A FORWARD-THINKING, DYNAMIC SCHOOL WITH A COMMITMENT TO LIFELONG LEARNING AND REAL WORLD IMPACT.







### WELCOME FROM THE DEAN

The School of Health & Society is the largest school in the University of Salford with over 8,000 students. We seek to change lives through our groundbreaking work with the very best in the fields of health and society. Committed to breaking down barriers we are a diverse community which is energised by our commitment to our students, who come to Salford from all over the world.

We take pride in our relations with the NHS and other health providers, local authorities and social care units, prisons and the Greater Manchester Police – we are at the very centre of the lives of our community and our students get real life experience from our experts in the field. With world class researchers informing the teaching we do and with award winning teaching facilities, the students experience a hands-on approach to developing their talents.

We are the largest provider of Allied Health Professions undergraduate education in the north-west, and  $3^{rd}$  largest provider of Nursing undergraduate education in the country (HESA 2019/20).

Thanks for your interest in the school and please get in touch for more information.

Become unstoppable.

Professor Margaret Rowe Dean of School



### IMPROVING PEOPLE'S LIVES THROUGH RESEARCH

Our globally respected researchers have made positive change at local, regional, national and international levels and their work is fed back directly into our teaching. We work with a wide range of organisations to engage people in our research, co-producing wellbeing, delivering better health and social care and improving society.

The Centre for Social and Health Research (CSHR) is a multidisciplinary research centre based within the University of Salford. CSHR work seeks to understand the complex challenges facing people, communities, services and places, and create innovative responses. We are engaged in work which aims to alleviate health and social injustices and bring about positive change through engaged research and practice.

The CSHR approach is grounded in principles of collaboration, co production and critical analysis in order to support the development of positive changes in health, wellbeing and society.

The Health Sciences Research Centre (HSRC) is a multidisciplinary group, focused on improving health outcomes through innovation, research and partnerships. The centre has a strong focus on technological advancement, often working closely with NHS and industry partners to develop and test new treatments and to create innovative healthcare products and services. We also consult closely with patient groups to develop health care solutions focused on the needs of patients or community groups.

HSRC also plays a key role in training the workforce of the future and houses the EPSRC Centre for Doctoral training in Prosthetics and Orthotics. Membership of the research centre comes from a wide range of backgrounds, including nursing, physics, physiotherapy, psychology, public health social work and sport.



### THE STUDENT EXPERIENCE

Expert teaching staff, strong industry links and excellent facilities equip our students with the knowledge and experiences to advance their research or career.

Combining innovative teaching with hands-on skills development, the school offers undergraduate, postgraduate and CPD programmes across a range of subject areas including:

Counselling and Psychotherapy / Criminology / Midwifery / Nursing / Occupational Therapy / Physiotherapy / Podiatry / Policing / Prosthetics and Orthotics / Psychology / Public Health / Radiography / Social Work / Social Policy / Sociology / Sports and Exercise Our course content is developed in partnership with key stakeholders and we deliver specialist education, drawing on our own research via a rich interdisciplinary network. Our researchers have made positive change at regional, national and international levels and their work is fed back directly into our teaching so that students benefit from relevant, evidence-based lectures.

In a rapidly changing world, the school is keen to leave a productive legacy of helping people at all stages of their lives, improving physical, psychological and social wellbeing.

### DEVELOPING TOMORROW'S WORKFORCE TODAY

Through our pioneering industry collaborations, students, staff and industry partners work together to shape careers.



Through work placements, clinical skills development, and community and practice-based projects, our students develop the skills and competencies needed to succeed. Students, staff and industry partners work together to shape career and discipline-focused programmes, where learners engage with real-world scenarios and graduate with high levels of employability. Over 90% of our graduates find employment or go on to further study within six months of graduating.<sup>\*</sup>

Central to our direction as school are areas of growth including the Digital Health and Health Technologies, Health and Social Inequalities; and Human Movement and Rehabilitation.

Our inter-disciplinary, inter-professional community is enterprising, dynamic and fit for the future.

\*Data from 2016-2017 Destinations of Leavers of Higher Education Survey



### THE UNIVERSITY OF SALFORD

The University of Salford is a truly global institution, with over 3,000 international students and a total student body of 18,000 living and studying in the heart of Greater Manchester - one of the UK's most vibrant and multicultural city regions.

Drawing on our industrious heritage, we are revolutionising traditional education. A friendly and vibrant place to study, we strive to provide the best opportunities to develop your skills and enhance the student experience.

Over the past five years we've invested £160 million in our buildings, facilities and industry-standard equipment. We're the only university with an industry-leading facility at MediaCityUK.

Through ground-breaking collaborations and experience-building programmes, we shape our students ready to succeed in today's challenging world.



### FACILITIES



Our state-of-the-art facilities enable our students to practice new skills in a safe environment, under the supervision of qualified practitioners. Our Simulation Suite is set up to mirror a range of real life clinical environments, and our state-of-the-art Human Performance Lab can be used by students studying a wide-range of programmes. Other facilities include the digital imaging suite with CT scanner and x-ray rooms and our purpose-built counselling suites.



- Counselling and Psychotherapy Centre
- Digital Imaging Suite
- Human Performance Lab and Strength and Conditioning Suites
- Immersion Simulation Room
- Podiatry Clinic
- Prosthetics and Orthotics Laboratory

- Psychology Laboratories
- Rehabilitation Flat
- Simulation Suites
- Sports Injury Clinic



#### School of Health and Society

Mary Seacole Building University of Salford Frederick Road Campus Salford M6 6PU

E: healthsociety-execsupport@salford.ac.uk

www.salford.ac.uk/school-health-society @UoS\_HealthSoc



## **Professor of Nursing**

**Professor – MNGT** 

(Ref: Role Code)

School of Health & Society

### **Role Title:** Professor of Nursing

### **Reports To:** Associate Dean – Research and Innovation

### The Role

The School of Health and Society is looking to appoint an exceptional candidate to the role of Professor of Nursing. We are seeking an established nurse academic who will lead the expansion and development of research and innovation in the Directorate of Nursing and Midwifery, the School and the University. The successful candidate will have a commitment to collaborative working, staff development and have an engaging leadership style. The postholder will provide key academic leadership within the Directorate and the School, being a member of the Directorate Management Team enabling a significant positive contribution to planning and decision making.

