

University Research Update (5th edition)

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](#).



I'd like to take this opportunity to welcome you to the 5th edition of the university's Research Update. The items in the update certainly provide a sense of some of the key themes and activities in our research work across a wide range of discipline areas. I find it completely inspiring to note how much valuable and impactful work is being undertaken within our research community during this time of national emergency and huge global challenge as the pandemic rages around us.

As you may be aware the university has now received its share of the one off 'research funding uplift' from the Scottish Funding Council. These funds amount to some £918K and 80% of the monies have been distributed to core research areas to support activity impacted by COVID-19, including in-year funded extensions for completing PhD students whose studies have been impacted, continuation funding to support staff costs where there have been COVID-19 impacts, and discipline specific COVID-19 related research projects. Some 20% of the resource has been put aside to fund in-year cross academic partner research projects focused on exploring the impact of COVID-19 at regional level. Following a call bids were received for fourteen projects, involving eleven academic partners and the research areas. A small panel met to score the projects against the criteria and 4 projects have been awarded funding. These are:

1. Community-determined change-scapes of recovery: Case studies across the Highlands and Islands of the Impact of and strategies for recovery from the COVID-19 pandemic – PIs Vicky Johnson and Ros Bryce – APs involved – PC/IC/OC/WHC/NHC. Value £100K
2. Developing post COVID-19 resilience capacity for families – PI Malcolm Clark – APs involved MC/PC/OC/AC. Value £20K
3. Impact Assessment of the COVID-19 Crisis on Gaelic speaking families with young children attending sgoitean-àraich (Gaelic nurseries) – PI Angela Weir - APs involved – LCC and Language Sciences Institute (EO). Value £35K
4. Understanding the experiences of the COVID19 pandemic for residents with long-term conditions (LTCs) for families, carers and support organisations in rural areas of the Highlands and Islands PI – Sarah-Anne Munoz – APs involved rural health and well-being, nursing, LCC and IC. Value £28K

In wider developments, the university is actively engaged in the university and college sector review which is being undertaken by the Scottish Funding Council on behalf of the Scottish Government. Entitled a 'Time for change', the first stage of the review has just been published, with phases two and three to follow later this academic year. It will be a significant piece of work for Scotland and in terms of research, it is anticipated that this will be a major focus for phase two of the review. Significant themes here will include potential new arrangements for the Research Excellence Grant (REG) following REF 2021, the extent to which universities will be incentivised to collaborate in research initiatives across Scotland and beyond, the future of the research pools in Scotland, and strategies to strengthen research output which has clear impact on the economy and society post pandemic and post BREXIT. As the anchor university in the Highlands and Islands region, we will be developing a robust submission for phase 2 of the review which profiles the impact of our work – we have nearly £30M annual income from research and knowledge exchange – especially on our communities within our region, but also at national and international levels.

Given the importance of the Scottish Funding Council Review and the likely upcoming sector change over the next few years, it is more important than ever that we make a high quality submission to REF 2021. The submission date has been revised to 31st March 2021, due to COVID 19 impacts. We will be submitting in seven units of assessment:

Unit 3: Allied health professions, dentistry, nursing and pharmacy (focusing on our Institute of Health Research Innovation)

Unit 7: Earth systems and environmental sciences

Unit 15: Archaeology

Unit 23: Education (this will be a first time submission for us)

Unit 25: Area studies

Unit 26: Modern languages and linguistics (focusing on Gaelic)

Unit 28: History

Preparations are at an advanced stage and final scrutiny events have occurred for the 17 impact case studies (with further scrutiny for education planned in December), and for the unit environment statements. Unit level output selection panels will meet before Christmas to identify the actual outputs which will be submitted. Overall there has been a significant growth in the number of staff involved in the submission from 68.7 in 2014 to around 117.24 in 2021.

In September the university's annual research forum was held. Attended by research leaders and core research staff from across the university, this event was an opportunity to take stock of achievements and to discuss strategy and development across research and knowledge exchange. Stimulated by input from Stuart Fancey, Director of Research and Innovation at the Scottish Funding Council, we had a wide ranging discussion across some significant areas, including strengthening the role of the professoriate in the university, defining key themes across our research and knowledge exchange activities, exploring how we communicate the strength and depth in our research and knowledge exchange work to optimum effect, and how we continue to strengthen the links between the research clusters and knowledge exchange sector groups. Due to the longer term consequences of COVID-19 and BREXIT, we are at a very important point in our journey as a university, but my overriding impression at 'research forum' is that RKE@UHI is in a very good position to grasp new opportunities and to 'weather the current storm'. We should be confident and proud of what collectively we have achieved, and understanding of the significant impact that our work continues to have in the Highlands and Islands region and beyond.

