

# Faculty of Natural Sciences (/communications/natural- sciences/2023/feb-2023/)



01 March 2023 | [My Portal \(https://portal.stir.ac.uk/my-portal.jsp\)](https://portal.stir.ac.uk/my-portal.jsp)

► In this issue...

## Pathway to Food Security



**Alexander Kaminski, PhD Student, IoA and Dave Little** have contributed to a study with WorldFish which has found that polyculture – farming multiple species in one system – can serve as a supplement to capture fisheries that are subject to seasonal restrictions. The results have been published in the journal [Foods](https://digitalarchive.worldfishcenter.org/handle/20.500.12348/5176) (<https://digitalarchive.worldfishcenter.org/handle/20.500.12348/5176>).

Co-author Shakuntala Haraksingh Thilsted, WorldFish's Global Lead for Nutrition and Public Health and 2021 World Food Prize Laureate was the first to examine the nutritional composition of indigenous small fish species, commonly found and consumed in Bangladesh and Cambodia. Her research demonstrated that these affordable and locally available aquatic foods offer life-changing benefits for children's cognitive development in the early stages of their life and the nutrition and health of their mothers.

WorldFish scientists took these lessons to Zambia by working with smallholder homesteads to stock various micronutrient-rich small fish species. Small-scale farmers in Zambia are often encouraged to cultivate tilapia in monoculture systems, removing indigenous small fish species from their ponds. The authors thus aimed to rethink tilapia pond systems in Zambia as multi-species systems (polyculture)

rather than single-species systems (monoculture) that would offer a direct source of food for household consumption rather than farming tilapia strictly for markets.

“Ultimately, any improvements to aquaculture should not be done in isolation without considering the more important role of capture fisheries in providing cheap, micronutrient-rich small fish for vulnerable people,” *Alexander Kaminski*

**Save the date**

The launch event to celebrate the opening of the Psychology Division's new Lifespan Research Lab will take place on **Tuesday 18<sup>th</sup> April!**

The day will feature short research presentations by academics interested in using the Lifespan lab, tours of the Lifespan and demonstrations of some of the new research equipment.

Further details (e.g. schedule and confirmed speakers) will be circulated closer to the time.

[Click here to register](#) for the opening event or scan the QR code:



For any enquiries contact [line.caes@stir.ac.uk](mailto:line.caes@stir.ac.uk) or [c.a.caldwell@stir.ac.uk](mailto:c.a.caldwell@stir.ac.uk)

Artwork Credit: Playtime by Sue Beach

Please save the date of **Tuesday 18th April** for the launch event to celebrate the opening of the Psychology Division's new Lifespan Research Lab. The new lab is set up to be a comfortable, inviting and easily accessible space to conduct research with vulnerable subjects (eg pregnant mothers, toddlers, or elderly people). The day will include short research presentations by academics from the University (from both inside and outside of Psychology), who are, or who might be, interested in making use of the Lifespan Lab and its facilities. There will also be tours of the lab itself, and demonstrations of some of the new research equipment (eg Biopac, eye tracker, camera traps and sound recording equipment).

Please use [this link](https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fforms.office.com%2Fe%2FrkDQ0SPTE5&data=05%7C01%7CFNSDeanPA%40stir.ac.uk%7C8e08eb56a50b43&...) (<https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fforms.office.com%2Fe%2FrkDQ0SPTE5&data=05%7C01%7CFNSDeanPA%40stir.ac.uk%7C8e08eb56a50b43&...>) to register if you plan to attend (to facilitate our planning) and let us know if you would be interested in contributing a presentation. Further details will be circulated closer to the time. Contacts for further information: Dr Line Caes ([line.caes@stir.ac.uk](mailto:line.caes@stir.ac.uk) (<mailto:line.caes@stir.ac.uk>)), Prof Christine Caldwell ([c.a.caldwell@stir.ac.uk](mailto:c.a.caldwell@stir.ac.uk) (<mailto:c.a.caldwell@stir.ac.uk>))

## Data Intelligence Project



The University of Stirling is the first non-US university to participate in a data management education programme provided pro bono by data catalogue supplier Alation. CSM are participating in Alation's [Data Intelligence Project](https://www.alation.com/data-intelligence-project/) (<https://www.alation.com/data-intelligence-project/>) which exposes students to its technology.