The post holder must be a Registered Nurse. Applications from candidates from any area of nursing are welcome.

The post holder will have a sustained and significant track record, of delivering nationally/internationally recognised research and/or significant strategic experience of nursing leadership in academia, and will be able to:

- Articulate a clear vision for the development of nursing research and innovation in the School
- Develop and deliver programmes of research, growing research capacity and generating significant research impact
- Demonstrate a commitment to connecting people, communities and organisations to enable implementation, knowledge exchange and impact
- Support and contribute to enterprise and entrepreneurial activities (including continuous professional development, commercialisation of our research, submission of tenders and consultancy work)

We want you to join our team and work with us to enable the development of nursing research and innovation that promotes health and addresses the needs of individuals and communities nationally and internationally. We successfully educate and develop students for careers in the modern world, and you will contribute to creating the professionals of the future.

### **EDI Statement**

We are proud of our diverse student population and it is important for us to create an inclusive culture where all our students and colleagues can bring their whole selves to the University. It is important to us that our students see themselves reflected in those who teach them, and that higher education is a place where they can thrive. We recognise that our colleague profile is not as diverse as it should be and have developed strategies to address this.

### **Role Detail**

To provide academic leadership for the Directorate of Nursing and Midwifery across a broad spectrum of research and innovation activities.

### **Role Purpose**

#### **Teaching and learning**

- Provide academic leadership, development, mentoring and career management advice to colleagues and students in all areas of teaching and learning
- Contribute to the development and delivery of research-based teaching and learning

### **Research and Innovation**

- Develop plans and deliver research and innovation objectives that contribute to University and School Research and Innovation Strategies
- Develop and deliver plans and programmes of work that enable growth in research and innovation capacity
- Develop local, national and international collaborative partnerships with organisations, communities, educational institutions, academics and practitioners to develop research and innovation projects, enable implementation and optimise impact
- Develop and disseminate research outputs of national/international standing
- Supervise PhD students, ensuring timely completion in line with University standard timescales
- Act as a mentor to new, early and mid-career researchers and PGR students
- Make a significant contribution to the University's returns to the Research Excellence Framework
- Play a lead role in development of an innovative academic environment which brings tangible benefits and impacts for other groups and organisations outside the higher education sector
- Be recognised as a leader, for example through:
  - o Giving keynote speeches and plenary addresses
  - $\circ$   $\;$  Being invited to speak at international conferences and workshops  $\;$
  - o Attracting research funding from relevant external bodies
  - o Conducting research of international excellence
  - Membership of internationally recognised journal editorial boards and key funding bodies
  - Undertaking professional activities that recognise their professional standing within the discipline or subject area

- Contribute to and support the development of the wider commercial objectives of the University, for example through:
  - Securing income from commercial and industrial sources for research and innovation activities
  - Undertaking activities such as continuing professional development which generate additional commercial income for the institution
  - Developing mutually beneficial partnerships with key businesses and organisations
  - o Commercial exploitation of research and innovation projects

### Leadership and Management

- Undertake line management as required
- To engage with and participate in the University's PDR process as reviewer and/or reviewee, as appropriate
- To contribute significantly to management, planning and organisation of the School and University, for example via membership and attendance of relevant committees and steering groups
- Perform any other duties appropriate to the grade as may be required by the School
- Comply with the personal health and safety responsibilities specified in the University Health and Safety policy
- Engage with the University's commitment to put our students first and to deliver services which are customer orientated, represent value for money and contribute to financial and environmental sustainability when undertaking all duties and aspects of the role
- Promote equality and diversity for students and staff and sustain an inclusive and supportive study and work environment in accordance with University policy in line with the Athena SWAN Charter and the Race Equality Charter
- To act as ambassador and participate in activities for the School and University

# This role detail is a guide to the work you will initially be required to undertake. It may be changed from time to time to meet changing circumstances. It does not form part of your Contract of Employment

Indicative level of membership for Higher Education Academy: Principal Fellow

Within this role, it's not only what you do but how you do it that will enable you to be truly successful. The Salford Behaviours are an integral part of who we want to be as an institution and it is important that you are able to show us that these are also important to you.

For this role, we have identified the following behaviours to be critical.

- Connecting You can build strong working relationships and create a network of trusted contacts across organisational boundaries
- Co-creating You are open to new ideas and can work positively with a diverse range of people to tackle complex issues and generate innovative and practical solutions
- Inspiring You communicate with clarity, engaging and influencing people

### **Person Specification**

### Qualifications

	The successful candidate should have:	Essential/ Desirable	Tested by* A, I, P, T
1	PhD or professional doctorate in a relevant discipline	Essential	A
2	NMC qualification as a Registered Nurse	Essential	A
3	A recognised teaching qualification	Desirable	A
4	Principal Fellow of Advance HE	Desirable	A

### Background & Experience

	The successful candidate should have:	Essential/ Desirable	Tested by* A, I, P, T
4	Demonstrable strategic academic leadership experience	Essential	A, I
5	Experience of leading large research/innovation projects, programmes and collaborative partnerships	Essential	A
6	A sustained record of securing external funds for research and innovation activities	Essential	A
7	A sustained record of developing and disseminating outputs of national/international standing	Essential	A
8	Experience of successful Doctoral supervision as primary or secondary supervisor	Essential	A
9	Demonstrable record of contribution to enhancing research- informed learning and teaching	Essential	A, I
9	Strong national presence and evident trajectory of increasing international profile	Essential	A, I
10	Significant experience of the management of others, including mentoring and supporting career development.	Essential	A, I