I would like to thank you for all of your ongoing work to support research and knowledge exchange at the university.

Professor Neil Simco

An t-Àrd-Ollamh Niall Simco

Vice-Principal Research and Impact

Iar-Phrionnsapal Rannsachaidh agus Buaidh

Our researchers are committed to assisting the global response to the COVID-19 pandemic

We have a new COVID-19 area attached to our research repository; it can be accessed [here](#) and brings together all research activities relating to COVID-19 now and it's affects over time from across the university.



Postgraduate research student induction



Professor Michael Rayner gives thanks to colleagues who attended the graduate school research student induction-by-VC on 13 October and who provided recorded presentations on key matters that will be important to our new post graduate research students, not least during these extraordinary times we are currently living through.

The range of high quality and largely practically-oriented research degree topics that are being undertaken by our students places the university in the forefront of applied research in areas that will deliver essential solutions to many of the real issues facing the world at large, and our Highlands and Islands region and beyond in particular. Not least, as we prepare to move into the realities of a post-COVID-19 world and economy. The range of questions that

are being addressed, underpinned by the highest quality theoretical propositions and existing research findings, as well as the outlines of research methodologies and the sheer enthusiasm that was palpable in our virtual meeting room, was truly inspiring.

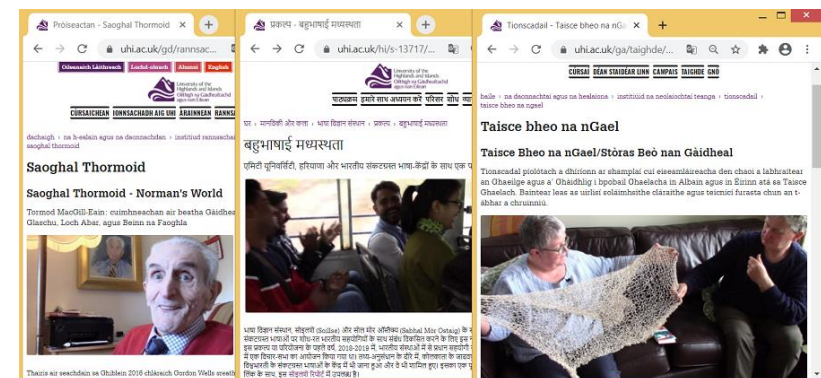
In the light of this, I would encourage all members of supervisory teams to help our students in whatever ways you can, and to ensure that they are kept well informed about all relevant matters relating to their research studies at a practical as well as research-related level. Where appropriate, this extends to issues like changes regarding campus re-opening, where necessary, as well as local requirements that may need to be undertaken, such as risk assessments, before students can move to on-campus study.

Everyone associated with the graduate school wishes our new students all the very best for a very successful and enjoyable research experience with us.

Jackie Deacon, Graduate School Manager

Gaelic-inspired research goes quadrilingual during lockdown

Researchers at the university have expanded their range of languages now available online to support a variety of multilingual research projects. Read more [here](#).



Viva by video-conference



I recently finished my PhD at the university. Having conducted research here for three years, gaining a number of publications it was a great experience.

Having just finished writing up my thesis for examination during the beginning of COVID-19, there was a lot of uncertainty which made the finish to the PhD a very different experience to what I anticipated. Lockdown was announced in Scotland during early March which was when my PhD was due to finish. Having not established a date for the viva voce exam to be conducted only added to the uncertainty. The primary issues with the lockdown and the examination was that typically the external examiner travels to the students' university which was made impossible through travel restrictions imposed by the government. As a result it was clear that there was no provision for the exam to happen 'in-person' for the foreseeable future. As the funding for my PhD stopped in March there was obvious concerns as to when the exam could take place.

I was advised by my supervisors that there was the potential to conduct the exam over video conference. This was something I hadn't ever considered would be happening three years ago but adapting was something I was used to doing. Viva-by-VC isn't a usual occurrence at the university and my viva was one of the first to be

undertaken this way since lockdown. The guidelines issued by the graduate school included the need for testing equipment and wireless connection beforehand and so there were a number of test sessions that took place leading up to the examination. Preparing for the exam was challenging due to the unpredictability of such a set up – the guidelines allowed for connection failure to some extent, but there was a possibility that if connection failure couldn't be resolved the exam would need to be abandoned and rescheduled. This again was a challenging thought of preparing for the biggest day of the PhD, and if technology let you down

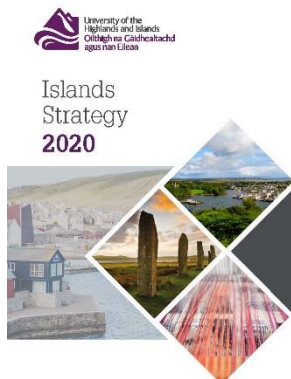
then the viva would be done again from the start. However, I was slightly reassured to know that the independent internal chair (a role required for all UHI vivas) would be on hand to ensure 'fair play'.

