Saltire European Global Health Exchange: Leadership of Health and Healthcare in a Post-pandemic Environment

Nominated host university and other universities

Glasgow Caledonian University, Queen Margaret University Edinburgh, Robert Gordon University, Abertay University, University of the Highlands and Islands, University of the West of Scotland.

Brief description of proposed exchange programme

Key aims and objectives of the programme.

Developing Europe's leadership in health and healthcare must be achieved through collaborative sharing of experience, research, and best-practice, which are also the key objective of the proposed Saltire European Global Health Exchange (SEGHE) programme.

According to Health Cluster (Cluster 1) within the 2nd Pillar of the Horizon Europe Programme: "The aims of this cluster include improving and protecting the health and well-being of citizens of all ages by generating new knowledge, developing innovative solutions and integrating where relevant a gender perspective to prevent, diagnose, monitor, treat and cure diseases."

The proposed exchange programme will focus on what post pandemic health and healthcare leadership will look like and achieve its key objectives by addressing the Cluster 1 aims through the following sub-objectives:

- 1. To engage with existing national COVID-19 programmes, including Chief Scientist Office (CSO) funded projects and equivalents in European universities.
- 2. To provide opportunities for knowledge transfer between partner institutions to inform healthcare practice and research
- 3. Organise Saltire European Global Health virtual conference: a one-day virtual conference open to anyone to share the outcomes of the programme.
- 4. To develop a collaborative post-pandemic research workstream to be the basis for the forthcoming Horizon Europe calls in relation to the Health Cluster.

Nature of exchanges

SEGHE programme will offer bidirectional exchange opportunities. Postgraduate Research Students (PGR) and Early Career Researchers (ECR) from the consortium of Scottish and partner European universities will be eligible to apply. The programme will include 5 outbound placements from Scotland and 5 inbound placements from European partner institutions.

For decades, one-directional flow of expertise has dominated collaborative higher education initiatives and bidirectional exchanges have remained rare despite having clear advantages. They enable more equitable sharing of resources and knowledge.

Proposed European partner universities

CARPE, the established European consortium on applied research and professional education and its participating institutions will represent the basis of the proposed programme. More specifically:

- Hamburg University of Applied Sciences (Germany),
- Polytechnic Institute of Porto (Portugal),
- Turku University of Applied Sciences (Finland),
- University of Debrecen (Hungary),
- University of Applied Sciences Utrecht (Netherlands),

The proposed programme will therefore create new collaborative opportunities for universities focusing on applied research.



Programme countries

The proposed programme spans across 6 European countries (Germany, Hungary, Finland, Netherlands, Portugal, and Scotland), equitably representing different European geographical regions. Strengthening the existing collaborations between CARPE

members and Scottish universities in addition to the geographical spread and common strengths in the area of global health are the key reasons behind the consortium development.

Programme area of research

The consortium universities have been involved in many COVID-19 related research projects, including: COVID-19 and health, infection prevention and control, impact of COVID-19 and long-COVID on healthcare staff and students, long-COVID rehabilitation, remote delivery of healthcare services, and food security. Focusing on health in a post-pandemic environment must be a collaborative initiative and the proposed programme represents the basis for developing a European post-pandemic health consortium after the successful completion of this programme.

Whether this will be a new exchange programme or build upon/extend an existing programme.

While the consortium universities collaborate within existing projects, including in response to COVID-19, and the proposed European partners are members of the well-established CARPE consortium, the proposed exchange programme is new in scope and purpose. There have been no previous exchanges with CARPE partners and the Scottish Universities. However, the existing collaboration, combined with the need for all countries involved to refocus healthcare for the post-pandemic era, provides a unique opportunity for an impactful exchange programme to inform innovative solutions for health and care.

Assessment criteria for applicants

- Early Career Researchers (i.e. within 7 years from the date of obtaining Doctoral degree),
 PhD students and those on relevant professional doctorate programmes in their final year of study (3rd year for full-time students) may apply for outgoing placement of up to 6 months.
- Applications must detail the nature, relevance, and organisation of placement.
- Depending on the placement project, a student may spend the whole duration of the placement at a single institution or at multiple receiving institutions (e.g. Scottish students may be hosted for up to 6 months at European institutions with the minimum duration of 2 weeks at each institution; European students may be hosted for up to 6 months at Scottish Institutions with the minimum duration of 2 weeks at each institution). The final number and duration of visits will depend on the COVID-19 pandemic situation at the time.
- Applications will be assessed by a panel of reviewers where each reviewer is nominated from one of the consortium universities.
- Assessment criteria: Quality of proposal (60%), demonstrable fit between expertise of host and recipient institutions (20%), opportunities for follow-on funding (20%). Applicants will be asked to submit a written proposal and to undertake a presentation outlining their

proposed exchange. The final selection criteria will be set by the steering group in the first month of the project.

