Faculty News

Faculty of Natural Sciences

29 September 2023





Even pandas can get SAD

A study led by **Kristine Gandia**, **Psych**, together with **Sharon Kessler and Hannah Buchanan-Smith**, has found that giant pandas housed in zoos outside the latitude of their normal range are less active, with potential consequences for their welfare. All animals have a circadian rhythm regulated by cues from their natural environment, such as temperature, light cycles, and seasonal food. If these cues are quite different to the ones from the latitudes which they have evolved for, it disrupts their bodies and behaviour.

They studied vulnerable animals at six zoos over the course of twelve months and concluded that much like humans in Scotland experience seasonal affective disorder (SAD) in the winter, pandas, and captive animals in general, may struggle to fully adapt to environments which they have not evolved for. The findings were published in

Also in this issue...

UNIVERSITY of

STIRLING

parkrun success factors

Tackling Climate Change

New Researcher Guide

Menopause Month Events

Other news



Hosted by Stirling Council, this annual festival will be held in various venues across the area during the first week of the school holidays (11-14 October), with input from a variety of organisations including staff from FNS. This vear's festival will be even bigger and better thanks to the generous support of EventScotland's

<u>Frontiers of Psychology</u> and was picked up by more than 400 media outlets worldwide! We do love pandas.

Read the full story here



parkrun near water and woodland = success

parkruns are community-organised, timed, 5k runs that take place every Saturday in hundreds of locations across the world to encourage physical activity in a friendly and social environment, including a weekly parkrun around Airthrey Loch.

Analysis by ecologist **Dr Andre Gilburn, BES,** who also regularly takes part in the parkrun, suggests the creation of more routes alongside water and woodland habitats could encourage people to regularly take part, improving public health. The study also found that a higher proportion of new runners at an event increased the return rate; that people are more likely to return to smaller events; and that participants who completed routes in a relatively quick time are more likely to return. The organiser of the university campus parkrun is in no doubt this location encourages new participants to join and then return time after time. The results were published in <u>PLOS Global Public Health</u>

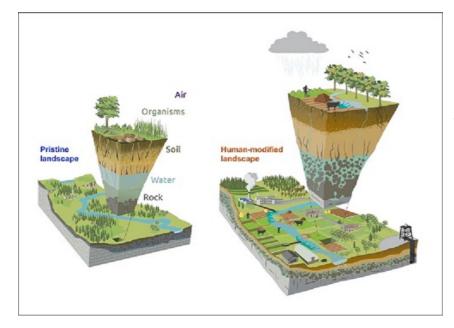
Read the full story here

National Events Programme. With a fantastic array of activities and events to inspire young and not so young minds, from ocean-themed arts workshops and stargazing to testing out the plasticity of your brain with visionshifting goggles and a series of engaging science talks, there really is something for everyone. To find out more about the events, visit the Stirling Science Festival website.



Student Ambassador award

BES Environmental Science student Allison Villareal has been awarded the Student Ambassador award by the Institution of Environmental Sciences (IES) for consistent commitment and dedication to her role. The award entitles Allison to one year free membership with the IES after her graduation. The IES is the professional body for Environmental Scientists and accredits our Environmental Science degree



Local knowledge vital for tackling climate change

Prof David Oliver, BES, was among a team of researchers who have suggested that plans to tackle the impacts of climate change on food security must integrate local knowledge to help preserve the Earth's critical zone. The critical zone is the thin layer of the planet's surface that stretches from the roots of drinking water aquifers to the tops of plants and trees. It supports and sustains animal and plant life by regulating the flow of water, greenhouse gases, nutrients and energy. Access to food, drinking water and clean air depend on a wellfunctioning critical zone, but decades of human activity have degraded the zone's condition around the world as the above diagram shows.

The researchers suggest that the new diagram should replace a widely used, more simplified graphic, introduced in 2007, which focused on the natural processes that shape the critical zone without addressing human impact on landscapes. The multi-national group of researchers contributed to the paper published in <u>Earth's Future</u>. programme. Environmental Science Students are entitled to free student membership.



30 years of MERL

Happy 30th birthday to the Marine **Environment Research** Laboratory based at Machrihanish near Campbeltown, a key facility at the vanguard of aquaculture research and innovation. MERL was opened 30 years ago by the then Chief Scientist to the Cabinet Office. **Professor William** Stewart, and Professor Arthur John Forty, University Principal and Vice-Chancellor at the time. The University's ongoing commitment to MERL was recently underlined with a £2m refurbishment which began earlier this year. Here's to the next 30 and beyond!