### Knowledge

	The successful candidate should have demonstrable knowledge of:	Essential/ Desirable	Tested by* A, I, P, T
10	Practice, research, innovation and entrepreneurship in nursing	Essential	A, I, P
11	Contemporary issues in nursing	Desirable	A, I, P

#### **Skills & Competencies**

	The successful candidate should demonstrate:	Essential/ Desirable	Tested by* A, I, P, T
11	An effective compassionate leadership style	Essential	A, I, P
12	Proficiency in the effective academic leadership and management for individuals and teams in relation to research, innovation and education	Essential	A, I, P

#### A = Application form, I = Interview, P = Presentation, T = Test

Details of any assessments required will be provided in the invitation to interview letter. Appointments to grade 7 and above will normally include a competency based interview and presentation and in some instances a work based simulation exercise.

#### Candidate guidance

You should use the **supporting statement template** which can be downloaded from the relevant vacancy posting within the e-Recruitment System (Oleeo) to describe how your skills and experience match the criteria listed in the person specification. You should provide narrative to each of the key sections (Background & Experience, Knowledge and Skills & Competencies). Strong applications will demonstrate experience relevant to the **essential** and **desirable** criteria. You should aim to be as <u>concise and succinct</u> as possible when providing your narrative, as this will greatly assist the shortlisting panel in reviewing your application.



# Research & Innovation School of

# **Health & Society**

- / Poverty and Social Welfare
- / Criminal Justice Research
- / Sustainability and Social Justice
- / Social Prescribing
- / Long-term Conditions
- / Digital Health and Society
- / Global Health

- / Ageing and Dementia
- I Breast Cancer Imaging
- / Human Movement Technologies
- / Equity, Health and Wellbeing
- Centre for Doctoral Training in Prosthetics and Orthotics
   Knop Apple and East
- Knee, Ankle and Foot





# POVERTY AND SOCIAL WELFARE

Improving the lives of those experiencing poverty and inequality

The University of Salford is leading research in the areas of poverty and inequality – to understand the experiences of those living with poverty and inequality and to inform significant reform within social welfare systems.

Our research is funded by the Economic and Social Research Council (ESRC), the European Commission, local authorities and charities.

The Salford team brings together experts in welfare reform, poverty, homelessness and migration to understand the experiences of socially excluded and marginalised populations. Our work supports the development of policy and practice – and the delivery of a social welfare system that addresses poverty and inequality.



### SANCTIONS, SUPPORT AND SERVICE LEAVERS - SOCIAL SECURITY AND TRANSITIONS FROM MILITARY TO CIVILIAN LIFE

This project, led by the University of Salford, is the UK's first substantive research to understand military veterans' experiences within the social security benefits system.

Research findings have been cited within parliamentary debate and presented at a range of forums – both within and outside of the military arena.

Details of the research were also cited in a high-profile report focusing on poverty in the UK and subsequently published by the United Nations Special Rapporteur on Extreme Poverty and Human Rights.

#### An article in the Guardian newspaper referenced the research findings, stating:

"Ex-service personnel with physical and mental health issues have described how they felt ignored and let down by their country after falling foul of a social security system that failed to offer adequate support when they fell on hard times.

Research has found that many armed forces veterans with complex needs report overwhelmingly negative experiences of universal credit, fit-for-work tests used to gauge eligibility for disability benefits, and benefit sanctions. Veterans found it difficult to navigate what some described as a bewildering social security system."

### SALFORD ANTI-POVERTY TASKFORCE

The Salford Anti-Poverty Taskforce was established in February 2017, alongside the launch of Salford's new antipoverty strategy. The Taskforce is an innovative research and knowledge exchange partnership between the University and Salford City Council.



Chaired by Salford City Mayor, Paul Dennett, it has delivered a range of projects and activities that directly support Salford's anti-poverty strategy and action plan. The Taskforce oversee a programme of projects delivered by both students and academics.

## To date, the Taskforce has delivered two key research reports:

- 'Precarious lives' focusing on poverty in the private rented sector
- 'Hidden young people' looking at Salford's young people not in employment, education or training

The Taskforce is now delivering a third major research piece – exploring experiences of universal credit in Salford.

In addition, the Taskforce oversee the 'A Place To Call Home Commission' which brings together various partners and organisations to work towards addressing homelessness. The partnership provides an opportunity for research that can make a real difference to the people of Salford and have an impact on policy nationwide.



# CRIMINAL JUSTICE RESEARCH

Improving policy, practice and outcomes in criminal justice

Every year, approximately 1.6 million people are formally dealt with by the criminal justice system in England and Wales. More than a quarter of offenders are reconvicted within a year.

Research by the University of Salford aims to find more ways to effectively help people who have offended to turn their lives around, leading to safer communities with fewer victims. The research concentrates on the support needed for vulnerable groups in the system, including children, mothers, minority religious groups and prisoners with autism.

Based in the School of Health and Society, the research is being led by a multi-disciplinary team to address real-world problems. The team use a range of research approaches, including evaluations, large-scale surveys, and in-depth qualitative interviews and case studies. The team's research is funded by the Youth Justice Board, HM Prisons and Probation Service, Ministry of Justice, Big Lottery Fund, probation companies, Barrow Cadbury Trust, Economic and Social Research Council, the Dawes Trust, the Salford Foundation and Action for Children.

### IMPROVING THE EFFECTIVENESS OF SUPPORT FOR CHILDREN LEAVING CUSTODY



Successful and sustainable resettlement of young people after leaving custody is a chronic problem. A team of researchers at the University of Salford are leading a programme of research in this area – their work has raised policy awareness of the issues, directly influenced government policy, driven practice improvements, and informed the standards by which resettlement support for children is judged.