Advertising exchange opportunities

The opportunities will be internally advertised through the consortium universities and through a dedicated website that will be used to disseminate information and promote the consortium externally.

Match funding

Should we be successful, the partner universities would investigate supporting future activities through external funding (Horizon for example) and potential for institutional contribution (in kind and/or financial).

Where the partner University has successfully applied for ERASMUS+ (K107) International Credit Mobility, e.g. University of Debrechen, it is the intention to facilitate additional exchanges to Scotland. This activity is for exchanges beyond Europe and therefore now includes Scotland. It opens the possibility for the overseas partner staff and PGR students to develop new professional networks and share best practice via additional exchanges.

A brief plan outlining key stages and dates of the programme

Consortium description and suitability

Health and healthcare must be at the forefront of societal efforts and the pandemic has had the most adverse effect on people from most disadvantaged backgrounds and those working in key public services. The consortium of Scottish universities includes the largest provider of health education in Scotland (UWS). They are thus well placed to establish the exchange programme due to their reach with 57% of full-time students from the most disadvantaged backgrounds; 66% of full-time mature students and 42% of all care-experienced students. In addition, nearly 30% of the total student population in the consortium universities are studying courses linked to key public services.

Scottish partners

University of the West of Scotland (UWS) occupies an integral position within Scotland's proud tradition of excellence in education and is committed to successful partnership working in close collaboration to ensure our services are relevant and valued by individuals, organisations, and our communities. The School of Health and Life Sciences has a vibrant research and consultancy culture that is organised within three research institutes. The three School Institutes worked to thematically and collectively grow and mature the School research culture and amplify impact with recent focus on UN Sustainable Development Goals (SDGs). The Institute of Biomedical and Health Research (IBEHR) combines research focused on humans, health and disease, and the environment, organised within 3 themes: chronic inflammatory disease, infection & microbiology, and environmental health. The Institute of Health and Care Research (IHCR) research is focussed on four themes: dementia, mental health (global and forensic), deteriorating patient, and learning for practice. The Institute of Clinical Exercise and Health Science (ICEHS) coordinates the research activities for sport, exercise, and health research. The University of the Highlands and Islands Institute of Health Research & Innovation spans Biomedical Sciences, Nursing and Rural Health and Wellbeing; membership of the Institute is currently ~80 researchers. Specific areas of interest are diabetes, cardiovascular disease, cancer, public health, mental health, rural healthcare delivery, physical activity and nutrition, digital health, and nanotechnology. Recent investment in the Institute through Inverness and Highland City Region Deal has enhanced our remit to deliver commercial outcomes through collaborative research with local, national, and international companies. We currently host ~20 PhD students, the vast majority of whom are funded through European Social Fund and Inter-reg programmes. In the most recent postgraduate survey (PRES 2019), supervision in Health at the university was ranked first in the whole of the UK. Robert Gordon University (RGU) is an innovative, professionally focussed institution with a strategic mission to transform individuals and communities by providing demand-led teaching and research that contributes to economic, social, and cultural development regionally, nationally, and internationally. RGU has 11 academic schools and a graduate school supporting over 300 PGRs. The three health-related schools' (Health Sciences; Nursing, Midwifery and Paramedic Practice; Pharmacy and Life Sciences) shared research strategy is designed to enhance human health and wellbeing, focussing on three key thematic areas (Communities; Long-term conditions; New pharmaceuticals/nutraceuticals & novel target discovery). Specific areas of focus include diet and nutrition, food security, multi-morbidity, high-risk prescribing, polypharmacy, musculoskeletal health, rehabilitation, and health service delivery. The COVID-19 pandemic facilitated the creation

