# Research activity, support and opportunity here at the university

Welcome to the university's research newsletter which has been developed to inform you about research in the university, relevant information, news and support. You have received this newsletter as you are on the university's mailing list as being research active / interested. If you would like to unsubscribe please reply to this mailing.



In my last introduction to Research Update, I mentioned that we were about to submit to REF 2021. That submission occurred some nine days ahead of the national deadline, 31st March 2021, and I would like to acknowledge the sheer hard work of everyone that was involved in pulling together the 267 outputs, the 17 research case studies, and the 8 environment statements. It has been an inspirational experience to have worked with so many talented professional colleagues across the research community, and I know that everyone strived to secure the best possible submission. It was a real team effort, reflective of the wider research culture which we have. The contribution of every individual to this – from PhD students to principal investigators and including all our professional services staff – is so important to our combined success, whether or not any one individual was directly involved in the REF. We await the REF audit process – which will be robust across the UK- and still have to finalise our equalities impact assessment submission, due at the end of July, but the key date will be April 2022 when the results of REF 2021 will be released. One of the striking things about

REF 2021 is the evidence it provides about the growth of our research across the university and in many disciplines. For example in health, there has been a significant expansion of a wide range of sub-disciplines within the School of Health, Social Care and Life Sciences, including the transfer of nursing from the University of Stirling back in 2017. This growth, across many disciplines and across science, arts and humanities, provides a strong foundation for the future. Growth is indicative of a healthy and dynamic and successful research culture. It builds confidence and strength and maximises impact in our region's economy and society and beyond. It is true that there will be challenges ahead for the sector, and there is volatility and a sense of change at the moment. The combined impacts of COVID-19 and BREXIT have been far reaching for sure, but there are new opportunities – such as a potential closer collaboration with Scotland's Rural College, opportunities provided by Horizon Europe and the Peace Plus programme, the regional growth deals, our involvement in cutting edge technology in the aviation industry, and the nurturing of a closer relationship with UK Reach and Innovation and the Research Councils. It will be important that we seize these opportunities, and others, that we have a relentless focus both on excellence and impact (not mutually exclusive, of coursel), and that we continue, as the highest priority, to engage internationally. For it is this international engagement, our ability to consistently produce research outputs of acknowledged excellence, and our adepthess at securing research impacts with highrelevance to solving global challenges that will serve us well in the time ahead.

### Professor Neil Simco An t-Àrd-Ollamh Niall Simco

Vice-Principal (Research and Impact) | Iar-Phrionnsapal (Rannsachaidh agus Buaidh)

### Celebrating a decade of research at the university



As we celebrate the university's tenth birthday, we look back at ten key research projects our staff and students have been involved in over the years. From Neolithic textiles to marine microplastics, we hope you enjoy this small selection of studies.

Join our tenth birthday seminar series examining how we can help lead our communities and economy to a post-COVID recovery:

- <u>Leading learning</u> Thursday 13 May, 4pm to 5.15pm
- Leading health research and innovation Thursday 10 June, 4pm to 5.15pm

# Birthday competition - chance to win a voucher

What impact has our university partnership made on you, someone you know or your community? Enter our tenth birthday photo and video competition for a chance to win a £100 youcher! Staff, students, alumni and members of the community are all welcome to enter!

# Information communication technology and library support for research

It is important that you involve information communication technology and libraries early in your project planning (and prior to proposal submission) to make sure you have a comprehensive research data management plan and adequate budget to fund equipment, software, specialist services and, probably most importantly, data storage for during and after your research project.



Access this link for the new 'ICT and library support for research' webpage to find out more about the support researchers can get with information communication technology and libraries.

# Histories and herstories



From 14 to 16 April the <u>Institute for Northern Studies UH</u>I held its 5<sup>th</sup> 5t Magnus Conference entitled 'Island Histories and Herstories'. The conference was postponed in 2020 due to Covid restrictions. However, instead of delaying the conference again, it was moved online, and with the help of Leanne MacLeod VC Master, it turned outto be a great success. Forty papers were delivered by speakers from across the North Atlantic, including from Canada, Iceland, Shetland, Orkney and the

UK Mainland. The organiser Dr Andrew Jennings said, "This type of conference definitely has its merits. There's been a feeling of friendly, relaxed, informal intimacy." At times there were 200 attendees watching the proceedings. A Canadian delegate said, "It was SO worth getting up at 4:45 a.m. from Prince Edward Island to tune in to everyone's wonderful presentations. I learned so much."

