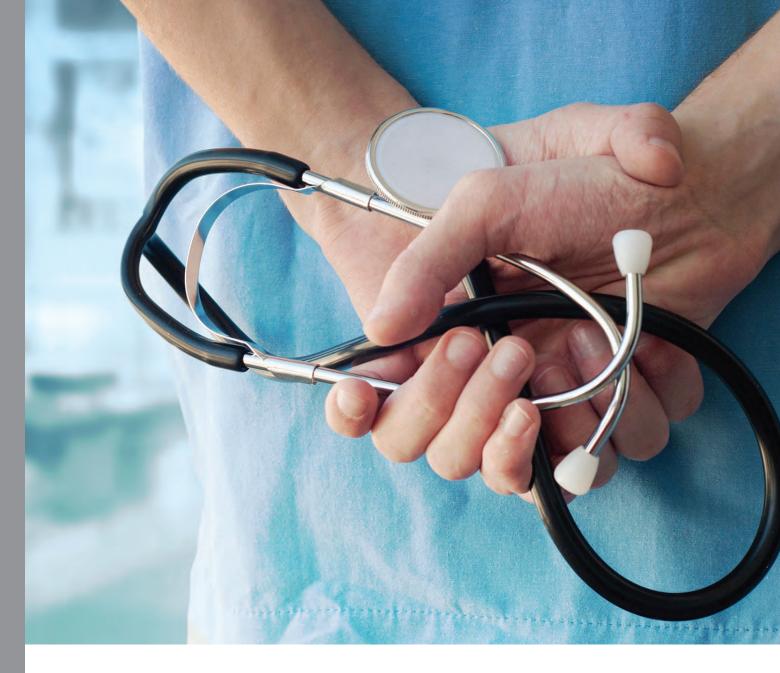
Our Commitment to Research: 2019 - 2023









Foreword

Our ambition is sweeping.
Health and social care organisations face unprecedented challenges that require transformation and innovation at scale. We want to create the conditions that enable research to be at the heart of these efforts to provide outstanding care to our community, as well as enable increased capability to deliver traditional high quality research trials.

To achieve this, we need a seismic shift in strategic and operational collaboration among our three organisations, and investment in our infrastructure. Most importantly we need to ensure our talented staff are able to develop research careers whilst maintaining patient-facing roles.



The Vision

Our vision is to provide excellent healthcare and training in a vibrant research environment to improve the health and care outcomes of our local communities in the North East of Scotland and beyond. We will embrace research and innovation as a means of promoting, enabling and sustaining health and well-being.





Professor Amanda Croft, Interim Chief Executive, NHS Grampian holds a Florence Nightingale Scholarship and a Chair at RGU



Dr Lynda Lynch, Chair, NHS Grampian holds a PhD from the Institute of Psychiatry

We are delighted to support this Commitment to Research: 2019-2023. Research and innovation are at the very heart of our ambition to provide the highest quality health care to the citizens of our region. The outstanding quality of our staff, with the provision of an outstanding research environment and the partnership with our local Universities, further education colleges and Health and Social Care Partnerships will be the key to delivering sustainable and patient-focussed care for the future.

We welcome also the growing recognition of the Foresterhill Health Campus as a key feature in our developing Life Science Industry.

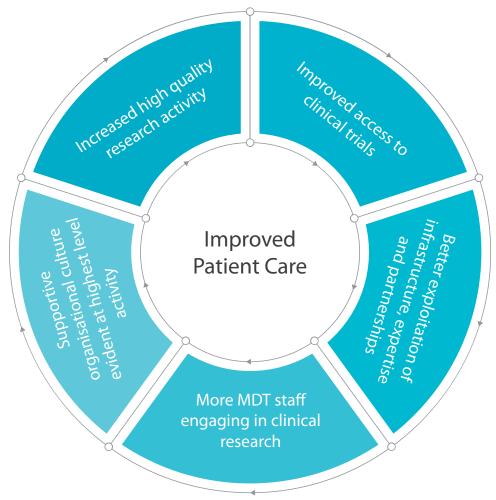
"

Our Strategic Aims

Our aim is to provide a vibrant research active community that plays a leading role in research and innovation in medical science and healthcare delivery.