of new multidisciplinary research groups across the schools, with several funded projects in this field, The three schools currently host a total of approx. 80 PGRs and have a vibrant research culture including support and development of ECRs. Abertay University is a leader in enabling access to university and preparing students for work. The university's focus on Transformational Opportunities, Digital Innovation and Academic Collaboration enables students, staff, and graduates to excel in an inclusive, healthy, and supportive environment and to have a positive impact on the industries, organisations and communities with whom they interact. The compact nature of the institution enables cross-disciplinary working, and this ethos is embedded in the university's recently refreshed Research and Knowledge Exchange Strategy with a focus on four challenge spaces (Health and Care across the lifespan; Security, Equality and Social Justice; Sustainable Development and Inclusive Living; Creative Industries and Cultural Vitality). The School of Applied Sciences (SAS) is one of four academic Schools and has a strong reputation in codesigning and delivering innovative and relevant teaching and research programmes with industry which ensure practical applications have transference to real world settings. The School's research and consultancy services have enabled staff to influence health, education, and environmental policies and practices nationally, as well as impacting developments in the food, biomedical and engineering sectors. The university's Allied Health research activity is concentrated within SAS and is progressed by three interacting research groups:- Biology of Health and Disease (with a focus on cancer systems biology; reproductive physiology; molecular and comparative physiology and nutritional health; and antibiotic resistance gene spread); Mental Health (with a focus on the development and delivery of effective interventions and support for people experiencing challenge, and the interplay between physical and mental health); and Practice Engagement (with a focus on the engagement with, and experiences of, healthcare practice; profiling of patient demand on the healthcare system and ethical aspects of healthcare; and the role of quantitative methods to characterise behaviour and enhance the quality of practitioner interventions). At Glasgow Caledonian University, the UN's Sustainable Development Goals or SDGs are at the heart of our research strategy and reflect our ethos as the University for the Common Good. The School of Health and Life Sciences has a long tradition of conducting a wide range of multi-disciplinary applied health research that is economically and socially relevant applying new knowledge to problems of global significance. This is realised through our Research Centre for Health (ReaCH), which aims to make direct and significant contribution to Sustainable Development Goal 3 – good health and wellbeing. The core of our activity is to focus on enhancing lives of people with long-term health conditions as well as developing and evaluating public health and lifestyle interventions. The centre showcases the work undertaken in our research groups in the themes of public health: Ageing Well; Child and Adolescent Health; Safeguarding Health through Infection Prevention (SHIP); Sexual Health and Blood Borne Viruses; Substance Use; and long term-conditions: Living with Stroke and other long-term conditions; Molecular Mechanisms of long-term conditions; Musculoskeletal Health; and Vision Research. Colleagues in the Chief Scientist Office-funded Nursing, Midwifery and Allied Health Professions Research Unit (NMAHP) and Public Health Scotland also contribute to the centre. At Queen Margaret University, Edinburgh (QMU), we are distinctive in our person-centred approach to education and teaching, and our commitment to shaping a better world, enabling individuals and communities to flourish. We treat our students as individuals, and we aim to offer them the optimum balance of theoretical and practical learning. Renowned for immediately relevant research and innovation, we have widely recognised expertise in business, the creative industries, education, health and rehabilitation, and social sciences. We are dedicated to improving the quality of life and building the evidence-base for policy and practice development through research and knowledge exchange. With a lively and strong research culture, we are highly regarded for innovative,

relevant, practice and policy informing research and scholarship across a wide range of disciplines. Our research culture is enhanced by strong links and collaborations with the NHS, other universities in the UK and worldwide, industry and the voluntary and third sector. Information on our research and knowledge exchange centres is available on our website.

European partners

The Polytechnic Institute of Porto (P.PORTO) is one of the largest higher education institutions in Portugal (around 18000 students), encompassing 8 schools and 24 R&D units (8 funded by the FCT) that have demonstrated excellence in R&D activities. The School of Health (ESS | P.PORTO) is one of these schools (one of the largest in Portugal in Health Sciences) and has increasingly attracted students (around 3000/year), professors (around 100 full-time and over 300 invited lecturers), and researchers/PhD students (2 R&D units). ESS|P.PORTO is an interdisciplinary applied sciences school that provides technological resources for high-quality teaching practices and competitive R&D projects in the fields of rehabilitation, medical biotechnology, radiology, and radiation therapy, biosignals, healthy lifestyle, and environmental health. ESS | P.PORTO has been quite successful in competitive funding in the last 5 years, attracting PhD students and publishing papers in peer-reviewed journals. ESS | P.PORTO has a wide network of partners, ranging from toplevel national/international R&D units, private companies, NGOs, and health-care facilities. The HU University of Applied Sciences Utrecht has 22 units related to educational activities and four theme-based research centres. These are Innovation in Business and Communication, Healthy and Sustainable Living, Learning and Innovation and Social Innovation. The research centre Healthy and Sustainable Living focus on reducing disparities in health, promoting self-management, and realising an energy-neutral, circular, and accessible city. We work to promote a healthy lifestyle: so that people can continue to live independently – in full control of their own lives – in a sustainable, energy-neutral urban environment; including vulnerable groups like older people, people with a chronic illness, functional illiterates, and children. Knowledge questions in the fields of healthcare, a sustainable living environment and the development of 21st century digital and energy infrastructure play a central role. This includes areas such as innovations in the provision of care, self-management, life sciences, smart energy, and sensors. The University of Debrecen (UD) is a leading institution of higher education in Hungary with a student body of 28 000. It is not only at the forefront of Hungarian and international education but also active in the fields of research, innovation and development, and enjoys fruitful links with the business sector. UD's mission is to contribute to the education of future generations in cooperation with Hungarian and international partners, with high-quality interdisciplinary programs, and research built on versatile and practical experience. As the most popular higher education institution outside the capital, it offers academic programs, conducts research, and provides RDI opportunities in the fields of agricultural sciences, humanities, health sciences, law, economics, engineering, educational sciences, medical sciences, social sciences, natural sciences, art, and music by its 14 faculties and 24 doctoral schools. UD is also renowned internationally: in Hungary this is where the greatest number of international students study (over 20% of the student body), coming here from all parts of the world; the university also occupies prestigious positions in international rankings due to the academic work and success of our faculty and researchers involved in international projects. It now features among the top 500 universities in QS rankings, in the top 200 in several disciplines. Medical and health sciences are among the key research areas of UD's scientific activities. Besides education, and research the institution provides European-quality patient care with