Academic institutions get to use the supplier's "data intelligence platform" free of charge. This includes its [data catalogue](https://www.techtarget.com/searchdatamanagement/feature/Alation-Data-Catalog-helps-provide-collaborative-data-governance) (<https://www.techtarget.com/searchdatamanagement/feature/Alation-Data-Catalog-helps-provide-collaborative-data-governance>), which is a collection of metadata combined with data management and search tools. The programme also enables students and teachers to access guest speakers from Alation, with expertise in data topics such as analytics, data science and engineering.

"The modern world relies on data to innovate and grow in the digital era. We prime our students with analytical acumen that will help them use data-driven decision-making to build a better world. Alation's Data Intelligence Project augments our curriculum, bringing critical real-world experience with software that better prepares students for career success." *Kevin Swingler*

## NATO Research Specialists' Meeting



**Dr Wen-shin Lee, CSM**, was invited to give a talk, titled "*Breaking the curse of dimensionality in exponential analysis*," at NATO SET-319 Research Specialists' Meeting on "New Mathematics for Multi-Dimensional Radar Systems" that took place during 21-23 February in the International Centre for Mathematical Sciences (ICMS) in Edinburgh. Bringing together more than 40 experts from 10 NATO Nations, the meeting focused on the new and cutting-edge maths research needed to enable, exploit and enhance advanced multi-dimensional radar systems. This specialists' meeting was unclassified, but attendance was by invitation only from NATO Science and Technology Organization (STO) National Delegates and from Sensors and Electronics Technology (SET) Panel Members.

## Using the whole fish



In January 2023, the Institute of Aquaculture in collaboration with [IbioIC](https://www.ibioic.com/) and [Seafood Scotland](https://www.seafoodscotland.org/) in partnership with [Zero Waste Scotland](https://www.zerowastescotland.org.uk/) and [Opportunity Northeast](https://www.opportunitynortheast.com/), hosted a workshop "Building a sustainable seafood sector through collaboration" which attracted a diverse range of participants. The key focus of the event was how innovation approaches could energise the value addition of by-products and wastes in the seafood sector. Alexandra Leeper of the [Icelandic Seafood Cluster](https://www.sjavarklasinn.is/en/) set out the background to the origins of their initiative and told the story of how this fish rich nation had transformed its seafood sector in recent years with a central element being optimising value by recovery and value add to waste.

The day included short presentations from projects mapping waste, extracting valuable n-3 oils from farmed salmon processing wastes and an overview of Zero Waste Scotland. The Institute's **Wesley Malcorps** (above) presented his work on the farmed fish by-product nutrient resource and its critical relationship to traceability through using block-chain approaches. Arguably, Stirling and environs already has a strong cluster of enterprises and a knowledge base that can be built on to unlock potential and a strong recommendation would be to prioritise developing strong relationships with Iceland and other emerging seafood clusters around the world.

## FNS PhD Crucible



Last chance to sign up for the FNS PhD Crucible!

Due to a high level of interest in the FNS PhD Crucible, registrations are still open. Any PhD student in the Faculty of Natural Sciences is welcome to [sign-up for the event at this link](https://forms.office.com/pages/responsepage.aspx?id=9wmNTnnMy0yRSaQjldF0lgajvVk0ydxOumCB3n2h0DVUQzdYQVI3SDk4WlU2NTVIMkwwRzE0UIZTVS4u).

The Stirling FNS PhD Crucible is designed to provide development opportunities to PhD students, helping to foster inter-disciplinary connections among early career researchers. The Vice-Chancellor's Fund has generously funded this initiative, which features a two-day workshop taking place on **Monday, April 3rd, and Tuesday, April 4th, 2023.**

Participants can expect to expand their networks, develop interdisciplinary collaborations, enhance their ability to think creatively and innovatively in their area of research, and gain a deeper understanding of how their work can impact society, as well as how to effectively communicate their findings to a broader audience. The program also includes fun networking activities and input from Susan Alexander (RIS), Prof Anna Whittaker (Faculty of Health Sciences and Sport), Prof Ronan O'Carroll (Psychology) and many more!