The papers were very varied, and both Orkney and Shetland were well represented. Concerning Orkney for example, 3 PhD students with the Institute for Northern Studies; Julie Cassidy, Annie Thuesen and Fleur Ward delivered presentations on the manufacture and distribution of alcohol in Orkney from the 16<sup>th</sup> century to the present day, the development of Orkney as a tourist destination, and the role of information and communication technologies in connecting Orkney to the wider world. Polish scholar Dr Halszka Lelen discussed the narrative representation of female characters in selected short stories of George Mackay Brown and Dr Gabrielle Barnby explored the diary of Orcadian poet Bessie Skea. Jenny Murray and Allen Fraser discussed their current research into the use of Orkney sandstone in the construction of three medieval churches in Shetland, the same stone used in constructing St Magnus Cathedral.

As for Shetland, Dr Siun Carden delivered a paper on knitting skills and stories called, 'Makkin and Yakkin in Shetland and the Aran Islands'. Dr Jane Rendall talked about Shetland women poets from the Napoleonic Wars and Dr Andrew Jennings discussed the little-known 15<sup>th</sup> century Shetland poet Olavus Pauper, who wrote in Latin. Dr Simon Clarke discussed time, space and gender in the Iron Age broch village at Scatness, while Maya Darrell-Hewins talked about the archive of Shetland home movies.

The conference was brought to end with a recorded concert specially devised by Nordic Viola, featuring the work of female composers, which reflected upon the female experience of landscapes, motherhood and social gathering.

The quality of the research and the presentations was such that the organisers are very keen to produce a publication. The comments at the end showed that despite

not being able to attend in person, people had thoroughly enjoyed the experience. Professor Christina Lee from the University of Nottingham posted. "It was a lovely conference!" and Dr Kate Mathis from the University of Glasgow emailed, "I wanted to send a brief note to everyone to say thank you so much for arranging and hosting such a great conference; even virtually, there was so much of a welcome for delegates and such great reception for all the panels, and the papers were unanimously excellent. It was also lovely how much slightly more random discussion did take place during the set-up times."

A new topic entitled 'animal welfare and environmental ethics' has been added to the ethics reflection and practice module which is available to staff and research students in Brightspace. If you have already undertaken the other 6 topics in this module you now have the option to complete this new topic and the multiple choice questions attached to it. One completion of the new topic please contact Fiona Leiper and she will issue you with a new completion certificate once you have completed it. If you don't currently have access to the module please contact Fiona Leiper and she will set your



### sting the global response to the COVID-19 pandemic



Our COVID-19 area, attached to our research repository, can be accessed here and brings together all research activities relating to COVID-19 now and its affects over time from across the university.

# Research survey open – understanding the interface between teaching and creative process





As part of a research project funded by The Carnegie Trust, Mandy Haggith and Rosie Newman, researchers at the centre for remote and sustainable communities, are inviting creative arts teachers in Scottish colleges and universities to take part in an online survey to explore their balance between teaching and creative practice

The research project is aimed at understanding how synergies can be nurtured between higher education arts teaching and teachers' own practice. More information can be found on the liminal zone project webpage

If you are a creative arts lecturer or creative practice practitioner please could you spare a little time to take the survey.

If you can help to share with your peers in colleges and universities please contact Rosie at Rosemary. Newman.ic@uhi.ac.uk who is coordinating the research project contacts list with Mandy Haggith

### Home based exercise study – call for volunteers



This study will assess how participants interact and use wearable fitness technology (Fitbits) and smartphone applications. It will look to understand if participants adhere to online exercise classes. Participants will be randomly allocated to 1 of 2 groups over a 6-week intervention. One group will attend 2 sessions a week of online home-based exercise provided by High Life Highland. The other (control) group will continue their habitual levels of physical activity. Both groups will be issued with a Fitbit and be required to complete a short testing session before and after the 6-weeks. The research team are looking to recruit the undernoted participants:

- Males and females
- 50-70 years old
- People currently conducting low to moderate levels of physical activity
- No contraindications to exercise

# **Further details**

# nuel-Thomas Valdivia's blog



Manuel-Thomas Valdivia (pictured), a Hydro Nation PhD scholar with the university, has written a blog related to his PhD project (in the Medical Nanotechnology group in the Division of Biomedical Sciences):

https://www.hnic.scot/world-water-day/create-world-water-day-blog-8

https://www.hydronationscholars.scot/scholars/manuel-thomas-valdivia

# Research captures the 'living landscapes' of a North Coast 500 community

PhD student Julian Grant (pictured) has worked with a Caithness community to create a unique photography exhibition based on conversations about developed in partnership with the Castlehill Heritage Centre, located in the Caithness village of Castletown



# NHS Research Scotland – an update from Frances Hines, NHS research & development manager



We are rapidly opening things again with careful consideration of the implications, health and safety and all other COVID-19 related aspects We are continuing to receive more feasibilities - especially of interest are those in relation to mental health, and we have a big interventional mental health study coming up. Things are pretty much back to normal with local based commercial studies, and we hope to finalise the NHS RESEARCH SCOTLAND remaining studies we have waiting for approval in the next couple of weeks. Our large EU projects in various areas are all moving on and

making substantial progress, and we have some applications in for more work in Africa, and more Internet of Things work in Northern Europe. Hopefully the next edition of University Research Update will include our new website

# New research underway to trace the steps of urban squirrels



This study is led by Dr Louise de Raad, Research Fellow at Inverness College UHI, in collaboration with the Scottish Wildlife Trust's Saving Scotland's Red Squirrels project.