Read the full story here



Nature of Scotland Award nomination

BES PhD student **Sarah Watts** has been shortlisted for the



Wageningen University visit

Aquatic scientists in BES recently hosted a visit from the Water Quality Management & Aquatic Ecology Group of Wageningen University (WUR), one of the top Aquatic Ecology groups in the world. The visitors from the Netherlands were keen to get to know the BES scientists and explore mutual research and teaching interests.

In the morning, lightening, and enlightening, presentations were followed by informal chat and home-made cakes. The afternoon agenda incorporated a visit to Argaty farm, a rewilding field-site where BES scientists are investigating impacts of beaver reintroductions as well as studying factors that influence the air-water greenhouse gas exchanges which make lakes and ponds a key component of the global carbon cycle. The site trip was rounded off with the experience of witnessing the daily feeding of the burgeoning local red kite population. All-in-all a productive and enjoyable day, and hopefully the start of some future collaborations.

European Paediatric Psychology Conference

Dr Line Caes organised and chaired the European Paediatric Psychology Conference (EPPC2023) at the University of Stirling



from 30 August - 1 September 2023. The conference was a huge success, attracting about 140 international paediatric psychologist to share the latest research evidence and clinical practices to support the wellbeing of children with a physical illness and their families. Conference participants came from the USA, the UK, the Netherlands, Sweden, Belgium, Spain, Switzerland, Iceland, Italy, Ireland, Ukraine and Lithuania and featured 3 keynotes, 13 parallel symposia, 12 short oral presentations and 56 posters. Importantly, the conference featured a presentation outlining the support the European Paediatric Psychology

Conservation Science Nature of Scotland Award - see the full list here: <u>2023 Shortlist</u> (<u>rspb.org.uk</u>)

This is a hugely prestigious award, recognising the achievements of researchers whose exemplary science has had an important impact on nature conservation in Scotland, or has exceptional promise of doing so in the future. Well done Sarah, and good luck on 22 November when all the shortlisted projects will be celebrated at the Awards Ceremony in Edinburgh.



HNC Workshop

On 7 Sept researchers funded by the HNC Catalyst Fund met in Stirling for a workshop to help accelerate their pump priming projects into impact. The day consisted of a series of project updates from the funded projects, an introduction to impact and its acceleration and then a Box Sprint exercise, which is a mini version of the sprint concept which usually takes place over 5 days. It was a successful day with the research community engaging in the impact conversations and enlightening moments

Network has been able to deliver to health care providers in Ukraine via a webinar series.

where research moved from research to innovation and commercialisation opportunities.

ACTIVE

TRAVEL WEEK

16TH-20TH OF



Behavioral Medicine Congress

Vivien Swanson, Wendy Maltinsky, Ronan O'Carroll, and Gozde Ozakinci, Psych, attended the 17th International Congress of Behavioral Medicine, in Vancouver, Canada, 22-26 August, with the timely theme: 'From Local to Global : Behavior, Climate and Health'.

Vivien Swanson chaired a symposium on 'Advancing International Evidence and Knowledge Translation to support Health Professionals as Agents of Behaviour Change' including a talk on the Scottish NHS MAP behaviour change programme. Ronan O'Carroll chaired sessions on (a) Telehealth and digital interventions for prevention and intervention in health behaviours and (b) on Mental health and health behaviours in students. Gozde Ozakinci gave a talk in an invited symposium in honour of Prof Howard Leventhal, one of the grandfathers of health psychology. Wendy Maltinsky presented a poster on her ongoing innovative work on digital interventions to improve respiratory health. OCTOBER

Active Travel Week

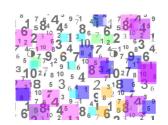
Join us for the University's new Active Travel Week from 16-20 October 2023. An interactive week focused on cycling, walking, and other forms of active travel. Come along to our Q&A evening with local record-breaking cyclists, sunrise stroll event, bike and blethers, lunchtime walks and many more. Full programme available at this link.

Saemi Haraldsson, CSM, gave an invited talk at the 65th Crest Open Workshop on 18 September, entitled: *"Will programming become an obsolete skill?"*.

Crest Open Workshops (COW) are a prestigious series of invited talks organised the CREST Centre (<u>Centre for</u> <u>Research on Evolution</u> <u>Search & Testing</u>) at UCL. He posed some questions of academic interest as well



as industry and the education of the workforce by reflecting on a limited historical point of view to speculate on what lies ahead with the recent rapid deployment of powerful generative-Al tools.