The reason for this is simple: organisations that highly value innovation and research deliver better clinical outcomes for the communities they serve.

Our intention is to cultivate a culture where research, improvement and innovation are core to everything we do, and where collaboration between healthcare, academia and industry is promoted and nurtured. Supporting and developing our multi-disciplinary staff is crucial to increasing our research activity and to providing greater opportunities for our communities to become involved in clinical studies.





Professor Kevin Cooper

Kevin Cooper is a consultant gynaecologist with NHS Grampian and has a Chair with the University of Aberdeen. He has been or is presently a grant holder for a number of independently funded trials in benign gynaecology totalling over £7M. His particular areas of interest are the management of menstrual disorders, pelvic organ prolapse and incontinence. He is widely published in these areas. He is a recognised expert in minimal access surgery and is a national tutor for this, offering advanced laparoscopic and hysterocospic training within his Department. He has supervised postgraduates studying for higher degrees including MSc, MD and presently a PhD.

Our Commitment

All three organisations already have strategy documents focused on their core business.

This section details our joint commitment to creating the infrastructure, cross-organisation processes, and staff culture that will promote a vibrant research environment and high quality healthcare delivery.



Partnership and Expertise

Our commitment to increasing the range and complexity of research and related activities demands that we enhance our existing partnerships and breadth of expertise in all three organisations and beyond. We require smart cross-organisation strategic and operational networks that can respond dynamically to local, national and international research and healthcare agendas. We can achieve this by thoughtful effort focused on developing our partnerships.

Commitment:

- We will initiate regular meetings of the NHS Grampian chair and the principals of RGU and the University of Aberdeen
- We will expand membership of our Liaison Group to include executives from RGU as well as NHS Grampian and the University of Aberdeen. This group will meet regularly to discuss areas of shared strategic concern in the delivery of healthcare
- We will establish a Research Hub consisting of research leaders in NHS Grampian, RGU, and the University of Aberdeen to facilitate discussions about potential collaborations, expanding jointly funded posts, and ensuring delivery of this strategy





Our Infrastructure

It is imperative to our ambitions that we continue to expand and develop all aspects of our research infrastructure. We intend to do this in ways that not only facilitate greater levels of formal research activity, but also data-driven initiation and evaluation of transformation programmes, improvement science projects and innovation in health and social care. It is also important to us that the people of the north can access more complex research trials.



Commitment:

- We will develop with our partners an information platform to securely collect and link all aspects of health and social care data
- We will work toward creating a 24-hour clinical research facility and embed international standard research facilities in all new substantial NHS Grampian buildings delivering clinical care
- We will invite our academic partners to early-stage discussions of all substantial healthcare initiatives and developments to explore the potential for collaboration including opportunities for formal research



Professor Maggie Cruickshank, our Director of Research and Development, holds a Personal Chair with the University of Aberdeen, and is an honorary consultant in gynaecology with NHS Grampian.

"

I am delighted that we have formalised in this document our recognition that research, innovation and the best possible quality of care are inextricably linked. My Department are committed along with the Board and our partners to deliver these aspirations for our staff and most crucially for the communities we serve.



Developing Our Staff

Our staff are our greatest asset. We intend to create the conditions to grow the next generation of clinical researchers, develop our capacity to deliver research including commercial trials, and increase awareness of the support available to current and potential researchers.



Commitment:

- We will acknowledge the importance of research using job plans to recognise the commitment of chief and primary investigators in funded research trials, and to develop career pathways especially for non-medical staff
- We will deliver cross-organisational training and promotional events, and master classes to increase awareness, knowledge and skills of front line clinical and management staff
- We will create research champions who can promote research activity in their professions, departments, divisions and directorates and can signpost staff to available opportunities and further support



The Foresterhill Health Campus

Foresterhill is one of the largest integrated health campuses in Europe. Healthcare and research staff share the resources and infrastructure required to provide high quality health services, education and research.

