



Welcome to the October issue of the Research Centre for Health (ReaCH) newsletter highlighting the latest research from the School of Health and Life Sciences at Glasgow Caledonian University (GCU).

Within this month's newsletter we reflect on the success of the Glasgow Science Festival, where we were able to contribute both to in-person and online events. Our roundup of impactful contributions to public debate and engagement regards health continue with, for example, Carol Emslie's article in the Guardian and Dawn Skelton's article in the Conversation. The impact of COVID-19 upon mental health is featured, and both the full paper and the Common Good podcast are highly recommended!

It was great to see successes across so many of the research themes included in this month's newsletter, from lab-bench to sports-bench for example, and from people at different parts of their research career, with doctoral researchers, early career researchers, established principal investigators, research leaders and professors all represented.

In looking to the future there is an interesting (and free) seminar on Open Science - aimed at early career researchers but I suspect all interested researchers welcomed - as well as a great Rehabilitation conference (modest registration fee payable). Our seminar series (20th October 12-1) is also a must for the diary - you get 3 presentations in just 1 hour!!

Find out more about our research on our website www.gcu.ac.uk/reach or follow us on twitter



Professor Andrea Nelson, Pro Vice-Chancellor Research and Director of ReaCH



Glasgow Science Festival

The Glasgow Science Festival (GSF) was live at the Glasgow Botanic Gardens last month exploring themes such as COP26, gardening, sustainability and health & wellbeing. The GSF is one of the largest science festivals in the UK and aims to showcase the outstanding contribution Glasgow and Glasgow-based researchers make to the worlds of science, technology, engineering, arts, maths and social science. This year's GSF was titled 'Glasgow Connects' and celebrated the city's role in the upcoming COP26 (26th UN Climate Change Conference of the Parties) summit which will see world leaders arrive in Glasgow to hopefully agree plans to tackle the climate emergency.

There were in-person and online activities with sessions provided by our research groups, including:

- **How dough they do it?**, Safeguarding Health through Infection Prevention Research Group (SHIP)
- **Medicine Maker**, Dr Yvonne Dempsie, Molecular Mechanisms of long-term condition Research Group
- **Pain, Intermittent Claudication and TENS**, Dr Ukay Abaraogu, Ageing Well Research Group
- **Targeting Drug Resistance in Acute Myeloid Leukaemia**, Dr Mark Williams, Molecular Mechanisms of long-term condition Research Group

Find out more via the SHIP blog and view the videos via the link below.

[Read more](#)

Research reveals impact of first lockdown on mental health



Researchers at GCU have published one of the first studies revealing the full impact of COVID-19 on mental health on different groups of people living in the UK. The COVID-19 Psychological Wellbeing Study was conducted with colleagues from Queen's University Belfast and began on March 23, 2020 - the day the UK government announced the first national lockdown. Lead author Dr Kerri McPherson and co-author Dr Kareena McAloney-Kocaman of the Child and Adolescent Health Research Group found that the COVID-19 pandemic impacted on people's mental health symptoms in different ways. Two thirds showed low and stable self-reported mental health symptoms which reflects considerable resilience to the unprecedented demands of lockdown. However, at any point in time, around one fifth of the sample had clinically significant anxiety and depression symptoms and one sixth had elevated COVID-19 related traumatic stress symptoms suggesting difficulties adjusting to the pandemic.

[Read more](#)

Coaches, parents and peers play key role in motivating athletes



Research led by GCU sport and exercise psychologist Dr Bryan McCann found that coaches, parents and peers all have a huge influence on talented football players' motivation in a number of ways. The study 'A Retrospective Investigation of the Perceived Influence of Coaches, Parents and Peers on Talented Players' Motivation during Development' has been published in the Journal of Applied Sport Psychology. Researchers interviewed four talented footballers with an average age of 18 and 1.4 years of footballing experience, and four of their parents, to investigate their perceptions of coach, parents and peers' influence on motivation across different developmental stages. The research will give anyone working in sport including coaches, sport development officers, and sport psychologists and nutritionists, a real insight into the range of motivational influences that coaches, parents and peers can have on athletes to better develop and maintain motivation.