# Community determined change-scapes of recovery: case studies across the Highlands and Islands of the impact and strategies for recovery from the COVID-19 pandemic

The main aim of this Centre for Remote and Sustainable Communities led project is to contribute new knowledge on community perspectives on attitudes to, and responses to, COVID-19, lockdown and recovery. The proposal supports systematic community-driven creative research between the university academic partnership and the communities of the Highlands and Islands in order to inform regional planning for a 'just recovery' from the crisis.



# Contacting students to participate in student research

If students would like to recruit students from the University of the Highlands and Islands to participate in their research they should, when their ethical approval has been granted, complete a research email template form (available on the <u>university's research ethics website</u>) after which it should be emailed to <u>Fiona Leiper</u> who will then forward it on to the university's helpdesk for them to process. An email will then be sent to the relevant cohort of students who will have opted in, during online enrolment, to participate in the research.

Neither staff or students should contact students directly to ask them to participate in their research; doing so is an unlawful use of data.

# Researchers offer creative funding to bring Highland and Island heritage to life



Artists, crafters, musicians and writers in the Highlands and Islands are being invited to develop new work and products inspired by local stories as part of a collaborative project being managed by researchers from the University of the Highlands and Islands and Robert Gordon University.

As part of the Northword project eight development grants of £1,700 are available to support new creative work which will be promoted digitally to reach international audiences.

Applicants are being asked to present an idea for a new product or work based on stories that have been collected by project researchers celebrating the history, archaeology, traditions, folklore, landscape and environment of the whole region.

The project aims to use the power of storytelling to support the creative industries in remote areas and enhance the online presence of small businesses by giving them greater access to international markets. It also seeks to draw on and support long traditions of storytelling in northern locales and encourage communities to rediscover and celebrate local tales.

Dr Steve Taylor, Director of the <u>Centre for Recreation and Tourism Research</u> based at West Highland College UHI, said: "There is a wealth of creative talent in the Highlands and Islands and we're hoping to encourage applications from a diverse range of practitioners. The possibilities are wide ranging and potential products could include textiles, ceramics, crafts, jewellery, art, music, film, photography, dance and theatre. We welcome contributions in English, Gaelic or Scots."

This project is co-funded by the Northern Periphery and Arctic Programme of the European Union and draws on the experience and expertise of a range of international partners in Northern Ireland, Russia, Sweden and Finland. In Scotland the project is led by staff at Robert Gordon University in collaboration with the University of the Highlands and Islands.

Applicants will be asked to submit a two-minute video pitch detailing which story they have chosen and how their product will help to bring it to life. Applications close on 18 May and successful applicants will be informed within a month. They will then have a six-month development period in which to produce the work. More information about the application process and how to apply can be found here or you can find our on the Northword Facebook page.

### **Graduate School resources**

The <u>Graduate School's sharePoint</u> site is available for all staff and supervisors looking for more information about the postgraduate research provision.



The code of practice for postgraduate research degrees and the brightspace postgraduate research area remain the go-to places for student procedural guidance and forms - the aim of this new site is to provide staff with complementary information, templates and checklists to assist with, e.g. candidate interviews and new student local inductions. The Postgraduate Research page on <u>Brightspace</u> has been updated to include a new page entitled 'COVID-19 (coronavirus): Information for students and supervisors' which contains Covid-related info and FAQs.

# Study reveals importance of outdoor space during COVID-19 pandemic



The findings were made by health experts from the University of the Highlands and Islands and the University of Aberdeen who surveyed 2,969 adults from around Scotland in June and July last year.

The study also revealed that people who had to share outdoor space and who live in deprived areas also experienced great mental health challenges during the pandemic.

# Innovation funding

There are a number of challenge, innovation and government grant programmes aimed at driving innovation across the UK in universities and businesses, many focus on improving the links between universities and businesse. Descriptions and links for some of the major programmes are available here.

The Scottish Funding Council has awarded a standard innovation voucher for a project between Orcades Marine Management Consultants Ltd. and the Computer Science Department, Orkney College UHI. Orcades Marine Management Consultants Ltd. is a team of highly experienced global marine consultants, with decades of combined experience, providing innovative, reliable and cost-effective solutions to the marine industry. Together with Orkney College, they will develop a tool to capture small vessel stability in a time-saving and accurate way. The Department of Computer Science in Orkney College offers a good opportunity to bring subject specialists into the development process of the assessment tool. Through teaching, research and academic interests the department offers opportunities for close partnership working during the development process, which may not be available from a commercial company.