For further information, please contact Pamela Rackow (FNS PGR Co-Director; [pamela.rackow@stir.ac.uk](mailto:pamela.rackow@stir.ac.uk)) or Ali Muqtadir (FNS Faculty Officer; [ali.muqtadir@stir.ac.uk](mailto:ali.muqtadir@stir.ac.uk))

## Festival of Research



Expressions of Interest are now open for the Festival of Research 2023 which will take place from Monday 22 May – Friday 2 June and will focus this year on interdisciplinary research and how current and future Stirling research contributes to reaching the UN Sustainable Development Goals. To showcase the breadth of research and relevance to international challenges the 17 Sustainable Development Goals have been grouped in 6 main clusters aligned with recent IAS studentship clusters:

- *Healthy Living and Ageing*
- *Improving resilience and finding solutions to conflict in an era of unprecedented change*
- *Deploying rationality, reason, and risk management to support equality and human rights*
- *The role of heritages, legacies and mobilities in understanding socio-economic transitions in space and time*
- *Behaviour change in our approach to food and healthy eating*
- *Novel methodologies to support future research and better-informed policy*

Contributions to the research focussed sessions are open to all research active staff and postgraduate research students and will be in the format of a [three-minute thesis style presentation \(https://3mt.ku.edu/\)](https://3mt.ku.edu/) (one slide in 3 minutes). Whether you wish to showcase an established project or and new ideas emerging from the IAS studentship clusters you can submit [via this expression of interest \(EOI\) form \(https://forms.office.com/Pages/ResponsePage.aspx?id=9wmmNTnnMyQyRSaQjjdF0Is03Ng\\_TA8RNvrDtrikDxKIUN0Q0TIM0UU5NUVVINVdIVjJBOEw0S1M4Qy4u\)](https://forms.office.com/Pages/ResponsePage.aspx?id=9wmmNTnnMyQyRSaQjjdF0Is03Ng_TA8RNvrDtrikDxKIUN0Q0TIM0UU5NUVVINVdIVjJBOEw0S1M4Qy4u). Deadline for EOIs is **Wednesday 15 March 2023**. For any questions, please contact [ias@stir.ac.uk \(mailto:ias@stir.ac.uk\)](mailto:ias@stir.ac.uk).

## Burns Ceilidh night!



The Victoria Hall, Dunblane was the venue for the Institute of Aquaculture Burns Night Ceilidh on Wednesday 25<sup>th</sup> January. This was an opportunity for students and staff past and present to get a real taste of local culture as well as raising funds for a local charity, Start-up Stirling. The cost of living crisis has made the work they do even more urgent and the event built on a campaign to donate groceries and household goods organised by the Institute Social Committee. The well-known ceilidh four-piece band Skelpit Lug, gave the sonic welcome and brought the beautiful hall to life. At the break the haggis was paraded into the hall and kilted colleague Jimmy Turnbull addressed the beast before giving the Selkirk Grace.

Sponsors Omega Quant ensured everyone was well fed and watered and great support provided for the raffle and games. Prizes were awarded to the most improved dancer, an MSc student from Arts and Humanities, Titilope Adebajo, who accompanied an IoA MSc student and Joseph Murray took away the young person's award for enthusiasm, style and sheer endurance. The organisers wish to thank everyone for their contributions and for raising over £600 pounds for a fantastic local charity.

## SIEC KTP event



Join Scotland's International Environment Centre to discuss net zero and Knowledge Transfer Partnerships (KTPs). The event is designed to introduce small and medium-sized enterprises to KTPs.

Given the economic and political climate, cost of living crisis and continually rising energy bills, the climate emergency may have slipped down the agenda. With the net zero 2045 target still looming, we are inviting SMEs to have a practical conversation about how they can become net zero.

Thought-provoking presentations will provide advice on business activities, available support and funding. An informed panel discussion will cover multiple aspects of how to become a net zero organisation including energy and transportation. The East of Scotland KTP Centre will be there in person to provide an overview of what to expect when competing for a KTP and are happy to

answer any questions you may have.