comprehensive services to fulfil its obligations in the city, county, and region and often on the national level as well. Hamburg University of Applied Sciences is one of the leading Higher Education Institutes in Northern Germany and one of the largest of its kind in Germany. From design and media, social sciences and business to engineering, IT and life sciences, HAW Hamburg offers a wide range of undergraduate and postgraduate degree programs within its four faculties. Currently, around 17.000 students - of which 2600 are international students from over 100 nations – are enrolled at the university in one of the four faculties: Life Sciences, Technology and Informatics, Economics and Social Sciences and Design, Media and Information. Students at HAW Hamburg receive a high-quality education preparing them for a career in the industry, consultancy, administration, and in the social sector. In teaching, HAW Hamburg focusses on applied sciences and students already gain practical insights into their fields during the course of their studies through field projects, lab work, and internships. Students are also given the opportunity to collaborate with the industry or other partner institutions for their Bachelor's or Master's thesis. The close alignment of research and teaching and a focus on international partnerships are important components of educational programs at HAW. An increasing number of international projects being conducted at the HAW and students can participate in research on a global scale during their studies. The HAW promotes a student-centred learning process through cutting edge teaching methods combined with exercises that encourage students to apply their knowledge to solve real life problems. As a member of a local network of Hamburg universities, the HAW supports the transfer of ideas, knowledge and technology in the Hamburg Metropolitan Region. Strong links with the economical, social, political and cultural sector are maintained to translate science discoveries into meaningful and applicable results, such as demand-oriented products and services. The university has five main research areas: Information, communication and media, mobility and transport, health and nutrition, energy, and sustainability as well as diversity of research. Turku University of Applied Sciences is an inspirational community that is 10,000 members strong. This multidisciplinary and innovative university is dedicated to the creation of international competitiveness and well-being for Southwest Finland. Turku UAS graduates professionals with real world practice and top competencies. Turku UAS programmes are relevant to working life because they combine theoretical studies with practice in professional skills. Innovation Pedagogy, a new approach to learning developed at Turku UAS, is the core of their teaching strategy. Innovation Pedagogy is focused on a mix of RDI and working life. This methodology turns out graduates with the ability to think critically and excellent international knowledge and communication skills. The Faculty of Health and Well-being educates future professionals to work in the field of health care and social services. The starting point for our teaching activities is innovation pedagogy, a learning approach emphasizing multidisciplinary, experimental, and practice-oriented learning. Thousands of social and health care professionals develop their competence through our continuing education.

Contingency plans

Virtual seminar sessions will underpin collaborative working across the different institutions and groups. Virtual laboratory sessions / research group meetings / technical walkthroughs – meet the experts in different techniques will underpin the sharing of information. In the event of travel issues regarding the COVID-19 pandemic, these activities will be scaled-up to ensure best experience for our PhD students and early career researchers. It may be that this blended approach (face-to-face and virtual) will need to be applied depending on the COVID-19 situation at the time.

Proposed exchange programme summary

Within CARPE, meetings are organized in the conferences. Once every two years a CARPE conference is organised at and by one of the CARPE members. The aim is to share knowledge and find research collaborations. Each conference has a specific theme. The sixth CARPE conference October/November 2021 will be hosted by Debrecen University (DEB) conference. The SEGHE programme will be one of the many programmes in CARPE with this being the only one focussing on the challenges that comes along with the post COVID pandemic impact.