The exam was a very different experience especially due to the lack of human interaction. On the day of the viva, I was still nervous, but perhaps being in the comfort of my own home made it a little more relaxing. With the normal exam procedure the drive from my home to the university and the wait outside of the exam room was removed. There were a number of variables which were more challenging conducting the viva at home such as ensuring my internet was stable before starting the video conference. Further, trying to ensure a quiet environment was a 'funny' experience for myself. Having a 20 year old, deaf cat who doesn't like closed doors shouting, was an element I didn't account for but in the end having passed the viva with minor corrections was a funny story to tell.

It wasn't the viva voce experience I expected but nevertheless the examiners were great and gaining the biggest achievement of my life it was a memorable time and in a year of uncertainty a good news story for myself.

Matthew Fraser

The university's islands strategy



The university has reaffirmed its commitment to island communities with the publication of its first ever islands strategy. The document sets out the university's plans to enhance its activity across Orkney, Shetland and the Western Isles.

Objectives include increasing island-based research activity, enhancing strategies for attracting and retaining talent, continuing to support the culture, languages and heritage of the islands and further engagement with industry to continue to build a skilled workforce in line with changing opportunities and needs.

Access the strategy [here](#).

The centre for mountain studies - update from Professor Martin Price, Director

The centre for mountain studies was established at Perth College UHI on 1 August 2000, with the objective of creating a centre of excellence for work in mountain areas within the emerging university. Since then, the university has gained title; and the centre for mountain studies has achieved its initial objective. This article highlights many of our activities over the past 20 years.

2002 was the international year of mountains, and this provided many opportunities for us to work with a wide range of non government organisations from the recreation, tourism and conservation sectors, as well as Scottish Natural Heritage, which provided most of the funding for a project officer and a conference on the mountains of northern Europe.

2004 was an important year of beginnings. First, we launched an online MSc in sustainable mountain development. It has now attracted over 100 students, over half from Scotland, and the others from across the UK and Europe, as well as North America, Asia and Africa. Recognition of the innovative nature of the course was a key reason for the designation of our UNESCO chair in sustainable mountain development in 2009 – the first united nations educational, scientific and cultural organization chair in Scotland. Second, our first PhD student, Rob Mc Morran started his research on the forests of the Cairngorms.

In 2007, Rob was joined by three more PhD students – Annie McKee, Jayne Glass, and Pippa Wagstaff – in the ‘Sustainable Estates for the 21st Century’ project, funded by the Henry Angest foundation. The practical relevance of the project was assured by the involvement of an advisory board with representatives of non-governmental organisations from the environmental and landowning sectors, the Cairngorms national park authority, and The Scottish Government. The students’ research focussed on private estates and their local communities, and a toolkit to foster sustainable estate management; chapters about these were all included in ‘Lairds, Land and Sustainability’, published by Edinburgh University Press in 2013, and described by Prof. Chris Smout, Professor Emeritus in History at St Andrews University and historiographer royal in Scotland, as “a book for everyone seriously concerned



about the future of the Highlands”. Since the project was completed, its outputs have been widely used in practice and policy, and other CMS projects – on land ownership, game management, and wild land – have built on it. Rob and Jayne have now moved to Scotland’s Rural College and Annie to the James Hutton Institute, and we are glad that they all continue to collaborate with us.

We have been active in many projects funded by European organisations, and led two large multi-national projects in northern Europe funded by the EU Northern Periphery (and now Arctic) Programme. The first was Clim-ATIC (2008-11), on community adaptation to climate change – which later led to an MSc in Climate Change Management at Western Norway University of Applied Science. The second was SHAPE (2017-20), on ecotourism in united nations educational, scientific and cultural organization biosphere reserves. Both projects included Scottish partners: CNPA in the first, Wester Ross and Galloway and Southern Ayrshire Biospheres in the second. Since 2002, we have coordinated four studies of Europe’s mountains – for the European Commission, the European Environment Agency, and ESPON – successively increasing the range and depth of knowledge of many of the environmental and socio-economic characteristics of these mountains. The outcomes of the projects have been widely used for policy-making by European institutions, as well as for lobbying by Euromontana, the pre-eminent European mountain non governmental organisation, of which UHI is a member. We have also been involved in EU-funded projects involving Euromontana: on quality mountain foods, the use of the outputs of European-funded projects in mountain areas, and social innovation in marginalised rural areas. Our involvement in the latter was led by Ros Bryce, who joined us in 2014, and also led the SHAPE project.

