

School of Health Sciences' Research Strategy 2019 – 2024

Sections 1-3: Current Research Activity

1. Our world-leading research

We are one of the UK's top academic producers of health sciences research. The quality of our research is demonstrated by the UK 2014 Research Excellence Framework (REF): 91% of our research achieved or exceeded the classification of "internationally excellent" and over 33% was classified as "world leading". Our research excellence placed us 4th in our REF unit of assessment for the percentage of outputs that were "world leading".

Our research aims to understand the determinants of health and well-being, to understand patterns of health service use, and to develop and evaluate interventions to optimise health and well-being. As such our research activity, grouped into three broad domains (not mutually exclusive), addresses:

1. Health behaviours, prevention and rehabilitation
 - a. Communication and cognition
 - b. Musculoskeletal rehabilitation
 - c. Understanding and changing behaviour
 - d. Workforce well-being
2. Brain, ageing and health
 - a. Acquired brain injury recovery
 - b. Dementia and frailty
 - c. Sleep and brain health
3. Health care innovation
 - a. Care and complexity in later life
 - b. Diagnostic testing
 - c. Inclusion (equity in health and social well-being)
 - d. Supportive, palliative and end-of-life care

We have expertise in fields including: behavioural science, biomechanics, complex intervention development and evaluation, digital health, epidemiology, ethnography, evidence synthesis, implementation science, linguistic analysis, neuroimaging, clinical neurophysiology, and trial methodology.

2. Our research impact

In partnership with health, social care, industrial and broader communities (for example patients, carers and the public) we address clinically important questions that will make a difference to people's lives. Our research informs health and social care services and public policy and empowers people to take action to improve their health and well-being and that of their families and communities. Examples of work from across our three domains of research activity are: improving care home experience, self-help groups in rural Kenya, and enhancing evidenced-based decision-making in stroke rehabilitation. We outline these examples here.

- Improving care home experience
There are 11,300 care homes provided by 5,500 organisations in the UK caring for 410,000 people who are challenged to live independently. The organisation and culture of care is recognised as important but also problematic across health and social care provision for older people. Repeated failures in the quality of care have made this a high-profile policy issue. The ResPECT and CHOICE projects had a direct impact on the revision of the regulation and

inspection regimes for care of older people. Our research into care home experience is used as evidence for practice by Care England, Social Services Knowledge Scotland, Social Care Institute for Excellence Social Care online resource, and listed by the British Geriatrics Society and National Institute for Health and Social Care Excellence Evidence.

- **Self-help groups in rural Kenya**
 When resources are limited, children with functional impairments underlying disability are often disadvantaged. Working with our partner, the Kenyan Medical Research Institute (Coast), we have transformed attitudes to, and understanding of, disabilities within local communities by using those with experience of disabilities to train people in disability awareness. This has informed our current project, SEEK, a locally supported enterprise that focuses on caregiver self-help. Participating groups and their members report economic success, for example by securing bank accounts and making profits from income-generation activities. We also expect growing portfolios for community-based and non-government funded organisations in this area.
- **Enhancing evidence-based decision-making in stroke**
 For physiotherapists working with stroke survivors, we have produced the Viatherapy App in collaboration with our international colleagues. Freely available to anybody in the world from app stores and the website (<http://www.viatherapy.org>), Viatherapy provides the most up-to-date evidence at the fingertips of physiotherapists wherever they are, using quick and simple steps to lead to evidence-based suggestions for therapy. A recent quality improvement project with community rehabilitation therapists established it was easy to use, enhanced treatment planning and increased the confidence of physiotherapists in their decision-making to support best practice.

3. Our research environment

Research in HSC is conducted within a cross-disciplinary and collegiate environment. In addition to the cross-disciplinary links within HSC we have research collaborations across the UEA with, for example, the Schools of Business, Computer Science, Environmental Sciences, Law, Medicine, and Psychology. This UEA research environment is complemented by key relationships with the Norfolk and Norwich University Hospital and the Quadrum Institute. Beyond the Norwich Research Park, we collaborate with other NHS Trusts, Social Care organisations, charities and UK Universities. Internationally we have research partnerships/collaborations with other highly-rated universities. Members of HSC are members of management boards with key responsibilities for delivery of specific programs in national research initiatives including the NIHR Applied Research Collaboration (east of England), and the NIHR Brain Injury MedTech Cooperative. In addition, members of HSC contribute to national advisory boards, national/international peer reviewed funding panels, and hold editorial positions on international scientific peer-reviewed journals. This network of collaborations, expertise and cultural settings ensures a creative, relevant approach to addressing challenges for health and social care globally.

The relevance of our research is also enhanced by working in partnership with the UEA Health and Social Care Partners, service users and the public to co-produce interventions for target populations. This covers the spectrum from prevention of ill-health to palliative and supportive interventions, including smoking cessation, physical activity promotion, hospital- and community-based rehabilitation, and support for carers.

Within the Norwich Research Park, we have access to facilities, services and support to ensure research is designed and conducted to the highest international standards.

- Support for all projects is provided by the UEA Research and Innovation Services (RIN). This support includes: identification of potential funding organisations, provision of costing for projects, research contracting, assistance with obtaining NHS ethical and HRA approvals, arranging appropriate insurance for research activity; intellectual property advice and support;

assistance from Research Partnership Managers; and provision of competitive internal funding for research impact activity.