Our campus is home to five hospitals and seven university buildings. Three hospitals and four university buildings have been built in the last ten years, representing unparalleled resources within which to deliver our services, provide training and conduct research:

- The Matthew Hay Emergency Care Centre
- Royal Aberdeen Children's Hospital
- The Institute of Dentistry
- The Suttie Centre for Teaching and Learning in Healthcare
- The Institute of Medical Sciences
- The Health Sciences Building
- The Rowett Institute for Nutrition and Health

By 2022, two new hospitals, the Baird Family Hospital and the ANCHOR Centre, will be open, to provide services including women's health and cancer in state-of the-art buildings.





A dynamic training and research environment exists on our health campus with thousands of students from the city's two universities studying medicine, nursing, physiotherapy, dietetics, pharmacy, radiography, occupational therapy, psychology, and health care sciences. A community of postgraduate students are taking one-year Masters programmes in a broad range of subjects including Public Health, Medical Physics and Clinical Pharmacology while over 300 PhD students carry out research projects at the cutting edge of medicine, medical sciences, health services research and nutrition. Continuing professional development in all aspects of healthcare delivery takes place every day, ensuring our talented staff can update their skills and expertise on-site





Our Partners

The University of Aberdeen promotes excellence in research and innovation at all levels. We have a Research and Innovation team dedicated to identifying and exploiting intellectual property and innovative ideas. James McIroy is a medical student and entrepreneur. He started a company to allow patients with a C. diff infection in the gut to receive a highly effective, but currently difficult to access, treatment through the NHS. James has attracted funds of £500,000 to further develop his work, which is focused on using the body's own micro-organisms to prevent and treat disease.

"The staff at the University of Aberdeen have been so helpful in getting us to this stage. I really can't thank them enough."



The University of Aberdeen's School of Medicine, Medical Sciences and Nutrition sits on the Foresterhill Campus.

This provides a world class environment to develop knowledge and translate that understanding into better strategies for the prevention and treatment of disease and the maintenance of well-being and excellent health.



Our researchers collaborate and work closely with those at the front line of clinical care. This collaboration ensures we are well positioned to address evidence gaps, respond quickly to emerging priorities, and promote uptake of research evidence in the provision of routine care. Our world-leading research institutes are addressing the major societal challenges not only here in Scotland and Great Britain, but across the whole world where our work is making a major impact on the provision and delivery of healthcare.





Professor Steven Heys, Head, School of Medicine, Medical Science and Nutrition, University of Aberdeen.





RGU's mission is to transform people and communities, by providing demand-led teaching and research to contribute to economic, social and cultural development regionally, nationally and internationally.

Over the last decade we have consistently had one of the best records of any UK university for graduate-level employment and we have been quoted top in Scotland and fourth equal in the UK for graduate employment by the Higher Education Statistics Agency in July 2018.



Professor Ian Murray, Head of School

of Nursing and Midwifery

IJ

RGU has a comprehensive portfolio of professional qualifying degrees and continuing professional development in nursing, midwifery, pharmacy, the allied health professions, health improvement, social work and sports and exercise science. Nearly 6,000 people are studying in these areas, both on and off campus. RGU is at the forefront of nonmedical prescribing education, and is rapidly taking a lead in terms of health care related research.





Louise Henderson, Anthony Furkuo and **Professor Cat**riona Kennedy

Catriona Kennedy, Professor of Nursing at RGU, is supervising three students completing research degrees that are being funded by NHS Grampian. The three students, Louise Henderson, Anthony Forkuo and Mary Munro, commenced their studies in October 2018. Louise is completing a PhD on the integration of health and social care. Anthony is studying young people's experiences of school nursing for his MRes and Mary, who is also studying for a MRes, is exploring the support of carers of those who engage in substance misuse.

Centres of Excellence

Our Foresterhill health campus has a wide range of state of the art facilities and Government funded centres of excellence.



The Rowett Institute

The Rowett is a recognised global leader in nutrition research with an illustrious history of shaping nutrition research and policy.

Over recent times, research has focused on the relationships between diet and human health.

Professor Alex Johnstone is an internationally renowned expert in the role of proteins in human appetite control. She led the contribution of scientific expertise to the development of the Balanced for You food range by Marks & Spencer.



Professor Alex Johnstone





Professors Graeme Nixon and Mirela Delibegovic, co-directors of the ACDC

Aberdeen Cardiovascular and Diabetes Centre

The mission of the ACDC is to enhance cardiovascular and diabetic patient care through research and education.