KTPs are a sum of three parts involving the Academic Partner, Associate and Business Partner. As a university, a KTP is a chance to apply research to a real-world challenge, contributing research impact, opening up commercial possibilities and tapping into additional funding. As a graduate, this programme could accelerate your career and put you at the beating heart of your chosen speciality. [Book your free place.](https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fktpforgrowth.eventbrite.com%2F&data=05%7C01%7CFNSDeanPA%40stir.ac.uk%7C3cc9a24dc1e64909f8dc08c) (<https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fktpforgrowth.eventbrite.com%2F&data=05%7C01%7CFNSDeanPA%40stir.ac.uk%7C3cc9a24dc1e64909f8dc08c>)



You are invited to celebrate International Women's Day with your university Enterprise Team and Careers & Employability Service!

This year's theme is [Embracing Equity](https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.internationalwomensday.com%2FMissions%2F18707%2FEquality-versus-Equity-What-s-the-difference-as-we-EmbraceEquity-for-IWD-2023-and-beyond&data=05%7C01%7Cnaturalsciences.enquiries%40stir.ac.uk%7Ce8fc4308686849a156bd08db133c88d6%7C4e8d09f7cc794) (<https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.internationalwomensday.com%2FMissions%2F18707%2FEquality-versus-Equity-What-s-the-difference-as-we-EmbraceEquity-for-IWD-2023-and-beyond&data=05%7C01%7Cnaturalsciences.enquiries%40stir.ac.uk%7Ce8fc4308686849a156bd08db133c88d6%7C4e8d09f7cc794>)

Join us on campus on **Wednesday, 8 March from 5-7pm** for an uplifting discussion featuring recent Stirling Alumni who are working to #EmbraceEquity and empower others. Let's share the passion and excitement that comes from valuing and supporting difference and reflect on how we can all be part of the solution, not the problem.

"Equity isn't just a nice-to-have, it's a must-have. It's not just something we say. It's not just something we write about. It's something we need to think about, know, and embrace. When we embrace equity, we embrace diversity, and we embrace inclusion. Equality is the goal, and equity is the means to get there. Through the process of equity, we can reach equality. How will you embrace equity?"

This event is open to University of Stirling students, staff, recent alumni and members of the public - invite a friend and help us spread the word! [Click here to register for free](https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.eventbrite.co.uk%2F%2Finternational-womens-day-discussion-panel-public-event-tickets-520563588707&data=05%7C01%7Cnaturalsciences.enquiries%40stir.ac.uk%7Ce8fc4308686849a156bd08db133c88d6%7C4e8d09f) (<https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.eventbrite.co.uk%2F%2Finternational-womens-day-discussion-panel-public-event-tickets-520563588707&data=05%7C01%7Cnaturalsciences.enquiries%40stir.ac.uk%7Ce8fc4308686849a156bd08db133c88d6%7C4e8d09f>)



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**Bartie Kerry L.**, Ngô Thao P. H., **Bekaert Michaël**, Hoang Oanh Dang Thi, Hoare Rowena, Adams Alexandra, **Desbois Andrew P.** 2023. *Aeromonas hydrophila* ST251 and *Aeromonas dhakensis* are major emerging pathogens of striped catfish in Vietnam. [Frontiers in Microbiology](https://www.frontiersin.org/articles/10.3389/fmicb.2022.1067235/full) (<https://www.frontiersin.org/articles/10.3389/fmicb.2022.1067235/full>)

**Cutajar, K., Gauci, A., Falconer, L.,** Massa-Gallucci, A., Cox, R.E., Beltri, M.E. Bardócz, T., Deidun, A., **Telfer, T.C.** 2023. Wind and shipping influences on sea currents around an inshore fish farm in a heavily contested Mediterranean embayment. *Regional Studies in Marine Science* (<https://www.sciencedirect.com/science/article/pii/S2352485523000440?via%3Dihub>).

"Expected goals in football: Improving model performance and demonstrating value" James Mead, **Anthony O'Hare**, Paul McMenemy. PLoS ONE.