# Coast



'Coast' is a community-led story gathering project, looking to build a bank of stories, covering the west coast of Scotland from Wester Ross and Lewis in the north toArran and Kintyre in the south. These stories will be narrated through a website, interactive app, and innovative exhibition material to encourage locals and visitors to explore the roads less travelled across the islands, peninsulas, and coastline of the west coast.

A key element of the Coast project has been working with a team of local story gatherers throughout the west coast of Scotland. The regional sessions will hear from some of the local story gatherers as well as provide the opportunity to share 'stories' about communities, places, people, and happenings throughout the west coast of Scotland.

# Haplo Ethics Monitor for online applications for ethical approval

The online application for ethical approval, provided by  $\underline{\text{Haplo}}$  through their ethics monitor system, is available  $\underline{\text{here}}$ . Please access the university's  $\underline{\text{research ethics}}$  website for guidance and supporting documentation.



It is essential that any post graduate research students and staff who intend to submit an application for ethical approval complete the Ethics Reflection and Practice module before completing their application.

It is essential that any line managers / supervisors / research directors who have responsibility for signing off applications for ethical approval complete the Ethics Reflection and Practice module.

 $For access to the \ Ethics \ Reflection \ and \ Practice \ module, which \ is \ available \ through \ \underline{Brightspace}, please \ contact \ \underline{Fiona\ Leipe}r.$ 

You can browse all research outputs published during 2021 on the university's research database.

Please remember to keep your Pure record up to date using this link.

Below are a selection of recent publications, from the UHI Research Database, to demonstrate the breadth of research happening across the university:

Mountain ecosystem services and climate change: A global overview of potential threats and strategies for adaptation

Egan, P. & <u>Price, M. F</u>., Oct 2017, Paris: <u>UNESCO</u>. 32 p.

Global-scale patterns of observed sea surface salinity intensified since the 1870s

Cunningham, S. & Gould, W. J., 26 Apr 2021, In: Nature Communications Earth and Environment. 2, 76, 7 p.

Shetland's Norse Identity: 'Da Norn is lang gien, but hit's left a waageng'

Jennings, A., 1 Apr 2021, Scotland and Islandness: Explorations in Economy and Culture. Burnett, K. (ed.). Peter Lang, (Studies in the History and Culture of Scotland Series)

A large wild salmon stock shows genetic and life history differentiation within, but not between, rivers

Miettinen, A., Palm, S., Dannewitz, J., Lind, E., Primmer, C. R., Romakkaniemi, A., Östergren, J. & Pritchard, V. L., 28 Feb 2021, In: Conservation Genetics. 22, 1, p. 35-51 17 p.

Application of a multibeam echosounder to document changes in animal movement and behaviour around a tidal turbine structure Williamson, B. J., Blondel, P., Williamson, L. D. & Scott, B. E., 28 Feb 2021, In: ICES Journal of Marine Science. p. 1-14 14 p., fsab017.

Since the beginning of this year there have been 67 published works by university staff; congratulations to all researchers who have had their work published!

#### Researchers trial assessing renewable energy sites with drones



Researchers in the north of Scotland and Wales are trialling a new method of measuring tidal currents which could revolutionise the marine renewables industry. The project, led by scientists from the university, will use drones to film the movement of water then apply algorithms to determine its speed.

#### The university's research web nages

The university's support pages for research staff can be accessed  $\underline{\text{here}}$ ; they contain a host of researcher resources, policy information and news.



# Call for university researchers who have interests in the use and/or development of autonomous vehicles ('drones')



Across the University partnership there are various activities either using or developing drone technologies, including in the marine and aerial environments. It seems timely therefore try to understand the breadth and depth of these activities and identify possibilities for future collaboration and exploitation. To start this process, and trigger conversation, an initial workshop took place on Monday 13<sup>th</sup> April where three speakers gave short descriptions of their experiences and current work on autonomous vehicles. This was followed by a discussion to establish the desire for, and preferred format of, any future community of interest. The outcomes included the idea to assemble a catalogue of equipment, expertise and applications across the partnership, and a proposal for the next meeting (une/July) to be centred around a flying

demonstration. Any staff who use drones currently for any aspect of their work, or those who might be interested in doing so in the future, and are not already a member of the SIG's MS Teams group, please contact <a href="Prof Andrew Rae">Prof Andrew Rae</a> (pictured) to be added.

Collaboration Openness Respect Excellence

If you want your research colleagues across the university to learn about your project, a recent publication, your work in general or have information about

Submit an article

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