Our aim is to ensure that our research makes a real impact on cardiovascular disease and diabetes treatment by defining from the outset where we can directly improve clinical outcomes.

We work with clinical and laboratory researchers to translate our research in to real-world patient care, more effectively and efficiently.

We are fortunate here in Aberdeen that we have so many internationally renowned researchers working in the areas of cardiovascular disease, diabetes and nutrition, and are therefore uniquely placed to bring all this expertise into one collective centre.

It is impossible to look at these issues in isolation as many diabetes patients also suffer from cardiovascular disease. Our centre offers the perfect opportunity for the sharing of knowledge and collaboration between our laboratory and clinical researchers in the University of Aberdeen and NHS Grampian.



Professor David Lurie



Professor David Lurie leads a team of scientists and clinicians conducting pioneering work on Fast Field-Cycling MRI.

They have built the only clinical prototype in the world, and used it to image their first patients in November 2017. The researchers have received a €6.6M Horizon-2020 grant to work with partners across Europe to develop the technology for routine clinical practice.

Aberdeen Centre for Arthritis & Musculoskeletal Health

Our ACAMH provides world-class, innovative interdisciplinary clinical, research and training activities on diseases that have huge social, psychological and economic consequences.

The Centre builds on the recognition of our musculoskeletal research as EULAR Centre of Excellence in Rheumatology (awarded in 2010 and recently renewed for a further 5 years until 2020) and is a collaboration of clinical and non-clinical scientists, who work closely with multi-disciplinary NHS colleagues.

Our research is focused on improving understanding of arthritis and other musculoskeletal disorders, so that we can better diagnose, treat and prevent these conditions.



Professor Cosimo De Bari,
Professor of Translational Medicine





The North of Scotland Centre for Applied Nursing, Midwifery and Allied Health Professions Research (NOSCAR) is a collaboration of academics and healthcare professionals.

The mission of this unit is to establish Grampian as a centre of world class nursing, midwifery, and allied health professional (NMAHP) research, and in doing so exploit the under-utilised research capacity in the NMAHP community, whilst delivering real-world improvements to healthcare delivery and outcomes. RGU and NHS Grampian co-fund NMAHP clinical chairs, currently held by Professors Kay Cooper and Angela Kydd (right). A key strategic priority of these posts is to increase research capability and capacity among these professional groups.

Linda Harper is an associate nurse director, leading a team of advanced nurse practitioners who are delivering and evaluating innovative models of out-of-hours care in Scotland. Working alongside GPs and paramedics, they run the region's urgent medical service when family doctor practices are closed. She was awarded a Fellowship of the Royal College of Nursing for her pioneering work.





Professor Kay Cooper has clinical and research expertise in musculoskeletal physiotherapy



Professor Angela Kydd is an expert in the area of gerontology



Centre for Healthcare Randomised Trials

The HSRU contains the UKCRC-registered clinical trials unit, CHaRT.

At CHaRT we collaborate with healthcare and academic staff locally, nationally and beyond to conduct high quality national and international randomised controlled trials. We provide all the elements required to successfully deliver trials: from design input, through securing funding, providing IT and trial management infrastructure, to analysis and dissemination.

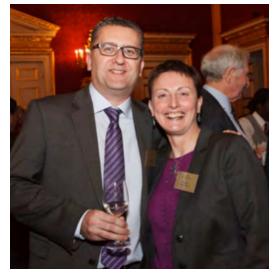
Professor Graeme MacLennan, Director of CHaRT.

Health Services Research Unit and Health Economic Research Unit

In 2017, the University of Aberdeen received the highest national honour for a UK university, the Queen's Anniversary Prize for Higher and Further Education, in recognition of the world-leading research into health services over the last 40 years.

The Health Services Research Unit (HSRU) and the Health Economics Research Unit (HERU), both CSO core funded units, have pioneered the combination of economic and clinical research in order to assess which medical treatments and policies are effective in the NHS.

Their research provided the underpinning evidence for the introduction of robotic surgery for prostate cancer and the ban on smoking in public places in Scotland, to name just two examples.



Professors Craig Ramsay and Mandy Ryan, Directors of the HSRU and HERU, respectively.