**O'Hare, Anthony** 2023. "A Toy Model of Food Production In A Connected Landscape" *Frontiers in Applied Mathematics and Statistics* (<https://www.frontiersin.org/articles/10.3389/fams.2023.1058273/full>).

Carragher, D. J., & **Hancock, P. J. B.** (2022). Simulated automated facial recognition systems as decision-aids in forensic face matching tasks. (<https://psycnet.apa.org/doiLanding?doi=10.1037%2F1037-0908.2022.33.10>) *Journal of Experimental Psychology: General*. (<https://psycnet.apa.org/doiLanding?doi=10.1037%2F1037-0908.2022.33.10>).

**Rosyl S. Somai & Peter J.B. Hancock** (2022) Exploring perceptual similarity and its relation to image-based spaces: an effect of familiarity, *Visual Cognition*

**Flora Rendell-Bhatti, Colin Bull,** Richard Cross, Ruairidh Cox, Gbotemi A. Adediran, Elma Lahive. 2023. From the environment into the biomass: microplastic uptake in a protected lamprey species. *Environmental Pollution* (<https://www.sciencedirect.com/science/article/pii/S0269749123002695>).

**Gilburn AS.** New Parkrunners Are Slower and the Attendance Gender Gap Narrowing Making Parkrun More Inclusive. *International Journal of Environmental Research and Public Health* (<https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.3390%2Fijerph20043602&data=05%7C01%7CFNSDeanPA%40stir.ac.uk%7C2842b38e5cd741aac>

Watkinson, M., **Brownlee, A.E.I.** Updating Gin's profiler for current Java. Proceedings of the Genetic Improvement Workshop, International Conference on Software Engineering 2023.

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## Other news

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### Importance of 'blue' foods



Elsewhere, the new Blue Food Assessment paper, co-authored by **Prof Dave Little**, was published in *Nature* (<https://www.nature.com/articles/s41586-023-05737-x>), entitled: 'Four ways blue foods can help achieve food system ambitions across nations'.

The research compiles and analyses a range of existing national data to uncover the four key roles that aquatic, or 'blue', foods can play to improve national food systems' performance and sustainability. This, in turn, has broader implications for financiers, processors, retailers, development organisations and fishers themselves.

"The study demonstrates that to understand their full importance its essential to embrace the full range of aquatic foods including those sourced from wild stocks and increasingly, the diverse range of farmed species." *Dave Little*



## Italy workshop



**Dr Andrew Desbois, IoA**, and Dr Stefano Carboni (International Marine Centre, Italy) led a workshop in Sardinia, Italy, aimed at establishing strategic research links between Stirling and Italy to support advancement of Mediterranean aquaculture. The 3-day workshop brought together 20 researchers and was funded by a BBSRC International Partnership Award and International Marine Centre.

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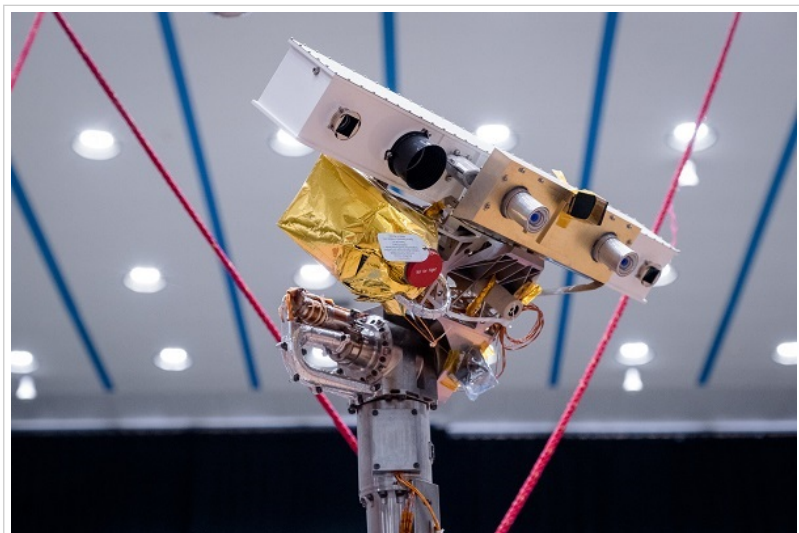
## Taiwan-Stirling collaboration