The centre for mountain studies has also been active at the global scale. During the international year of mountains in 2002, I worked with the united nations environment programme to plan the Bishkek global mountain summit, the final global event of the year in Bishkek, Kyrgyzstan, and facilitated the final declaration. This became the basis of a resolution of the united nations general assembly and, in turn, the declaration of 11 December every year as international mountain Day. We have also worked with both united nations educational scientific and cultural organisation and the International union for the conservation of nature on mountain issues and biosphere reserves. And, working with the mountain research initiative, the global mountain biodiversity assessment and other international organisations, we have organised three major international conferences on global change and sustainable development across the world’s mountains in Perth, in 2005, 2010, and 2015.

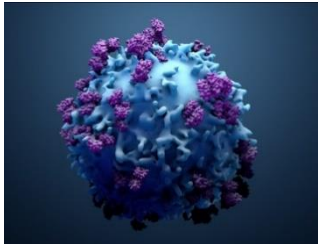
Knowledge exchange is a key element of the centre for mountain studies and, as well as these global conferences, we have worked with many organisations in Scotland on knowledge exchange events since the IYM in 2002, when we were involved in meetings

convened by 48 different organisations. Since then, working with different partners, we have convened meetings focusing on Scotland's uplands: on biodiversity, the values of mountain water, and climate and wider environmental change. As well as the vital connections that are a key result of any meeting, these have led to strategies for mountain research and many publications. Twenty years on, over 3,000 people from around the world have attended our meetings – and we are recognised for our activities not only in Scotland, but globally.

To celebrate our 20th anniversary, we were planning a forum on 'Challenging Upland Futures' on 1-2 September. COVID-19 has meant that this has had to be postponed, but we have rescheduled for 19-20 January 2021 at Perth Theatre: watch this space!

Website: www.perth.uhi.ac.uk/mountainstudies

POT1 gene mutations linked to further types of familial cancers



In 2014, we first described the association of mutations in the *POT1* gene with the familial predisposition to development of cutaneous melanoma (*Nature Genetics* 46(5):478-481, 2014). The POT1 protein acts in a complex that protects the end of chromosomes, a specialised region known as telomeres. The telomeres require careful maintenance to ensure chromosomal integrity. The mutations we described in POT1 result in loss of telomere protection, which leads to the increased likelihood of tumour development. Since 2014, mutations in *POT1* have been discovered in families with high predisposition to other cancers, including glioma (brain tumours) and chronic lymphocytic leukaemia (CLL); *POT1* has now been declared as a 'tumour predisposition syndrome' gene. Our recent work has further extended the list of tumours predisposed by *POT1* mutations as part of this syndrome. This includes uveal (eye) melanoma (*Journal of Medical Genetics*, September 2020) and a range of haematological (blood) cancers, including lymphoma and chronic myeloid leukaemia (CML) (accepted to *British Journal of Haematology*, October 2020). These findings have important clinical implications for families carrying a *POT1* tumour predisposition syndrome mutation, as surveillance for these specific cancers allows early identification of tumours and therefore, better treatment outcomes.

Dr Antonia Pritchard, senior lecturer | genetics and immunology research group

Scottish Universities Physics Alliance: careers insight to young researchers with Professor Kean

Alistair Kean (pictured) is the university's Professor of Nanotechnology. He was interviewed by the Scottish Universities Physics Alliance earlier this year. Access his podcast [here](#), and listen to him give some careers insight to young researchers.



Carnegie Vacation Scholarship student experience

The Carnegie vacation scholarships aim to encourage undergraduates to develop their independent research skills. The scheme is open to students enrolled on an undergraduate degree course at an eligible Scottish institution. The application scheme is competitive, students submit a research proposal and the Carnegie Trust selects those to be awarded on the basis of the academic standing and motivation of the student, the quality of the project, and the supervision and environment provided. This is the second year in a row the department has been successful in having an undergraduate awarded with this Scholarship.



Andy Jupp explains more about his experience as a vacation scholarship student this year:

I am a 2nd year mental health nursing student who was lucky enough to be accepted for the Carnegie vacation scholarship this summer. I was involved in a research project aiming to explore the LGBT+ knowledge, attitudes and experiences of student nurses and their educators, supervised by Dr Rebecah MacGilleEathain. The participants for this research were drawn from the staff and students from the department of nursing and Midwifery at the university, from across Highland and the Western Isles. [Read more.](#)



Humanities and Arts Research Cluster (HARC) and Society, Identity, Landscape and Knowledge Research Cluster (SILK) update

The Humanities and Arts Research Cluster (HARC) brings together researchers from diverse disciplines within the humanities and arts. The cluster is a collaboration of staff engaged with scholarly and creative engagement with the past and present, rooted in an understanding of the regional heritage and context of the Highlands and Islands of Scotland.