- Alongside RIN is the Norwich Clinical Trials Unit (CTU) who work with us to: assist with trial design, develop funding applications, ensure quality assurance, manage the conduct of trials, provide data management, assist with process evaluation, carry out health economic evaluation, and undertake statistical analysis. The CTU provides support across the research continuum from early studies translating scientific understanding into interventions through to implementation studies.
- Support from the CTU is closely aligned with the East of England Research Design Service (RDS) which is co-located with HSC on the UEA campus. The RDS provides free advice and support for the development of applied health or social care research proposals. Services include: advice on appropriate funding streams, guidance on choosing the most appropriate methodology, provision of information about involvement of patients and public in research projects, and identification of potential collaborators.
- Internal support is provided through the peer review committees including the Internal NIHR Peer Review Committee and the Biomedical and Clinical Peer Review Committee. In addition, there are peer review committees within other faculties that HSC researchers can access. Individuals are guided by RIN towards the most appropriate UEA peer review committee once notification of intent to write a grant application has been submitted. Researchers also have support through opportunities for project presentation provided within their research domains.
- HSC researchers are key for the management of specialist research facilities including: the Sleep and Brain Laboratory, the Movement and Exercise Laboratory, and the UEA Brain Imaging Centre.

Our staff are key to our research environment and success. We therefore have structures and processes to enhance our recruitment, retention, and development of highly skilled researchers at all career stages. In addition to the support outlined above, all HSC researchers, irrespective of type of contract, have access to: an annual appraisal (part of which is the production of a learning needs assessment to support current and future research roles), funding for attendance at national and international conferences, staff development opportunities, HSC seminars and masterclasses, and a range of processes designed to ensure equality and diversity. We have successfully implemented a bridging funding scheme for Research and Analogous staff (RAs) who are in-between funded projects. More recent innovations in staff development include: a pilot of a new HSC research mentoring scheme based on the Academy of Medical Sciences model of developmental mentoring, workshops on fellowship applications, initiation of three-year Clinical Academic Fellow posts providing supported opportunity for post-doctoral researchers to achieve the academic level required for appointment to a lecturer post, initiation of a transition path for early career researchers with high potential for future research leadership designed to increase the amount of internationally competitive research activity in their job profiles, and implementation of HSC guidelines, based on the Concordat, to support RAs. Further, all academic staff can apply for study leave in accordance with the UEA process.

In addition to our seminar series, speciality symposia and masterclasses provided by internal and external speakers, HSC encourages an active research community through an annual qualitative research symposium and HSC Festival. The HSC Festival involves all members of the school, including our undergraduate students, to celebrate our research, education and innovation activity and successes. The HSC Festival includes presentations, workshops, panel discussions and dedicated networking opportunities with our practice partners and relevant external decision-makers.

All HSC researchers are involved in the generation and delivery of our research strategy, through regular strategic research workshops to which all HSC academics, RAs and postgraduate research (PGR) students are invited, supplemented with virtual consultations (including our undergraduate

student cohort where appropriate). In this way we ensure the relevance of the HSC research strategy to all. Through these consultative processes we have generated an action plan for development of the HSC research environment. This action plan is being enacted by task-and-finish groups that provide recommendations to HSC Research Exec. The task-and-finish groups are led by the Associate Directors of Research for researcher development and the research environment. In addition, the HSC Research Executive has representatives for early career researchers, RAs and PGR students.

Section 4: Ambitions

4. Our strategic priorities and action plan 2019 to 2024

We are focused on building on the strengths of our established research programmes and enabling our emerging programmes to be competitive at an international level. We are also focused on further development of our established creative, innovative and collegiate research environment as the essential culture within which to grow: our research programmes, our staff, our students and consequently our international reputation and competitiveness.

As a result, our strategic priorities are structured into the categories of: research activity, research capacity, research impact, and research environment. The specific priorities in each of these categories are provided in Tables 1 to 4.

Table 1. Research activity: strategic priorities from 2019 to 2024

Strategic priorities
To secure larger internationally competitive research funding from major competitive peer-reviewed sources – programme grants and strategic awards.
To increase UEA value of industry/publicly-funded research projects and consultancies
To increase percentage of “world leading” research outputs from body of those estimated as “internationally excellent” (estimate 15%, January 2014- March 2019)
To increase international reputation for leadership in our research areas

Table 2. Research capacity: strategic priorities from 2019 to 2024

Strategic priorities
To have a sustainable staff profile for research areas e.g.: a professorial research lead; senior lecturers leading their independent research; and early career researchers developing their independent research
To enhance our recruitment, retention, and development of highly skilled researchers at every career stage
To increase the number of PhD students (predominately externally funded)

Table 3. Research impact: strategic priorities from 2019 to 2024

Strategic priorities
To increase the quality and number of REF research impact case studies
To increase knowledge about, and skills in, research impact
To promote the visibility of our research impact work internally and externally

Table 4. Research environment: strategic priorities from 2019 to 2024

Strategic priorities
To promote research career development opportunities for all HSC ATR, researchers and research-interested staff
To enable pre-registration and post graduate students to participate in HSC research activity and consider a research career.
To promote monitoring and revision of the HSC Research Strategy by all HSC research-active and research-interested staff.