[Read more](#)



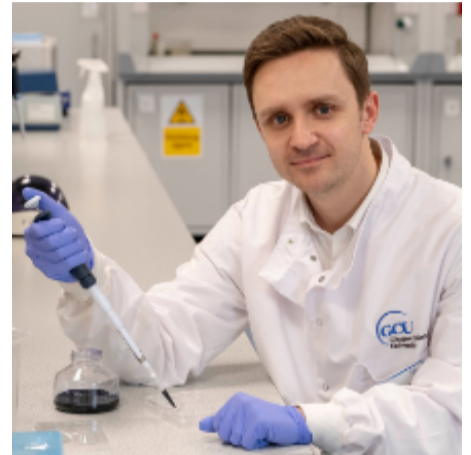
Researchers helping people with leg pain

Five researchers from GCU have launched an 18-month project investigating new ways to help people with leg pain known as intermittent claudication. Intermittent claudication is the medical term for a painful ache in the legs of people with peripheral arterial disease (PAD) that usually disappears after a few minutes rest. People with intermittent claudication are 40-45% less physically active, however, supervised exercise training is recommended for the condition by uptake is extremely low. Now researchers are looking to find new ways to change that behaviour by gathering evidence from around the world about what works and what doesn't as part of the Physical acTivity in people with InterMittent clAudication (OPTIMA) project. Principal Investigator in the National Institute for Health Research (NIHR)-funded study is GCU Physiotherapy Research Fellow Dr Ukachukwu Abaraogu of the Ageing Well Research Group, support by Co-Investigators Professor Dawn Skelton, Dr Joanna McParland, Dr Philippa Dall and Dr Chris Seenan.

[Read more](#)

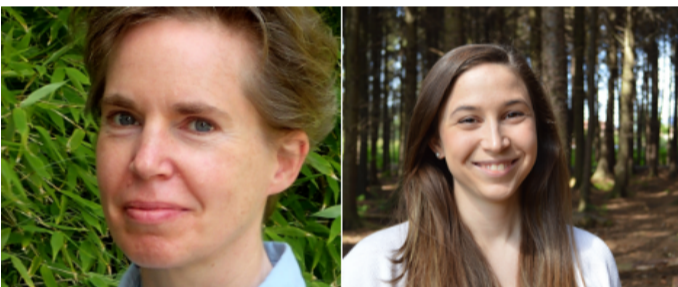
Blood cancer expert puts GCU on the world map for cancer research

Dr Mark Williams of the Molecular Mechanisms of long-terms condition Research Group has put GCU on the world map for cancer research and is fast becoming a recognised name in the field of blood cancer and therapy resistance. He was invited to showcase his lab's research at two major international events - Pharmacology 2021, the British Pharmacology Society 90th Anniversary Conference, and the annual Macrophage-directed Therapies Summit. Cell and Molecular Biology Lecturer Dr Williams reputation has also led him to be invited to be guest editor for the highly-respected British Journal of Pharmacology and the Frontiers in Pharmacology Journals. Research led by Dr Williams, and co-authored by PhD student Katie Miari, investigating new targeted treatments for Acute Myeloid Leukaemia (AML) reached a significant milestone earlier this year when their first peer-reviewed paper was published in the Frontiers in Cell and Developmental Biology journal. The review paper 'Macrophages in Acute Myeloid Leukaemia: Significant Players in Therapy Resistance and Patient Outcomes' highlighted the importance of immune cells called macrophages in driving resistance to therapy.



[Read more](#)

Stroke research showcased on international stage



GCU Professor in Neurological Rehabilitation Frederike van Wijck and PhD researcher Dora Regoczi, Living with Stroke and other long-term conditions Research Group have been showcasing their stroke research on an international stage at the European Forum for Research in Rehabilitation (EFRR) 16th Congress. 'How everyone can make a difference' was the focus of the virtual conference aimed at encouraging delegates to take home a number of practical, theory-and evidence-based action points to promote physical activity in people with stroke and other neurological conditions. Professor van Wijck and Dora hosted a workshop entitled 'Enhancing physical activity in people with stroke and other neurological conditions'.

[Read more](#)

INHSU conference

Professor Sharon Hutchinson, Sexual Health and Blood Borne Viruses Research Group was invited to speak at the International Network on Health and Hepatitis in Substance Users (INHSU) annual conference which took place last week. The presentation was on Successful Real-World Examples of HCV Elimination Among People Who Inject Drugs. There were also talks from David Whiteley, Dr Kirsten Trayner, Dr Alan Yeung, Dr Norah Palmateer and Dr Scott McDonald.

[Read more](#)

Best clinical abstract award



Professor Suzanne Hagen, Ageing Well Research Group presented the paper 'Pelvic floor dysfunction 26 years after childbirth: a longitudinal study' at the International Continence Society conference last week. The conference abstract reporting the first findings of the ProLong20+ study was awarded the best clinical abstract by the conference organisers.

[Read more](#)

Generation X are heavy, risk drinkers. Will anything ever persuade us to stop?

Professor Carol Emslie, Substance Use Research Group, shares her insight on generational alcohol consumption in an article in The Guardian.