HARC activities can be broadly said to cover the undernoted areas:

Archaeology | history | gaelic | literature | creative industries | music | visual art | textiles

There is also a research cluster which brings together researchers from diverse disciplines under the broad remit of Society, Identity, Knowledge and Landscape (SILK). Here, there is an emphasis on remote and rural communities; the distinctive cultural and natural landscapes of the Highlands and Islands of Scotland and the peoples of this region; in the past, the present and into the future, and in placing the Scottish context in a global perspective

Key research themes are:

Cultural and natural landscapes/ecosystems | identity and heritage | sustaining communities | pedagogy

HARC and SILK continue to work well together and are seeking to establish closer links, in support of spreading research throughout the university. They are pursuing increased collaboration and development of the interdisciplinary linkages across the university partnership while fostering a culture of scholarship and research. For both HARC and SILK Clusters, future plans have of course been impacted by current events; however, they continue to try to develop the reach and range of activities of the clusters as much as they can.

Recent activities and developments include plans to make a June postgraduate conference a regular fixture.

A HARC/SILK organised webex seminar was held in May on the topic of '*Having an impact on policy: a practical guide*' led by Nick Bibby, Director of the scottish government's scottish policy & research exchange.

Following the success of "*Ruination & Decay*" (HARC's 2019 interdisciplinary research theme) this year the HARC & SILK research clusters have invited papers from disciplines across the Arts, Humanities & Social Sciences engaging with the 2020 conference research theme - *The Edge*, to be held *Wednesday 20th – Thursday 21st January 2021* (at Inverness College UHI and/or virtually)**

Further details on the planned conference can be found [here](#).

In addition, a series of videoconferenced monthly seminars on this broad theme is underway, each one attracting 60 to 100 attendees on average. Details on speakers and topics are available [here](#).

A series of blog posts inspired by the concept of The Edge is online at <https://idruhi.wordpress.com/> and you can keep up to date with the latest developments by following [this blog](#).

Blog submissions on any topic related to the theme of "The Edge" are being accepted; if you would like to contribute an article, please email joanna.rodgers@uhi.ac.uk

The cluster has been successful in having a submission accepted for 'Being Human', the UK's national festival of the humanities held in November: <https://beinghumanfestival.org/us/>

Researchers from the university's language sciences institute and soillse, a multi-institutional research collaboration, launched a new book on Thursday 2 July 2020. '*The Gaelic Crisis in the Vernacular Community: A comprehensive sociolinguistic survey of Scottish Gaelic*' is the most comprehensive social survey on the state of Gaelic communities ever conducted. The book presents new sociolinguistic research about Gaelic communities in the Western Isles, in Staffin in the Isle of Skye and in the Isle of Tiree. The

authors urge a radical new approach to vernacular Gaelic revitalisation and propose a new agenda and strategy for Gaelic revitalisation in the islands. <https://www.uhi.ac.uk/en/media/news/new-research-sets-out-radical-new-approach-in-gaelic-policy-to-safeguard-the-future-wellbeing-of-the-language-in-the-islands-.html>

Reflections on my first international online conference

In August, I presented at my first international conference, albeit from my office at home. Due to the COVID-19 Pandemic the CARES Realist 2020 Training Conference was held online in Canada by the director of the centre for advancement in realist evaluation and synthesis and moderated online by two lecturers in the UK. In total, there were 60 delegates and 21 presenters. In addition to the UK, presenters came from Columbia, USA, Ireland, Norway, Australia, and New Zealand. The conference was held for three hours each day either in the morning or afternoon, depending on the time zone of the speakers. The presentations were recorded for those who couldn't make the live broadcast. In addition, the comments made on the interactive forum were collated by the moderators and sent to the speaker for feedback. At the end of each day the conference host gave a written summation of the issues raised and offered his own thoughts.

As much as I missed the opportunity to fly to Canada and meet fellow realist researchers face to face, it was a fantastic conference and a great learning experience. Due to the global pandemic, online conferences are likely to become more common place. For this reason, I thought I would take this opportunity to briefly share the pros and cons of my experience. [Read more.](#)



Viking waterway through the Orkney mainland revealed

New research has revealed a lost Viking waterway running through the Orkney mainland, connecting the North Atlantic and Scapa Flow, possibly forming the equivalent of an ancient 'highway'. [Read more here.](#)



The university's digital hub

The newly established digital hub steering group had their first meeting last month and have started to plan the next steps. There was a good level of interest from the 'advert' circulated in the last edition of University Research Update but for anyone who missed it, here it is again. Anyone interested is still very welcome to join.