CSM Public Lecture Series

"A Random Walk through Mathematics and Computer Science" public lecture series is back!. There will be 3 lectures in Autumn and 3 in the Spring on Thursdays



SARG Conference

On the 22 August, this year's <u>Scottish Autism</u> <u>Research Group (SARG)</u> annual conference was held for the first time at the University of Stirling. SARG, founded in 1999, is an interdisciplinary group of

academic researchers, postgraduate students and practitioners involved in autism research. Their aim is to facilitate a network of researchers in Scotland to foster excellence in autism research that is valued by autistic communities.

This year's annual meeting was on the topic of 'Autistic Wellbeing'. This was the first in-person event for SARG since the pandemic, which was co-organised by **Dr Catherine Grainger** and members of the <u>Stirling Autism</u> <u>Research team</u>, the charity Scottish Autism and autism researchers from the Universities of Edinburgh, Glasgow, Heriot-Watt and UWS. The event included excellent Keynote talks from **Professor Hilde Geurts** from the University of Amsterdam and **Fergus Murray** (Cofounder of the Autistic Mutual Aid Society Edinburgh). **Sarah Dantes**, a PhD student in Psychology also presented a flash talk on her PhD study exploring stigma in autism.



EU H2020 R&I Maths Project

Mathematicians **Wen-shin Lee, Anna Kirpichnikova, Anthony O'Hare, and MSc student Osamu Takahashi** attended the mid-term meeting of EU Horizon 2020 research and innovation project <u>EXPOWER</u> in Mariaspring, near Goettingen, 11 - 14 September. Wen7-8pm, room B4. Our Autumn programme is:

October 12 "The Unreasonable Effectiveness of Mathematics in the Physical Sciences" **Dr Anthony O'Hare**

November 9 "TBC" **Dr Wen-shin Lee**

December 7 "The Mathematics of Christmas" **Professor Rachel Norman**

Click on the link for more details



Valedictory Lecture - Prof Jimmy Turnbull

After 35 years as a member of staff at the university, **Prof Jimmy** Turnbull will retire from Institute of Aquaculture on Tues 31 October 2023. There will be a valedictory lecture on Weds 1 November, 16.00 in **Campus Central** 3.04. Everyone welcome. Further details can be obtained by contacting aquaculture@stir.ac.uk

New roles

shin delivered a status report on work package 5: applications; Anna gave a talk on exponential analysis in arrhythmia detection and its connection to wave propagation; whilst Osamu presented a poster based on his Master's project "Subspace-based Method for Financial Time Series Analysis" . It is evident that Stirling plays an active role within the consortium. The mid-term meeting was a success, attended by academic and industrial members of the EXPOWER consortium, as well as the EU project officer.

On the first afternoon, there was a field trip that included a visit to Mahr, a German company specialising in highprecision production metrology, and the Mathematical Institute at Goettingen, home of most of the famous mathematicians from the last four centuries. The Stirling group had a photo taken in Hilbert space. They were all disappointed on how small the Hilbert space was (yes that's a maths joke!!!).



New Researcher Guide

The Research Environment Group (REG) is delighted to share the newly developed <u>Researcher Guide</u>, a new information resource for Research Staff and Principal Investigators to navigate policies, roles and expectations to support researchers in their careers and involvement in a research project.

The Researcher Guide has been developed by researchers for researchers via a REG working group that was co-led by Dr Hannah Hale (Research Fellow Faculty of Social Sciences), Dr Allison Ford (Assoc Prof, Faculty Health Sciences & Sport) with further participation drawn from within REG and from across the University.

If you are new to Stirling there is also an <u>Induction Guide</u> for new research staff which provides an overview of support and opportunities for professional development and centrally supported networks, activities and resources for staff as they settle into their new role as a researcher at Stirling. For any questions about the guides or REG activity please contact researchenvironmentgroup@stir.ac.uk.



Stacey Mackay

Currently P/T Faculty Administrator in CSM, Stacey has also joined the HNC team as Programme Coordinator, initially until Feb 2024 to provide support for increasing volume of programme activities.

Joy Taylor

And welcome back (briefly) to **Joy**, formerly research support in RIBE, who has joined the AQUA Excel project team as P/T administrator until full recruitment is complete.