Dr Bruce Downey is the third NHS Grampian psychologist to have been appointed to a CSO NRS Career Researcher Fellowship. This is more than have been secured by psychologists in all other NHS boards combined.

His programme of work is focused on improving methods of assessment in neuropsychological practice, and the development and evaluation of interventions designed to improve outcomes in neurologically compromised populations.



Professor Nick Fluck, Medical Director, is a former Medical Research Council Research Fellow and holds a Honorary Chair with the University of Aberdeen.



"We firmly believe that a flourishing, dynamic culture of research and innovation are fundamental to our aspiration to provide the highest possible quality of care to our community."



NHS Grampian Clinical Professional Executive Leads



Susan Webb, Director of Public Health NHS Grampian and NHS Shetland



Caroline Hiscox, Acting Director of Nursing, Midwifery and Allied Health Professions

The Aberdeen Centre for Health Data Science

The Aberdeen Centre for Health Data Science is a partnership between the University of Aberdeen, NHS Grampian and NHS Research & Development North Node. It hosts our accredited Data Safe Haven secure research facility.



Professor Corri Black, Co Director of The Aberdeen Centre for Health Data Science

"ACHDS is creating innovative, interdisciplinary, data science solutions to the big challenges for health and health care, to improve health for individuals, local communities and internationally. NHS Grampian staff work in partnership with health researchers, data scientists and digital technology companies to create a vibrant research ecosystem. Recent successes are bringing cutting edge technologies to the North East for development and evaluation with investment to create state of the art infrastructure supporting data driven research and innovation"

"





Dr Abha Maheshwari



Dr Abha Maheshwari is a consultant in Reproductive Medicine. She is the chief investigator of the NIHR-funded E-FREEZE study, a randomised controlled trial evaluating the clinical and cost-effectiveness of a policy of freezing all embryos followed by thawed frozen embryo transfer, compared with a policy of fresh embryo transfer in women undergoing in-vitro fertilisation.

The Aberdeen Fertility Centre is unique within the UK in being the only university based academic IVF centre.

NHS National Research Services Children's Network

Royal Aberdeen Children's Hospital hosts the NHS NRS Children's Network. There is a dedicated paediatric clinical research facility (the Craig Unit) staffed by experienced paediatric research nurses all GCP accredited. The network runs a Young Person's Advisory Group, which is a group of young people age 11-18 who are patients and/or have an interest in medical research. The group offers expert comment from a children and young person's perspective on research design, recruitment strategies and how to retain young people in trials. The group are members of the European Young Persons Advisory Group.





Dr Pamela Dicks

Dr Pamela Dicks has been the manager of the NHS National Research Services Children's network which provides expertise and infrastructure to support paediatric clinical trials in Scotland, for 8 years. She is also the coordinator of the network's Young Persons Advocacy Group, a founder member of European Young Persons Advisory Groups network, on the board of directors of the International Children's Advisory Network (iCAN) and the Coordinating Group of the European Network of Paediatric Research networks at the European Medicines Agency.

Our Successes

As well as the previously noted areas and individuals with internationally renowned research reputations, we have myriad examples of our multi-disciplinary staff leading research programmes, securing substantial grants and prestigious fellowships.



Dr Simon Sawhney is a Scottish Clinical Research Excellence Development Scheme (SCREDS) clinical lecturer in renal medicine. He holds a Wellcome Trust Research Training Fellowship. He has recently completed his PhD supported both by the Wellcome Trust and the Farr Institute. His work uses routinely collected health information in Scotland to answer questions about kidney health and disease. He has also led a collaboration of four UK centres in research seeking to improve the methodological robustness of clinical research in kidney diseases.



As Head of Health Intelligence, **Jillian Evans** supports evidence informed strategy, public health and planning. She is also Deputy Chair of NIHR's Health Services and Delivery Research Panel, helping to influence research which addresses issues of major importance to the NHS, including planned and unscheduled care; prevention and self management of long term conditions.



Dr Roy Soiza is a consultant geriatrician working across both acute and community geriatrics services. He secured an NRS Career Researcher Fellowship in 2012, and is the Principal Investigator of several research projects worth over £7.5M including the international SENATOR study and NIHR-funded BiCARB trial.





