansea.ac.uk</a>). Deadline for submissions: 15th of each month.

If you would like to promote a research event on the FSE Events webpage, please contact <u>fse-research@swansea.ac.uk</u>

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