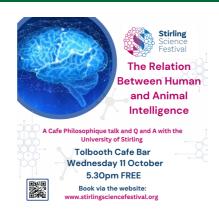
Welcome to the Faculty



Welcome to **Dr Anna Crawford** who has joined BES as

Inter-disciplinary ARED project events

A couple of events coming up organised by the interdisciplinary ARED project (Psychology & Philosophy) in conjunction with Stirling Science Festival:



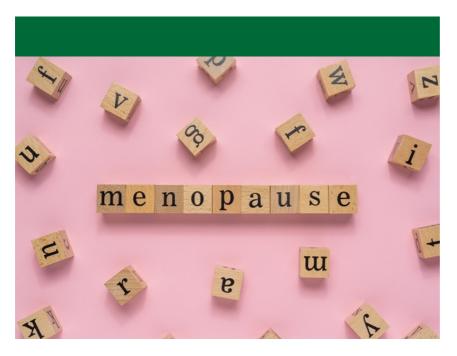
Café Philosophique event,

Weds 11 October 17.30, Café Bar, Tolbooth, Stirling: The relation between human and animal intelligence

A Café philosophique talk on the relation between human and animal intelligence delivered by Dr Giacomo Melis, research fellow at the University of Stirling. The event will begin with a presentation outlining arguments in favour and against the idea that human intelligence is of an entirely different kind from that of other animals. Dr Melis will then raise some questions to be discussed with the audience. For more details and to book a place, <u>please click on this</u> <u>link</u>.

Public Lecture - Professor Erica Fudge (Strathclyde), Fri 13 October 2023, 18.00, Campus Central 3.04: What were the animals thinking? The differences between theory and practice in early modern ideas

Join the ARED Team and the Stirling Science Festival to explore the development of our conceptions of animals and humans in the modern world. Professor Fudge is the director of the British Animal Studies Network, and author of several books and articles on the relation between human and non-human animals with a special focus on the modern period. For more details and to book a place, <u>please click on this link</u>.



Lecturer in Physical Geography. She is a glaciologist who employs 3D models to investigate the processes that drive iceberg calving at marine-terminating glaciers. Before joining BES, Anna was a Leverhulme Early Career Fellow with the School of GeoSciences at the University of Edinburgh, following completion of her MSc and PhD programmes at Carleton University, Ottawa. In her free time. Anna is an avid runner, hiker and mountain biker who is also trying to find time to practice her amateur piano skills.



Welcome to our new Cognition Technical Specialist, **Mark Donoghue**, based in Psychology.

PhD Success!



Huge congratulations to **Stephanie Horne**, IoA, who successfully defended her

Events for World Menopause Month

HR will be running several online events for World Menopause month.

Event 1 - Line Manager only Workshops

To encourage meaningful conversations around the menopause, we are running two <u>line manager only</u> workshops in October. These are to provide managers with the tools to best support staff who are starting or going through their menopause journey. If you have ever wondered how you could help a team member who may be struggling due to the menopause, please join one of these sessions to learn more about your role and what you can do.

Please register for one of these sessions via links below:

Line Manager (only) workshop -Wednesday, 11 October, 9.30am-12.30pm (via Zoom) or

Line Manager (only) workshop - Wednesday, 25 October, 9.30am - 12:30pm (via Zoom)

Event 2 - Webinar with Dinah Tobias, Blooming Menopause

The Menopause in the workplace webinar is delivered by Dinah Tobias of Blooming Menopause, to get an overview of menopause – why and how it happens. You will learn some of the common symptoms and how it can impact lifestyle and work.

This webinar is for you if you are a line manager, someone approaching or in menopause, or a caring colleague who believes in creating an inclusive and supportive workplace.

Book your place for the Menopause in the workplace webinar - Wednesday, 18 October at 11am - 12.30pm.(via Zoom)



Ytteborg, E., **Falconer, L.,** Krasnov, A., Johansen, L.H., Timmerhaus, G., Johansson, G.S., Afanasyev, S., Høst, V., Hansen, Ø.J., Hjøllo, S.S., Lazado, C.C. 2023. Climate change with increasing seawater temperature will challenge the health of farmed Atlantic cod (*Gadus morhua* L.). <u>Frontiers in Marine Science</u> PhD. Thesis Title: Assessing the environmental impacts and nutritional outcomes of tilapia farming in Bangladesh.



And to **Timothy Wiese**, **IoA**, Thesis title: Safeguarding the welfare of Scottish farmed Atlantic salmon: current practices and prospects



Finally, congratulations to **Heri Kurniawan**, IoA. Thesis title: *Investigation of the bacterial outbreaks in farm tilapia and catfish in Indonesia.*

> FNS webpage

See the website

FNS staff directory

See the staff directory

Contributions for next edition

The next Newsletter will be published on **Friday 27 October 2023** Please submit contributions at least 3 days in advance to Diane Davidson: FNSDeanPA@stir.ac.uk