Aim: We are developing a one-stop-shop to improve communication across the university for people with research and teaching interests in digital technologies. This will be both for those with specific expertise in the technologies and for those interested in applying these tools for their own cutting edge applications or teaching. We want the hub to help share information and improve research linkages with computing science skilled scientists and prospective users. It may also form the nucleus for grant applications and better marketing. To begin with we want to find out and share who is already active, or wants to be more active, across the university in teaching, research or KE in the field(s). The scope is currently broad and inclusive. We want to identify, bring together and connect the expertise and ambitions already within the university.

What you have to do? Simply send Rachel Culver Rachel.Culver@sams.ac.uk an email so we know you are and we will be in touch.



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

Normally RDI Division in NHS Highland supports about 150 drug and device trials throughout any one year - big clinical areas are cancer, neurology, cardiology, diabetes, renal, surgery, rheumatology, primary care, stroke and others. This year we had to suspend nearly all our trials but are slowly reopening following extensive risk assessments, reconfiguration of the clinical research facility and assiduous following of the Scottish Government, Chief Scientist Office and UK Government policy and guidelines.



In addition to these trials we also support other trials, PhD, masters and undergraduate studies, and other projects. Many of these were also suspended, and a number of student studies have now closed as it has not been possible for them to do their research remotely. Others have restarted however, and if students want to find out what they can actually do with NHS patients or staff we are here to help.

We continue to support COVID-19 studies and currently have 5 drug studies happening, four in hospital and one in primary care. One of the hospital drug studies is the University of Oxford RECOVERY trial, which is also happening in Wick and in NHS Western Isles, but the other are largely in Raigmore Hospital in the red zone or in ICU. The PRINCIPLE trial is happening in primary care.

We are about to embark on a large scale surveillance study that is happening across Scotland (and the rest of the UK) called SIREN which will have health service staff as participants.

Additionally, we remain involved in more than ten European funded projects. Funded by the European Commission or the European Space Agency, we have projects developing products such as Lyme App, projects looking at service redesign and innovation (the TESTED project looks at non-clinical Internet of Things, the InAdvance project looks at early intervention for palliative care) or comparative analysis of responses to COVID-19 across northern Europe.

Our innovation section also supports a wide range of activities, working with large and small companies to help drive forward the development of a range of products. We are happy to receive queries on any of the work we do or requests for advice.

Research cruise DY120 is underway

[Dr Kristin Burmeister](#) (pictured) is an oceanographer on the scientific cruise DY120, headed for the North Atlantic to undertake crucial data monitoring and retrieval work. But this cruise on board the RRS Discovery is very different to every other that has gone before, because of COVID-19. Read more [here](#).



Double success for Archaeology Institute PhD student

Congratulations to Magdalena Blanz (pictured, right, with one of her PhD supervisors, Dr Ingrid Mainland) who has passed her PhD viva examination. Magdalena's thesis, *Seaweed as Food, Fodder and Fertiliser in the North Atlantic Islands: Past, present and future opportunities*, looked at the importance of seaweed to past and present island communities. Part of this involved researching how the chemical and isotopic composition of skeletal material is changed by the consumption of seaweed and the impact of fertilising grain crops with seaweed.



Her PhD was funded by the European Social Fund and Scottish Funding Council as part of Developing Scotland's Workforce in the Scotland 2014-2020 European Structural and Investment Fund Programme. Magdalena is now in Vienna, where she has a post-doctoral research appointment at Vienna Institute for Archaeological Science.

Funded by the Fritz Thyssen Foundation, the project is entitled *Farmers without borders: Ecological perspectives on the spread of animal husbandry from the Mediterranean to southeast Europe (6500-5500 BC)*. It deals with the interrelationships of environmental, biological and socio-cultural factors which enabled the dispersal of domestic animals in the Balkans, by analysing absorbed organic residues in pottery, stable isotope analysis of animal remains, statistical analysis of archaeological kill-off profiles and computational modelling.

Nexus – health and life sciences innovation opportunities with the university

Dr Adam Giangreco (pictured) presented at the NEXUS breakfast on 17 September 2020. Access his video here to learn about how he is focusing on focusing on the health and life sciences research commercialisation work predominantly funded by the City-Region Deal project.



Call for expert members to join the NHS research ethics committees

The North of Scotland Research Ethics Service are currently looking for expert members to join their Committees to review NHS research ethics applications. The committees meet on the 2nd and last Thursday of every month.