Dr Sara Denham is a consultant midwife and visiting senior lecturer at RGU. She has a wide variety of research interests focused on pregnancy and how to deliver the best possible midwifery care in challenging rural environments. Sara is driving forward efforts to use Bayesian statistical techniques to predict successful vaginal births following a previous caesarean section and thereby support informed shared decision making.



Professor Irfan Ahmed is a consultant surgeon with a specialist interest in advanced laparoscopic surgical techniques, and the development of surgical innovations. He is the joint chief investigator, with Craig Ramsay, Director of the HSRU, of a £1.4M NIHR-funded multicentre RCT exploring the appropriate management of symptomatic uncomplicated gallstone disease.



Thérèse Lebedis OBE is a consultant occupational therapist in Stroke and is the clinical lead for the Stroke Managed Clinical Network. She has been the primary investigator on a number of NIHR-funded large multi-centre trials focused on post-stroke rehabilitation. She was made OBE in 2019 for her work in stroke rehabilitation.

Innovation

Our organisation is committed to supporting a culture of innovation. We actively encourage all staff to come forward with their creative ideas about improving healthcare.

Innovati in Hub

Our Innovation Hub team consist of enthusiasts with different professional backgrounds and networks. It offers all our staff regardless of role and seniority direct access to their support. Innovation is supported at the highest level of our organisation, and by recurring regional resource from the Scottish Government. Our Innovation Hub team are committed to promoting commercial and non-commercial innovation by:

- Harvesting and supporting the innovation ideas of front line staff
- Setting open innovation challenges on intractable healthcare delivery issues
- Providing test-beds for innovations developed by NHS staff and industry
- Co-developing health and social care solutions with industry and academic partners



Jill Ferbrache, Excellence in Care Lead

NHS Grampian is leading efforts to help nursing staff provide the most person centred and efficient care possible to people admitted to hospitals in Scotland.

17

"Our aim is to capture and create real time health records that are available when and where needed by our multidisciplinary teams. We are working collaboratively with senior nurses across Scotland, Glasgow School of Art, the Digital Health Institute, and leading Al and cognitive technology industry partners to generate an innovative solution to what is a substantial healthcare delivery challenge."

66

The Big Pitch: Six staff members presented their innovation ideas to an audience of industry representatives, Scottish Government leaders, academics, and senior NHS clinicians and managers.





Professor Alan Johnstone

Alan Johnstone is a consultant orthopaedic surgeon with NHS Grampian and specialises in trauma. He was awarded a Chair by RGU and is a serial inventor, designing implants and surgical equipment.

Currently, he is developing a novel soft tissue pH monitoring system that will have multiple clinical uses. Through collaborations with NHS Grampian and CHaRT, he is conducting a multicentre study investigating its efficacy to diagnose acute compartment syndrome.

The system won the Elevator Innovation Award in 2018.

The Bio-therapeutics Hub for Innovation

More than 2,500 people are employed in the life sciences sector in Grampian, and it contributes £160M GVA to the regional economy. Aberdeen has one of the highest concentrations of life scientists in the UK outside of Cambridge. Building a dynamic cluster of life sciences companies is a key priority within the economic diversification strategy for North East Scotland.

The Bio-therapeutic Hub for Innovation is scheduled to open on the Foresterhill site in 2020. This is a transformational £40M project that includes £20M of capital investment, led by Opportunity North East in collaboration with NHS Grampian, University of Aberdeen, RGU and Scottish Enterprise.

"

"Our region's triple helix of academic research, clinical and commercial expertise with patients at its heart provides the ideal environment to create and grow companies to solve major healthcare challenges.

At the heart of our joint ambition is the creation of an innovation hub for life sciences, healthcare and medtech businesses on the Foresterhill Health Campus. The hub will provide a focal point and space for collaboration between clinicians, researchers and industry.

We aim to create the next generation of products and therapies in known areas of strength here in the North East such as biotherapeutics, modern epidemics (including dementia, obesity, diabetes), medtech, diagnostics and nutrition."



Jennifer Craw, Chief Executive, Opportunity North East, was awarded an honorary Doctor of Business Administration by RGU in 2018