#### The team's most recent project Beyond Youth Custody has introduced a new framework for resettlement support services consisting of:

- A new model for casework, based on guiding and enabling the development of a child's pro-social identity
- A set of five principles for effective practice

The team engage directly with policymakers and practitioners to ensure the findings from their research impact services.

This includes taking on roles in HM Inspectorate of Probation and on the Board responsible for overseeing youth justice in England and Wales. Research findings have now formed the basis for:

- A new cross-departmental national policy approach -"Constructive Resettlement"
- The Youth Custody Service's overall 'theory of change'
- National standards for all youth offending teams and custodial institutions
- New resettlement inspection criteria
- The national curriculum for youth justice staff training to support resettlement

### AUTISM AND THE CRIMINAL JUSTICE SYSTEM

Salford's multidisciplinary research Autism and the Criminal Justice System Centre for Excellence explores how individuals with autism experience the whole journey through the justice system – including police contact, court proceedings, custody and probation. The work documents the experience of adults with autism in order to review professional training – examining the links between autism symptomology and different types of offending, and developing guidance for criminal justice policymakers, decision-makers and practitioners.

The team's latest project explores the experience of living with autism spectrum disorders in secure psychiatric institutions. In order to provide real-world solutions, the team work closely with policy and practice partners including:

- / police forces
- HM Prison and Probation Service
- / crown and magistrates' courts
- / psychiatric hospitals
- / mental health partnerships
- local authorities and the National Autistic Council.



# SUSTAINABILITY AND SOCIAL JUSTICE

Understanding approaches to environmental sustainability that boost quality of life and protect vulnerable people

Researchers from the University of Salford are seeking to understand how urban environmental sustainability can be achieved, whilst reducing social and health inequalities – bringing health benefits and boosting quality of life for vulnerable people.

This includes the ways people travel, how they heat their homes, and the food that they eat.

#### Key research areas include:

- Walking and cycling the impact on active mobility
- / Understanding what it is like to live with fuel poverty and how it could be lessened

- / Approaches to improving housing stock
- Initiatives around food growing, gardening and nature-based care

Projects are funded by the Higher Education Innovation Fund (HEIF, research councils, charities, local authorities and third sector organisations.

### FUEL POVERTY RESEARCH LIBRARY



Salford researchers have been commissioned by the Eaga Charitable Trust to bring together the body of work the Trust has funded over its 25-year life – with a focus on demonstrating the Trust's impact across policy, practice and the wider sector.

A website has been created to showcase over 100 projects across the five themes of people, homes, impacts, approaches and concepts – making the Trust's funded work publicly available for the first time.

Resources include topic guides for policymakers and animations for those new to the field – there is also a brochure that includes a timeline of the Trust's work.

### The project includes two additional areas of research:

- A study looking retrospectively at the ways in which the Trust has influenced the wider field and the careers of its researchers
- A survey of experts to identify key themes for future work by the Trust

The Trust's projects can be viewed at **www.fuelpovertylibrary.info** 

### HEALTHY ACTIVE CITIES

Healthy Active Cities is a research programme looking at sustainable and healthy travel, with a focus on walking and cycling.



The programme is being led by researchers from Salford's School of Health and Society, and the School of Science, Engineering and the Environment – reflecting the interdisciplinary nature of the research.

Key research areas include behaviour change, public health, smart technology and urban infrastructure – providing insight for policymakers and practitioners across a range of sectors, including transport, planning and health.

The team's recent work on a dockless bike share scheme in Greater Manchester, conducted in collaboration with British Cycling, is one of the first studies looking at this new technology.

#### Other published work includes:

- A study of the challenges of promoting adult cycle training
- Studies of mobility and tourism
- Work on transport governance in Greater Manchester



# SOCIAL PRESCRIBING

Social prescribing within personalised care, research, teaching and learning

Social prescribing is a method where health professionals refer people to health and wellbeing activities in their local community – including arts, sports, gardening and volunteering.

This personalised care supports people and allows them to have more choice and control over their own health and wellbeing.

To understand the impact of social prescribing on a diverse range of people, the University of Salford is currently conducting research in collaboration with partner organisations.

Partners include the National Social Prescribing Network, Health Education England, Social Farms and Gardens, Royal Horticultural Society, Salford CVS, and the Green Care Coalition.



### EVALUATION OF THE ROYAL HORTICULTURAL SOCIETY (RHS) WELLBEING GARDEN



Researchers at the University of Salford are investigating the impact on those visiting the first RHS Wellbeing Garden – situated at the new RHS Bridgewater site in Salford.

Across a 12-month period, researchers are recording the group's health and wellbeing following each visit to the Wellbeing Garden. Physical wellbeing measures include heart rate checks, with questionnaires, phone diaries and focus groups providing measures of mental wellbeing. The patient group is also providing feedback and reporting their experiences, both during and after each visit. Interim findings indicate that the Wellbeing Garden is having a beneficial impact on the group.

Findings from the research will help shape a model of working to support the ongoing development from the Wellbeing Garden – as well as provide an evidence base for clinical decision-making in relation to social prescribing, and further evidence for the RHS Wellbeing Garden approach.

### COMMUNITY AND VOLUNTARY SERVICES (CVS) SOCIAL PRESCRIBING MAPPING AND EVALUATION

University of Salford researchers are working with Salford CVS to provide evaluation of the 'Wellbeing Matters: VCSE-led transformation in Salford'.



#### Created and delivered by Salford CVS, the Wellbeing Matters programme aims to:

- Help reduce demand on costly areas of health provision
- Contribute to improving the health and wider wellbeing of Salford residents through using person and communitycentred approaches

An initial part of the research was to map all social prescribing provision across the ten localities of Greater Manchester. Through the research, Salford will provide evidence and learning from the project that can be shared with wider organisations and support best practice.