**Christian Schroeder** played host to Francois L. L. Muller from the [National Sun Yat-sen University in Taiwan](https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Focean.nsysu.edu.tw%2Fp%2F405-1271-196283%2Cc9285.php%3FLang%3Den&data=05%7C01%7CFNSDeanPA%40stir.ac.uk%7C4d7c82df438640153a8908db168b468a%7C4e8d09f7cc794ccb914%3E%3F%3F&as_has_attachment=true) ([https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Focean.nsysu.edu.tw%2Fp%2F405-1271-196283%2Cc9285.php%3FLang%3Den&data=05%7C01%7CFNSDeanPA%40stir.ac.uk%7C4d7c82df438640153a8908db168b468a%7C4e8d09f7cc794ccb914%3E%3F%3F&as\\_has\\_attachment=true](https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Focean.nsysu.edu.tw%2Fp%2F405-1271-196283%2Cc9285.php%3FLang%3Den&data=05%7C01%7CFNSDeanPA%40stir.ac.uk%7C4d7c82df438640153a8908db168b468a%7C4e8d09f7cc794ccb914%3E%3F%3F&as_has_attachment=true)), 1-10 February 2023. His visit was funded by the International Exchange Programme between the Royal Society of Edinburgh (RSE) and the Ministry of Science and Technology (recently renamed into National Science and Technology Council or NSTC) of Taiwan. His visit had been delayed by two years due to the Covid pandemic. The aim was to enhance our collaboration in the investigation of the role of iron in lateral carbon transport from sources on land to the sea. During his stay, he participated in the Earth and Planetary Observation Science Research Group meeting and gave a presentation to BES entitled: '*Why Scotland and Taiwan are excellent locations for source to sea carbon cycle studies*'. Christian will enjoy a return visit funded by the same RSE-NSTC exchange programme.

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## ExoMars funding



In 2022, the launch of the ExoMars rover scheduled for that year was suspended because of Russia's invasion of Ukraine. The mission was a collaboration of the European Space Agency and Russia's Roscosmos. The 2022 [ESA Ministerial Council](https://www.esa.int/About_Us/Corporate_news/Ministers_back_ESA_s_bold_ambitions_for_space_with_record_17_rise) (https://www.esa.int/About\_Us/Corporate\_news/Ministers\_back\_ESA\_s\_bold\_ambitions\_for\_space\_with\_record\_17\_rise) provided the funding for the now renamed Rosalind Franklin rover mission to prepare for a launch in 2028, following the removal and replacement of the Russian elements. **Christian Schroeder** has now been awarded a small amount of funding by the UK Space Agency to support his role as Guest Investigator on that mission.

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## Face recognition technology



**Peter Hancock** has had an article published in *The Conversation* ([https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftheconversation.com%2Fmachine-learning-is-helping-police-work-out-what-people-on-the-run-now-look-like-198325&data=05%7C01%7CFNSDeanPA%40stir.ac.uk%7C2358dc4f2cb94a49aafe08db1349f55f%7C4e8d09f7cc794ccb9149a4238dd17422%7C0%7C0%7C6](https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftheconversation.com%2Fmachine-learning-is-helping-police-work-out-what-people-on-the-run-now-look-like-198325&data=05%7C01%7CFNSDeanPA%40stir.ac.uk%7C2358dc4f2cb94a49aafe08db1349f55f%7C4e8d09f7cc794ccb9149a4238dd17422%7C0%7C0%7C6;)) on machine learning which recently helped Italian police arrest the alleged leader of the Sicilian Mafia who has been on the run since 1993. To aid in the search, the Carabinieri issued an artificially aged image to show what he might look like now (above middle) vs actual (right). In recent years there has been a move towards using computer systems that employ machine learning, a much more sophisticated and formalised way of changing people's faces. Whilst they can't predict with certainty how a person will look years after their last available photo, these images can still help police.