For more information please contact [Rachel Hardie, Scientific Officer / Regional Manager](#).



What's new on the horizon?

EU is preparing plans and budgets for new programmes for the 2021-27 period. The Horizon 2020 programme for 2014-20 will be replaced by Horizon Europe, which will be the 9th European research and innovation framework programme. Horizon Europe proposes to operate through 3 pillars:



Pillar 1 excellent science | Pillar 2 global challenges and European industrial competitiveness | Pillar 3 innovative Europe.

Widening participation and strengthening the European research area are underpinning themes. COVID-19 research and recovery activities will be a major focus within the multiannual strategic plan, which will set out work programmes and calls for proposals for the first 4 years of Horizon Europe.

Further details at https://ec.europa.eu/info/horizon-europe-next-research-and-innovation-framework-programme_en

The budget for the Horizon Europe programme has been subject to cuts, which is causing further concern, so it is likely that the original launch date of 1 January 2021 will slip. Nevertheless, the planning is all very ambitious – with lots of potential for our research and knowledge exchange activities across the partnership. Of course, we do have a problem – we do not yet know if or how UK organisations will be able to participate in Horizon Europe post Brexit. At the time of writing, it is still unclear what the outcome of the UK/EU negotiations will be. After December 2020, the end of the transition phase, UK government's stated preferred option is for the UK to be able to access Horizon Europe as an associate country – similar to that enjoyed by many countries world-wide. Third country status is another option in the event of a 'no deal', albeit not as favourable. And neither of them include the extensive engagement we enjoy now.

However, even if the UK/EU negotiations were concluded today, the European Commission are still working on regulations for any association to the new programme and it is likely that they will be different to those for Horizon 2020.

Other areas to watch include how much funding is dedicated to participation by UK government, as well as changes in travel, visa, health insurance, etc post Brexit, which may prove problematic. UK research and innovation and business energy and industrial strategy are working on a possible alternative domestic research and innovation programme, to fill the gap until any detailed access arrangements for UK organisations to Horizon Europe are agreed – or even longer-term if required. We don't have much information on this yet, but Scotland Europa do provide valuable updates. I have invited them to give a presentation to the Partnership once more information is available – further details to follow when confirmed.

Any Horizon 2020 projects which have been approved before 31 December this year – marking the end of both the UK transition period AND the Horizon 2020 programme – may continue for whatever duration has been agreed, possibly into 2023 and beyond.

There is a current call underway relating to the green deal, for which UK organisations are eligible – see https://ec.europa.eu/commission/presscorner/detail/en/ip_20_1669 However, consortia should already be fairly well established if they are to stand any chance of success. We do, indeed, live in interesting times. Still.

Linda Stewart

European initiatives co-ordinator

Institute of health research and innovation cluster

About our institute

Activities within the institute can be broadly divided into three main themes: disease management, smarter health, and rural health and wellbeing. There is a cross-cutting theme of active health, which exemplifies the interactions between the three main themes. Impact is central to our philosophy and we work closely with a wide variety of UK and international companies to ensure rapid translation of our technologies and services into products that will improve healthcare within the region, with worldwide applicability. A key feature of the Institute is collaboration: our researchers work closely together across disciplines and actively seek collaborations with external organisations worldwide, with a dedicated healthcare innovation team helping teams address commercialisation matters. Typically, we have over 60 ongoing projects, most of which involve partners at other institutions in Scotland, UK, Europe or beyond.



Division of Biomedical Sciences

The Division of Biomedical Sciences is home to the free radical research facility, and has research expertise in genetics and immunology, mass spectrometry and bioinformatics core facility, and includes the active health exercise lab. Together the departments undertake a range of activities related to active health and are able to support commercial work of any size. Led by Professor Ian Megson, the mission of the division is to undertake world class research into the causes and treatment of diabetes and the cardiovascular diseases that the condition precipitates. The division is based at the Centre for Health Science in Inverness, and conducts extensive research, primarily into the causes and consequences of diabetes, but also into a wide range of clinical

conditions; most notably cardiovascular diseases, inflammatory diseases, and cancer. <https://www.uhi.ac.uk/en/research-enterprise/res-themes/institute-of-health-research-and-innovation/dbs/>

Pure: <https://pure.uhi.ac.uk/en/organisations/division-of-biomedical-sciences>

Department of nursing and midwifery

Our department of nursing and midwifery specialises in patient and public involvement in research and engagement of the public in our research from start to finish. Our work compliments the expertise available across the Institute of health research and innovation.