Interim findings indicate that the Wellbeing Matters programme provides a personalised, holistic approach that considers the wellbeing of the individual, not just their health. These interim findings have already helped local community groups, beneficiaries, GPs and Community Connectors to understand what works well and identify key challenges – as well as provide evidence for Salford CVS to sustain and develop the Wellbeing Matters programme in the future.



# LONG-TERM CONDITIONS

Improving lives of people with long-term conditions

Long-term conditions are increasingly prevalent, both in the UK and globally. Conditions include chronic kidney disease, arthritis, asthma, diabetes, multiple sclerosis, cardiovascular diseases, mental health and cancer.

Research conducted by the University of Salford aims to improve people's ability to manage their long-term conditions and improve their quality of life – as well as reducing demand on health and social services.

The research is being conducted with local and national policymakers, patient groups, charities, clinical services, professional bodies and industry partners.

## Projects are funded by organisations including:

British Renal Society, Kidney Care UK, Kidney Research UK, Technology Strategy Board, Versus Arthritis UK, Public Health England and Salford Clinical Commissioning Group, Economic and Social Research Council (ESRC), and the Royal College of Occupational Therapists.

IMPROVING HEALTH INFORMATION, PEER SUPPORT AND PATIENT ENGAGEMENT IN CHRONIC KIDNEY DISEASE



Providing information effectively can help people with chronic kidney disease (CKD) to manage their own illness. However, providing the right information, at the right time and in the right way, can be challenging.

Researchers at Salford are looking at the effectiveness of providing 'real-time' information to patients digitally – through an information portal and across social media.

Initially established across Greater Manchester, the Kidney Information Network (GMKIN) now also operates across other regions – allowing users of the network to share information.

The research has found that this responsive peer support

model helps people to better manage their condition – it also helps patients to feel less lonely, develop friendships, and feel connected to others living with the condition.

This model has now been used for other long-term conditions including maternity care, musculoskeletal support and breast screening. The model has also won awards including 'Best Tech for Good' at the Big Chip Awards 2018.

### IMPROVING ASSESSMENT, TREATMENT AND MANAGEMENT FOR PEOPLE WITH ARTHRITIS

Arthritis is a common and leading cause of disability, seriously affecting people's daily activities and ability to work.



To improve outcomes, researchers at Salford have developed and validated a group of measures (PROMS) to assess the impact of arthritis from a patient's viewpoint.

The measures have informed studies of a range of treatment interventions, including:

- A trial of compression gloves found that they were no more effective than standard gloves at reducing pain and inflammation for patients with arthritis of the hand. This evidence is now being incorporated into guidelines and local practice.
- A feasibility trial of a vocational rehabilitation intervention – demonstrating that the intervention helped those with arthritis to continue to work.
- An occupational therapy led self-management education programme – to help patients with fibromyalgia to modify their behaviour.
- The development of an online self-management platform (MSK.HUB. com) which was shown to be helpful to patients in managing their arthritis.



# DIGITAL HEALTH AND SOCIETY

Applying digital developments across health and societal contexts

A team of Salford researchers are investigating how digital methods and technology can be used to improve outcomes across health or society.

#### Themes of the research include:

- developing digital skills training for the healthcare workforce
- exploring the use of apps and social media to stimulate patient engagement and improve self-care
- understanding digital media uses in leisure contexts – for example, digital kiosks within museums.

The team includes colleagues from across the School of Health and Society, NHS organisations, and from across the wider healthcare and charitable sector. Funding for the research includes National Institute for Health Research (NIHR), Health Education England and Salford Clinical Commissioning Group.



### USING APPS TO SUPPORT SELF-MANAGEMENT IN LONG-TERM CONDITIONS - MULTIPLE SCLEROSIS



There are currently in the region of 410 people living with Multiple sclerosis (MS) in Salford, with the MS service growing at a rate of 10% per annum, and patient needs outstripping capacity and resources.

Focus groups with Salford MS patients and clinicians have established that there is an overwhelming need for digital tools to help in the selfmanagement of the condition.

In response, the University of Salford is deploying and evaluating an app to support the management of long-term conditions, using MS as its initial focus. The research uses the LINCUS health self-management app and is being delivered in partnership with NHS, charitable and industry organisations.

The research team will customise the app following consultation with patients and their carers, clinical teams and technology developers. The app will then be trialled with a group of people in Salford living with MS, and in consultation with the health professionals they interact with.

Evaluation data will provide insight into the apps ability to meet the self-management needs of MS patients in Salford and to improve clinical service delivery.

### DIGITAL WEARABLES TO UNDERSTAND SELF-HARM IN YOUNG PEOPLE

Self-harm is a growing public health issue for young people. Around 10% of adolescents report to have self-harmed, and approximately 20% of those who self-harm progress to do this on a severe and repeated basis – many of these young people require support through mental health inpatient settings in order to maintain their safety. Existing research studies have helped identify the factors across a young person's life that can put them at risk of self-harm, however little research has been undertaken to understand the interaction between external triggers and the thoughts, feelings and urges that the young people report to experience in the moments before, during and after they self-harm.

There is currently a lack of tools that capture self-reported data from young people in real-time, when the young people are in a hospital setting. To answer this, Salford researchers are developing a system for using Ecological Momentary Assessment (EMA) to capture accurate data 'in the moment'.

The research, developed in collaboration with young people, will increase our understanding of the factors that drive and maintain the urge to self-harm. Findings will then be tested in participatory workshops and a larger study, prior to clinical trial.



# GLOBAL HEALTH

### Improving lives across the world

Global health research conducted by the University of Salford is providing education, training and specialist services in countries such as Uganda and Cambodia.

Through the research, the University aims to improve basic care facilities – and improve the lives of those who use them.

Emphasis is placed on developing and using lowcost solutions, providing training to establish core local teams, and developing guidance to maintain a sustainable service.

Partnerships have been developed with charities including Knowledge 4 Change and SicKids, NHS Trusts, non-governmental organisations, and other academic institutions including the University of Jordan, University College London (UCL) and the University of Southampton. The research is funded by partners including Engineering and Physical Sciences Research Council, National Institute for Health Research Global Challenges Research Fund, THET, Health Education England, and the Department for International Development Small Charities Fund.