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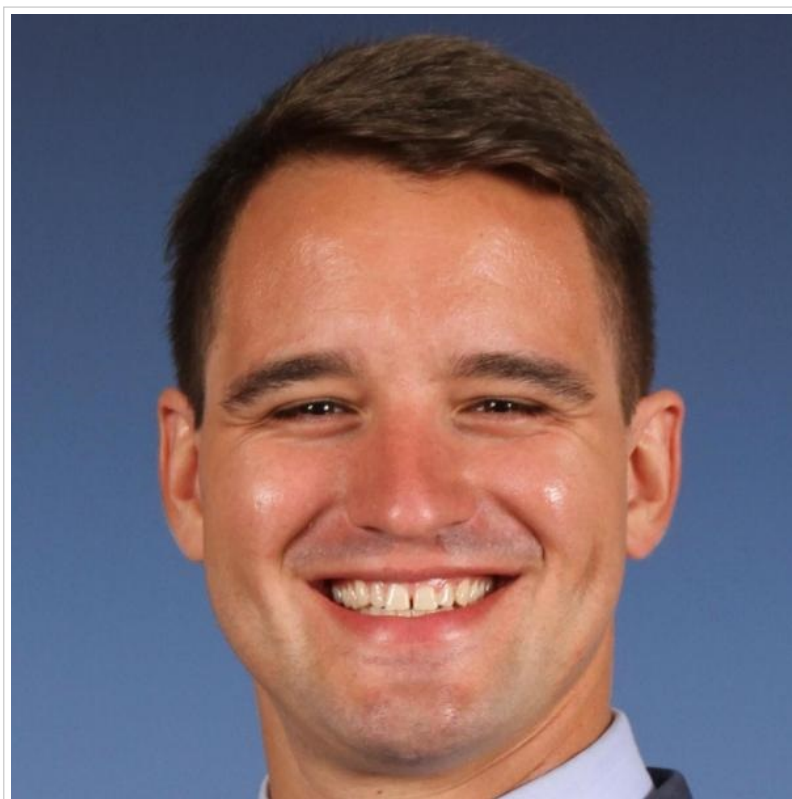
## Invited talk



**Gozde Ozakinci** gave a talk at the BPS Division of Health Psychology-Scotland annual scientific meeting in Dundee, 23 February on 'community-centred health promotion'.

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## Outstanding student



**Stefano Sarti**, a CSM TA and PhD student, has been nominated as an Outstanding Student at [EvoStar 2023](https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.evostar.org%2F2023%2Foutstanding-students-of-2023%2F&data=05%7C01%7CFNSDeanPA%40stir.ac.uk%7C58394c33e9f94b45447f08db15a6f4d2%7C4e8d09f7cc794ccb9149a4238dd17422%7C0%7C) (<https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.evostar.org%2F2023%2Foutstanding-students-of-2023%2F&data=05%7C01%7CFNSDeanPA%40stir.ac.uk%7C58394c33e9f94b45447f08db15a6f4d2%7C4e8d09f7cc794ccb9149a4238dd17422%7C0%7C>) the leading European event in bio-inspired computation. The nomination follows a paper entitled "*Under the Hood of Transfer Learning for Deep Neuroevolution*" (co-authored by Nuno Laurencu, **Jason Adair**, Penousal Machado and **Gabriela Ochoa**), a collaboration between the University of Stirling and the University of Coimbra. The paper has also been nominated for the best paper award at EvoApps 2023, which will be decided during the conference this April. The work uses a visualisation and analysis technique (Neuroevolution Trajectory Networks) proposed here at Stirling to understand the process of automatically designing deep neural networks.

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## Meet our new Comms partner



If you have a good news story to share – perhaps you've just been awarded funding for a new project or are about to publish a research paper – please get in touch with our new Faculty Communications Officer, **Peter Swindon**, who has recently joined the communications team.