The proposal is to structure the exchanges as follows, providing as much flexibility as is possible regarding individual and institutional requirements.

Up to 3 longer term exchanges (up to 6 months)

Up to 5 shorter term exchanges (2 week to 3 months)

Exchange will form the focus for cross-institutional collaborative activity. Those institutions that host an exchanging academic will undertake a series of planned CPD activities whereby the exchange academic will be the coordinator of activities (research, seminars, meetings) between the two institutions.

Project plan:

September – December 2021: Post award planning phase.

- 1. Announcement of successful award to partner institutions.
- 2. Cross institution steering group meeting to coordinate forward planning.
- 3. Website development, advertising of scheme within partner institutions. UWS as host institution to coordinate activity with partner institutions.
- 4. Process for exchange application processing standardised and formalised within partner institutions.

ECR / PhD student exchange selection of candidates (November – January 2022).

- 1. Partner institutions coordinate application process within their own institution.
- 2. Partner institutions shortlist candidates and projects.
- 3. Steering group meeting across partner institutions to finalise selection.
- 4. Final decisions on exchanges communicated.

Exchange programme implementation (January – August 2022).

The overall exchange timetable will be as follows:

- 1. Successful exchange academic coordinates a short seminar session prior to the exchange where colleagues from the host and recipient institutions discuss their research areas. The exchange student to present their plans for the exchange including plan of work, proposed deliverables, and plans for publication and future funding. Students following an honours trajectory will be encourage to submit their project. In addition, these students could also be working from the start onward to organize the project. In this way they also will have the opportunity to gain organizational competences and international experience (language / cultural/ methodological approach)
- 2. Exchange academic attends host institution and is guided through a tour of facilities, meeting the academic teams. Exchange academic to undertake a seminar where they present their plans for the exchange to other academics at the host institution.
- 3. Exchange scientist undertakes a planned series of activities hosted by research groups within the host institution.
- 4. Exchange academic hosts and end of visit seminar there they highlight their achievements and propose future collaborative activities between institutions.

Detailed programme income

The proposed costing model is based on the plan for exchange flexibility.

Up to 3 longer term exchanges (up to 6 months) (budget of up to £10,000 each) = £30,000

Up to 5 shorter term exchanges (2 week to 3 months) (up to £5,000 each) = £25,000

Funding to cover travel and subsistence between institutions, and travel while on placement.

Additional funding is requested to cover administrative support (£7350) and for website development (£1500) and seminars plus communications to support the exchanges and researcher links £1500.

This is an indicative budget that may change based on individual circumstance of applicants.

Total request: £65,350

Details of any planned cohort building or networking activities

Virtual workshops will be provided for the duration of the project. A Saltire European Global Health virtual conference will be a one-day virtual conference, jointly organised by the consortium and partner universities. It will be open to anyone to share the outcomes of the programme and establish a platform for continuing the programme in the future.

Senior level sign-off from host university or organisation

A joint letter of support has been included with the application, detailing the high-level institutional support for this proposal.

Equality and Human Rights Impact Assessment

An equality and human rights impact assessment (EIA) using the UWS (host institution) template was completed in advance of submission and circulated to all partners for comment and input to

ensure that the likely impacts when planning and delivering the impacts of the proposed activities are considered.

The proposal is designed to deliver a flexible programme with a flexible budget to ensure that diversity can be embarrassed. The selection process will take measures to facilitate mobility and counter act gender and disability related barriers to it. While scientific excellence, skills and career development, mobility, work/life balance, equality and inclusiveness, fostering open science and innovation are all objectives of the proposed programme.

The distribution of the indicative budget will be proportional to the number of eligible proposals. If the allocated funding is insufficient to fund the highest ranked applications to participate the necessary budget will be transferred in order to ensure that the highest ranked proposal can be funded. In necessary gender balance among the applicants and the host at the receiving institution named in the proposal will be used as a factor for prioritisation. Prior to confirming the final number of selected exchanges, the budget (including any available match funding) will be reviewed to ensure that allocation of funding based on ranked application takes account of any requirement to award a special needs allowances for researchers with disabilities and/or family obligations. The limitations of the grant funding period are acknowledged – January to August 2022. All exchange participants will be asked to complete and submit a questionnaire at the end of their exchange and there will be a section on Equality and Human rights to inform a final impact assessment post award in September 2022.