### COMMUNITY-BASED CERVICAL CANCER PREVENTION IN FORT PORTAL, UGANDA



### In Uganda, mortality from cervical cancer is high, attendance at screenings is low, and there is limited expertise to provide services.

Knowledge 4 Change is a charity based within the University of Salford. The charity aims to improve health systems in Uganda, with an emphasis on maternal and reproductive health.

In 2017, one of the first cervical screening see-and-treat services across Uganda was created at the Kagote Health Centre – a midwifery-led health facility in the town of Fort Portal. The service provides free of charge screening and treatment of pre-cancerous lesions, for all women aged between 25 and 60 years of age.

Staff at the Kagote Health Centre have received training from a specialist team at Wakefield Hospital, ensuring that there is a quality core team of Ugandan clinicians – along with ongoing training to build the expertise and confidence of the team.

The project also provides a way of reaching women considered to be more vulnerable to cervical cancer, including women living with HIV.



### IMPROVING THE LIVES OF VULNERABLE CHILDREN IN CAMBODIA

Since 2015, a team from Salford has been working collaboratively with 'M'Lop Tapang', a non-governmental organisation in South West Cambodia.

M'Lop Tapang provides health, social care, education, vocational training and child protective services to children living on streets and beaches in Sihanoukville, Cambodia.



### The project has delivered the following results:

- 5,000 children and 2,500 families now have access to first aid trained health and social care professionals in South West Cambodia
- Learning and education areas have been established
- The first baby massage course in Cambodia has been taught by a senior children's nurse from Manchester
- A community paediatrician has visited Cambodia to undertake child development clinics
- A children's asthma guideline has been introduced for the first time, with significant results

- Adult hypertension and Type 2 diabetes mellitus guidelines have been introduced
- Management plans have been put into place for children with chronic conditions or palliative care needs
- Multi-disciplinary child development teams have conducted reviews of disabled children
- Acute paediatric clinics have been delivered, including providing education training



# AGEING AND DEMENTIA

Promoting research, engagement, teaching and learning for ageing and dementia

Research on ageing and dementia at the University of Salford is focused within a Hub established as a Centre of Excellence for research, engagement, teaching and learning.

The Hub works with partner organisations to help people to 'start well, live well, and age well'.

### There are four key areas of research and work:

- Ageing together: understanding and enabling positive and inclusive experiences of neighbourhood and community living
- Ageing well in places of care: supporting people to positively experience their lives in care environments

 Living positively with dementia: research and evaluation, and developing interventions to enable people to live positively with dementia

 Technology: provision of technology to support older people to live for longer in their own homes



### GREATER MANCHESTER HEALTH AND SOCIAL CARE (GMHSC) PARTNERSHIP TEACHING CARE HOMES PROJECT

The GMHSC Partnership Teaching Care Homes Project helps develop innovative approaches to enable people to live more positively in care home settings.

There are five key themes: Research and Innovation; Workforce Development; Social and Community Cohesion; Digital Solutions; Sustainability.

Activities help combat sedentary behaviour by increasing opportunities for residents to move more within daily care routines. In addition, digital literacy training for residents and care staff also helps people to live more positively. The research was designed in consultation with residents, family, staff, managers, commissioners and inspectors. Research highlights are being captured using an **#ElderWisdom** bench initiative, which invites people to sit on a garden bench with others and pass on a pearl of wisdom – the 'pearls' are captured in quotes and shared across social media.

**#ElderWisdom** encourages conversations about improving care and quality of life for residents in care homes. Through sharing 'pearls of wisdom', the project also combats and raises awareness of ageism, and highlights the expertise residents can share with others in the community.

### LIVING POSITIVELY WITH DEMENTIA

An interdisciplinary team from the University of Salford are researching and undertaking interventions to help people with dementia to live positively.



The research has been designed with the input of a panel of people living with dementia, and their partners – all regular visitors at the University's Dementia Hub.

Some of the interventions are being delivered directly from the Hub – with a range of activities designed to be beneficial to the wellbeing of people living with dementia, including reducing isolation, building confidence and supporting people to develop friendships. Activities centre around the café and garden which is maintained by visitors to the Hub. There is also a weekly programme of activities that local people living with dementia can access with their partners, including a music group which has been co-created by musicians from Manchester's Hallé Orchestra.

Visitors to the Hub are involved in the design of all activities – ensuring that they are most beneficial to the needs of people living with dementia, and their partners and carers.



# BREAST CANCER IMAGING

Improving breast cancer detection rates through research

The Diagnostic Imaging Research Programme aims to improve the diagnosis of breast cancer, through improvements to image quality and patient experience.

Breast cancer diagnosis is predominantly undertaken through screening programmes using digital mammography. Researchers at the University of Salford are now working to evaluate and improve digital mammography, using both laboratory and clinically-based projects.

Based within Salford's School of Health and Society, the research is being undertaken by academics, students and clinical collaborators – together, they will look at breast cancer imaging and dose optimisation.



### MAMMOGRAPHY PRACTITIONER COMPRESSION FORCE VARIABILITY



During mammography, a patient's breast must be adequately compressed as the degree of compression influences image quality, procedural pain and radiation risk.

The University of Salford was the first to report an issue of practitioner variability, with regards to the application of compression force – with varying outcomes for patients. The research has found that better compression will result in greater cancer detection rates, a safer procedure, and less women failing to attend for subsequent screening visits. Based on the University's research findings, technical changes to mammography examinations have now been implemented internationally – in some countries this has resulted in national policy change.

A subsequent study in Norway has supported Salford's findings; compression force variability was tested across 18,000 women in Norway, and substantial variation reported between screening centres and individual radiographers.