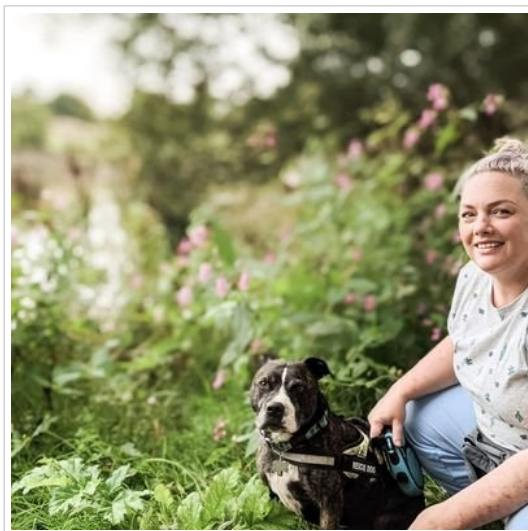
Peter was a national newspaper journalist before taking up his new position at the University and can advise on how to make a story newsworthy for the mainstream media, work with you on media releases and pitch stories to journalists. He would also be happy to provide support for any other media relations activity, including media interviews or pitching ideas to The Conversation. Peter can be reached by emailing [peter.swindon@stir.ac.uk](mailto:peter.swindon@stir.ac.uk) (<mailto:peter.swindon@stir.ac.uk>) or by calling 07393249946. He can also be contacted on Teams. He is looking forward to hearing from you.

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## Welcome to the faculty!

We would like to welcome the following academic staff who have joined us this month.

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**Zarah Pattison**, who has joined BES as a Senior Lecturer in Plant Sciences. Prior to this post she was based at Newcastle University for nearly 4 years. However, it was a return to a familiar place for Zarah who completed her PhD and a postdoc at Stirling.

Zarah's research is focused on the drivers, impacts and management of biological invasions, primarily plants in freshwater systems, but has now also ventured into woodlands! She has a keen interest in the risk of invasive non-native species to food (impact on fisheries) and water security (geomorphological alterations to rivers and lakes), with a range of projects in the UK, Tanzania, and Malawi, alongside some work in Europe. Zarah is grateful for the lovely welcome to BES so far and looks forward to meeting more new (and old) colleagues to discuss opportunities for collaboration. Contact details: [Zarah.pattison2@stir.ac.uk](mailto:Zarah.pattison2@stir.ac.uk) (mailto:Zarah.pattison2@stir.ac.uk) or Teams! My website: <https://zarahsinthefield.com/> (<https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fzarahsinthefield.com%2F&data=05%7C01%7CFNSDeanPA%40stir.ac.uk%7C5a93a6e4426e457f626808db0b4e96ce%7C4e8d09f7cc794c>)

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**Sandra Engstrom**, a Lecturer in Social Work, who will be joining us part-time to work with Forth Valley communities and SIEC for the duration of the Forth Climate Forest (FCF) project. This project aims to support increasing the woodland cover of Stirling, Clacks and Falkirk up to 3% by 2032. This will involve planting around 16.4m new trees over 10 years. Sandra will be looking to connect with people across the faculty with interests in this area and more generally. Contact: [sandra.engstrom@stir.ac.uk](mailto:sandra.engstrom@stir.ac.uk) (mailto:sandra.engstrom@stir.ac.u)

Sandra grew up on the traditional territories of the Niitsitapi (Blackfoot) and the people of the Treaty 7 region in Southern Alberta, which includes the Siksika, the Piikani, the Kainai, the Tsuu T'ina and the Stoney Nakoda First Nations. She has practice experience with different groups in Canada, the US, Vanuatu, St. Lucia, England, and Scotland. Her research centres on community resilience as well as the role of social work in combating the climate crisis. This often takes the form of looking at community mental health, trauma and eco-grief, working with vulnerable populations and community groups within a research and teaching capacity.

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**Ross Murray** who has joined us as a Lecturer in Psychology. He completed his PhD at Stirling in the Faculty of Health Science and Sport researching group dynamics as it relates to sport participation and performance. After his PhD, Ross worked as a post-doctoral fellow at the University of Toronto in Canada, primarily researching the impact of group exercise and team sport participation on adolescent and young adult mental health.

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### Look out for the March 2023 edition!

The next Newsletter will go out on **Friday 31 March 2023**. Please submit any content by Monday 27 March if possible please.

*If it's important to you, it's important to us!*

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### Keep in Touch



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