Our Key research themes focus on:

Remote and rural health | nursing workforce, education and pedagogy | rehabilitation and physical activity | quality improvement | older people and dementia | adolescent health | palliative care

<https://www.uhi.ac.uk/en/research-enterprise/res-themes/institute-of-health-research-and-innovation/nursing/>

Pure: <https://pure.uhi.ac.uk/en/organisations/department-of-nursing-and-midwifery>

Division of Rural Health and Wellbeing

The division of rural health and wellbeing has particular research interests in digital health and user engagement in rural health services design and delivery. The rural health and wellbeing research group carries out innovative research and evaluation in the area of rural health, health services and community wellbeing. The group collaborates with other UHI researchers in, Inverness, Moray and Lews Castle Colleges as well as being a member of the digital health institute and an Robert Gordon University and University of the Highlands and Islands collaboration. We aim to contribute to the knowledge base on preventing ill-health and

promoting wellbeing. Our research not only enhances understanding of patterns and experiences of health, illness and their underlying drivers, but also contributes to the development of health services policy and delivery that functions in as effective and appropriate ways as possible for staff, patients and families.

The university also hosts The Scottish Rural Health Partnership, formerly known as the Scottish School of Rural Health & Wellbeing. Please visit the dedicated webpages to learn more about this exciting project exploring new ways to deliver high quality and accessible care in rural and remote areas involving communities, research, innovation and education.

<https://www.uhi.ac.uk/en/research-enterprise/res-themes/institute-of-health-research-and-innovation/drhwh/>

Pure: <https://pure.uhi.ac.uk/en/organisations/division-of-rural-health-and-wellbeing>

Healthcare innovation

Healthcare innovation is about making a positive impact on people's lives. As part of the School of Health, Life Sciences and Social Care, we work with businesses, staff and students to help turn ideas into new businesses and technologies.

Whether you want to solve a problem by creating a business, or are simply interested in learning about innovation, we're here to help.

<https://www.uhi.ac.uk/en/business/ric/research-specialisms/healthcare-innovation/>

Applied departments

The department of nursing and midwifery has close links with the applied life studies subject network and sits within the overall structure to maintain close links with both the research-based divisions and teaching practice.

Laura Mackenzie, Cluster Administrator, institute of health research and innovation

Professor James Hunter dissertation prize

Congratulations to Silja Roethinger (pictured) who was awarded the Professor James Hunter dissertation prize earlier this month. Read more [here](#).



Graduate School resources

The Graduate School's sharePoint 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 Brightspace has been updated to include a new page entitled 'COVID-19 (coronavirus): Information for students and supervisors' which contains Covid-related info and FAQs.



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 business. Descriptions and links for some of the major programmes are available [here](#).

Haplo Ethics Monitor for online applications for ethical approval

The new online application for ethical approval, provided by [Haplo](#) through their ethics monitor system, has now been launched and is available [here](#). Please access the university's [research ethics website](#) for guidance and supporting documentation.



It is essential that any PG 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 [Brightspace](#), please contact [Fiona Leiper](#).

Research publications

You can browse all research outputs published during 2020 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 to demonstrate the breadth of research happening across the university:

Eat or sleep: availability of winter prey explains mid-winter and early-spring activity in an Arctic Calanus population

Hobbs, L., Banas, N., Cottier, F., Berge, J. & Daase, M., 25 Sep 2020, In : *Frontiers in Marine Science*. 14 p., 541564.

[Symptom burden and clinical profile of COVID-19 deaths : a rapid systematic review and evidence summary](#). Keeley, Paul ; Carolan, Clare ; Buchanan, Deans ; Pivodic, Lara ; Tavabie, Simon ; Noble, Simon. In: *BMJ Supportive and Palliative Care*. 2020 ; pp. 1-4.

A historical approach to understanding governance of extreme urban heat in Fukuoka, Japan

Mabon, L., 17 Sep 2020, In : *Disaster Prevention and Management*.

Forests in common: Learning from diversity of community forest arrangements in Europe

Lawrence, A., Gatto, P., Bogataj, N. & Lidestav, G., 13 Sep 2020, In : *AMBIO*.

Assessing hospital impact on pharmaceutical levels in a rural 'source-to-sink' water system

Niemi, L., Taggart, M., Boyd, K., Zhang, Z., Gaffney, P. P. J., Pfleger, S. & Gibb, S., 1 Oct 2020, In : *Science of the Total Environment*. 737, p. 139618

Congratulations to all researchers who have had their work published.

Access the university's support pages for research staff [here](#) to access a host of researcher resources, policy information and news.

If you want to your research colleagues across the university to learn about your project, a recent publication, your work in general or have information about research news, a funding collaboration you are building, events or training opportunities then please click the button below!

[Submit an article](#)

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