### MAMMOGRAPHY BLUR DETECTION

A team from Salford are researching image blurring which can occur during mammography. Although difficult to detect, such blurring can mask early breast cancers.



Blurring on digital mammography images is common and results in a patient either being required to re-attend for further imaging – causing increased patient anxiety – or it can lead to a failure to diagnose a breast cancer.

The Salford team are working with an NHS site and software developers to evaluate a method of automatically detecting blurring on an image – this will allow the mammogram to be repeated at the time of the examination, if required, and prevent patient recall or potential missed cancer cases. Salford is the first organisation to conduct research in this area, and the findings have now led to a global increase in awareness regarding image blurring.

It is hoped that through this research breakthrough, we will see an increase in global breast cancer detection rates, and a reduction in technical recalls.



# HUMAN MOVEMENT TECHNOLOGIES

Developing technology to assist human movement and using technology to understand physical activity in the real world

# A team of researchers from the University of Salford are investigating Human Movement Technologies

#### The research covers two main areas:

- Technologies for assisting human movement

   including prosthetics, orthotics, and
   functional electrical stimulation systems
- Walking aids using body-worn devices to help understand the benefits of physical activity on health

The research spans both the School of Health and Society and the School of Science, Engineering and the Environment – bringing together engineering, psychology, physiotherapy, occupational therapy, public health, prosthetics and orthotics. Funding is provided by organisations including National Institute for Health Research (NIHR), Engineering and Physical Science Research Council (EPSRC), and various charities.



### RESTORING UPPER LIMB FUNCTION



Loss of upper limb function, either through amputation or brain injury such as a stroke, can have a devastating impact on patients.

A team of Salford researchers are currently developing new technologies to restore upper limb function, together with novel evaluation methods.

There are two main areas to the research:

## **1.** Electrical stimulation to restore functional movement to weak or paralysed limbs

The team has developed a system that uses small electrical pulses to create muscle contractions, coordinated to support upper limb functional movements – such as picking up a cup and drinking from it. The system supports intensive upper limb practice during therapy.

## **2.** Upper limb prostheses that are fit for purpose in developing countries

The research team is working with partners in the UK, Jordan and Uganda to design new upper limb prostheses which are fit-forpurpose in low income developing countries. To fully understand the benefits for amputees, the team are now building on their award-winning research into real-world monitoring of assistive devices to provide local training and manufacture.

### INVESTIGATING THE EFFECTS OF CONTINUAL SITTING ON THE HEALTH OF OFFICE WORKERS

Office-based workers spend a large proportion of their working hours sitting, in addition to spending long periods sedentary during leisure time.



As high levels of sitting are known to be associated with a range of health-related outcomes including obesity, cardiovascular disease, Type 2 diabetes, some cancers and premature death – office workers are in an 'at risk' group who should be targeted for lifestyle interventions.

A team from the University of Salford are leading research in this area, using The Smart Work and Life Behaviour Change Intervention. The intervention uses heightadjustable workstations to test the amount of time that office workers spend sitting, both inside and outside of working hours. In total, 797 participants have taken part across Leicestershire, Manchester and Liverpool:

**One-third** of the group received the intervention and height-adjustable workstation

**One-third** received only the intervention without the adjustable workstation

### The final third acted as a comparison group

Activity was measured using an accelerometer-based device worn on participants' bodies for the duration of the research.

Further baseline measures have been taken from the group and will continue to be recorded at three months, one year and two-year intervals following the research.



# EGUITY, HEALTH AND WELL BEING

Improving access to health across the life course

A team of Salford researchers are investigating contemporary aspects of health and wellbeing, with a focus on inequalities in health and issues affecting the working-age population.

The interdisciplinary research team brings together biopsychosocial expertise, public health scientists, physiotherapists, psychologists, sociologists, exercise and health scientists.

Research areas include chronic illness, behaviour change, physical activity, drug and alcohol misuse – with a focus on specific settings such as workplaces, schools and communities. Research methods range from large trials to small-scale evaluation work. The work is funded by the National Institute for Health Research (NIHR), Natural Environment Research Council (NERC), the Medical Research Council (MRC), the European Centre for the Monitoring of Drugs and Drug Addiction and the Greater Manchester Health and Social Care Partnership.



### COMMUNITIES IN CHARGE OF ALCOHOL - A HEALTH CHAMPION APPROACH



Studies have reported that Greater Manchester experiences higher rates of hospital admissions due to excessive drinking when compared with admission rates across the rest of the UK. To tackle this, Salford researchers are involved in an innovative scheme to train local volunteers as 'alcohol health champions'.

The project is a partnership between the University of Salford, Greater Manchester Health and Social Care Partnership, the Royal Society for Public Health - and all ten Greater Manchester Local Authorities.

Volunteers take part in a twoday training course where they are given the skills to discuss alcohol and health with friends, neighbours and colleagues. The volunteers have also been trained to become involved in local licensing decisions – helping to reduce the oversupply of alcohol in their local area, supported by a local licencing officer.

The commitment and energy of the volunteers has led to some life-changing conversations within their communities – some have won awards for their work, and some volunteers have used the experience gained to move into employment.

The research is funded by NIHR and findings will be available in 2022.

### HELPING PEOPLE TO GIVE UP E-CIGARETTES

As part of comprehensive local action on smoking, the University of Salford has recently partnered with Salford City Council, and a local housing association, to create the Salford 'Swap to Stop' project.



The project encouraged people to try e-cigarettes to help them give up smoking – free e-cigarette starter-packs were distributed, as well as behaviour support to quit smoking. Swap to Stop targeted residents of social housing, and privately rented tenants, in some of the most deprived areas in Salford.

Demand for the service was high, with over 1,000 smokers recruited in ten weeks. Participants were asked to set a target date to quit, and subsequent evaluation found that 20% did quit smoking tobacco by the date they had set, although as expected, they were still using e-cigarettes. Further research is underway to determine success rates of participants giving up nicotine altogether within the following 12 months. This phase of research will assess the numbers of participants who have:

- Given up cigarettes and stopped using the e-cigarette
- / Have reverted to smoking
- Continue to use their e-cigarettes

Wider project partners include a stop smoking service, pharmacy services and a registered vape shop.



# CENTRE FOR DOCTORAL TRAINING IN PROSTHETICS AND ORTHOTICS

Ambitious interdisciplinary PhD training blended with practical experiences that enhance employability in prosthetics and orthotics

The Centre for Doctoral Training (CDT) in Prosthetics and Orthotics combines a world-leading set of research organisations, with students from a range of backgrounds, to address important global health challenges in the prosthetic, orthotic and wider healthcare technology sector.

The CDT is funded by the Engineering and Physical Sciences Research Council (EPSRC) and combines expertise from the University of Salford, Imperial College London, the University of Strathclyde and the University of Southampton - with more than 25 global industry partners and national facilities.



The CDT aims to provide doctoral training to create a new generation of highly skilled researchers who can deliver the technology and service innovations required to meet the needs and aspirations of prosthetic and orthotic users. Students will have backgrounds from engineering, physics, medical or clinical science. Applicants with clinical qualifications either related to prosthetic and orthotic use, or a patient group who uses prosthetic and orthotic devices, will also be considered.

All students commence their studies at the University of Salford and after six months they will complete their four-year PhD programme at one of either the University of Salford, Imperial College London, University of Strathclyde or the University of Southampton. Throughout their doctoral training, students will be immersed in authentic real-world academic, industry and clinical experiences, working directly with users and industry from the outset.

### THE CDT OFFERS:



#### / Competitive fully funded studentships

- Ambitious interdisciplinary PhD projects, blending high-quality training with practical experiences that enhance employability
- Training in research skills relevant to prosthetics, orthotics and the wider healthcare technology industry
- Integrated training in engineering, physical, medical and health sciences – as well as business, entrepreneurial and other professional skills
- Opportunities to work on research projects with industry and users

### THE CDT COMMENCED IN OCTOBER 2019. STUDENTS BASED AT SALFORD INCLUDE:

### Victoria Patricks

Victoria Patricks has come to study at Salford from Nigeria. Her research will be based on monitoring the usage of prosthetics and orthotics - looking at the current obstacles to prosthesis acceptance in Low and Middle Income Country (LMIC) populations. She believes that the research results will improve the understanding of LMIC amputees and help change the view of prosthetic and orthotic manufacturers - in order to produce acceptable prosthetic and orthotics for those living in LMIC.

### Sisary Kheng

Sisary has obtained a wide range of qualifications (from diploma to master's) in Prosthetics, Orthotics and Rehabilitation from across the world. She has travelled and visited more than 20 countries for her professional interaction in the field of prosthetic and orthotic for both education and clinical service. Areas of special interest to Sisary are education, inclusive development, and research.

### Zain Shahid

Zain completed an undergraduate degree in Mechatronic Engineering with an industrial placement year - creating a bespoke final-year project involving an upper limb rehabilitation system for children with cerebral palsy. Zain's research interests mainly lie in rehabilitation and

low-cost prosthetics and orthotics that can be used in developing countries.

### Jennifer Andrews

Jennifer is a Podiatry graduate from the University of Salford. Jennifer's research interests are based around the characteristics of the soft tissue on the foot and how these respond to pressure and shear. She is passionate about this as during her time as an undergraduate she spent a lot of time caring for patients with chronic wounds on their feet.





# KNEE, ANKLE AND FOOT

Solutions for injuries and diseases affecting the knees, ankles and feet

The University of Salford is leading research to understand foot, ankle and knee assistive technologies – along with the impact of injury and disease on biomechanical and clinical outcomes for patients.

Based within Salford's School of Health and Society, the research is closely linked to the Engineering and Physical Science Research Council's (EPSRC) Centre for Doctoral Training (CDT) for Prosthetics and Orthotics.

The research team brings together multiple health disciplines including podiatry, rehabilitation, orthotics and physiotherapy – alongside engineering, technology, and sports science professionals. Funding is provided by industry and charity partners, along with European funding. The wider research team includes many UK and international Universities.



### UNDERSTANDING THE CLINICAL EFFECTS OF ORTHOSES AND PHYSICAL THERAPY



Much orthotic research focuses on improving knee pain in people with knee osteoarthritis (and associated ACL injuries) – as well as reducing pressure under the feet of those with diabetes and at risk of foot ulcers – and investigating the clinical efficacy of orthoses in children with painful feet.

The University of Salford has been at the forefront of foot and ankle biomechanics research for the last two decades. The University previously revealed how the different foot joints interact to produce the variability in foot biomechanics that clinicians see in their practice. The research team is also exploring the structural and functional characteristics of people who experience repeated ankle sprains. Current research – in partnership with Universities in Manchester, Brighton and York – looks at how orthoses affect foot and knee biomechanics. The research investigates the experience of patients who have used orthoses – and the clinical impact on pain and physical activity.

### INDUSTRY LINKED FOOT AND KNEE RESEARCH

The University of Salford is now in its tenth year as a strategic partner of Scholl footcare, as well as working with a range of global companies including Clark's footwear, and Ossur from the prosthetic and orthotic sector.



The University's research has investigated the formation of foot skin blisters, callus and foot soft tissues – this research is currently being progressed through an industry-funded PhD studentship. Salford researchers have also investigated the effects of stair climbing and standing for long periods – and how footwear design can impact on posture and comfort. Current research, in partnership with Clark's footwear, will investigate foot shape and growth patterns. This research closely links with Salford's fiveyear 'Great Foundations' research programme – investigating how babies' feet develop when learning how to walk.

The University's company 'Salford Insole' has also provided a product that has recently been evaluated in a large randomised clinical trial for knee osteoarthritis, as well as being used commercially by many healthcare trusts.