[Read more](#)

Standing on one leg is a good sign of good health



Professor Dawn Skelton, Ageing Well Research Group, discusses the health benefits and indicators of standing on one leg in an article in The Conversation UK.

[Read more](#)

Could pigs really be superheroes?

Professor Linda Scobie, Molecular Mechanisms of long-term conditions Research Group, showcased her research as part of Explorathon 2021 last month.

[Read more](#)

Common Good Podcast

In the latest episode, Dr Kareena McAloney-Kocaman, Child and Adolescent Research Group joins the Common Good Podcast to talk about her research into how lockdown has impacted on mental health across the UK. Dr McAloney-Kocaman discusses how the first lockdown of spring 2020 affected the public's mental health in different ways and how their findings can be used in a practical context. She also talks about her background in academia and her previous research projects.

[Read more](#)

Child and Adolescent Health

Emily Whyte has joined GCU, having won the inaugural Child and Adolescent Health Research Group PhD studentship. Her studentship is titled "Physical Activity as a Vehicle for Good Mental Health and Wellbeing Amongst Care Experienced Young People" and will be supervised by Dr Bryan McCann, Dr Paul McCarthy, and Dr Sharon Jackson.

[Read more](#)



Forthcoming events

Please see details below and links to register for forthcoming seminar and events.

ReaCH seminar series: Ageing Well Research Group

The ReaCH seminar series continue with the Ageing Well Research Group on Wednesday 20th October, 12pm-1pm. The seminar will highlight research related to COVID-19 and the impacts on patients, staff and policy. Presentations will include:

- Physical Activity, the Immune System, Vaccination and Risk of Community-Acquired Infectious Disease. Dr Ukay Abaragou
- The impact of COVID-19 on nurses working in respiratory clinical areas. Dr Nicola Roberts
- The cost of deconditioning due to COVID-19 Social Restrictions, Modelling on falls. Professor Dawn Skelton

For a full list of the seminar series dates and further details, please visit the support for staff section on the ReaCH website. Videos of previous seminars can also be viewed via this section.

[Register](#)

CHAMP-UK trial seminar

Dr Stephanie Kearney, Vision Research Group, will discuss the risk factors for myopia and the CHAMP-UK trial at a seminar on Thursday 25th November at 12pm. Childhood Atropine for Myopia Progression (CHAMP-UK) is the first trial in the UK to explore the effectiveness and tolerability of atropine eye drops in slowing myopia progression in children. Myopia (short sightedness) occurs in childhood and continues to progress until late teenage years or early adulthood. It increases the risk of sight threatening pathologies including retinal detachment in adulthood. The prevalence of myopia in the UK is increasing too quickly to simply be accounted for by genetics and myopia is now deemed a global health concern.

[Register](#)

ECR network seminar series

Professor Simon Hunter (Child and Adolescent Research Group) and Rebecca Johnson and Rachel Taylor (GlasgowTea) will provide a session to discuss the importance of Open Science on Tuesday 16th November, 10am-11am. Glasgow Tea is part of the Reproducibility initiative, which helps early career researchers build a local community of ECRs interested in open and reproducible research.

[Register](#)

Rehab 2021: Living and ageing with long term conditions

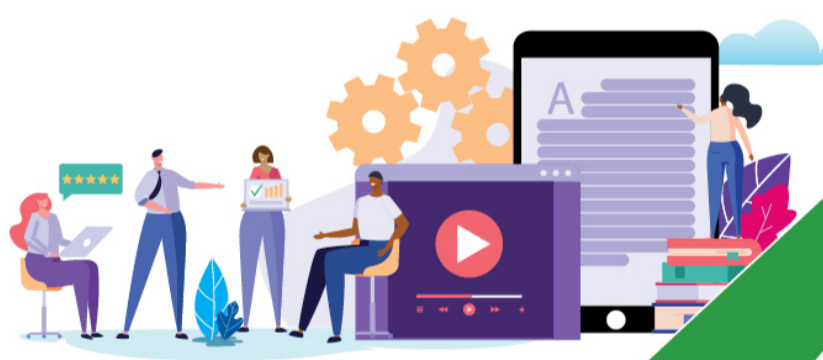
Professor Frederike van Wijck, Living with Stroke and other long-term conditions Research Group is on the Organising Committee hosting a joint conference of the Society for Research in Rehabilitation, the British Society of Rehabilitation Medicine and the Association of Chartered Physiotherapists for People with Learning Disabilities, which will take place on 9th and 10th November. Professor Dawn Skelton has been invited as one of the keynote speakers.

[Register](#)

Coffee Break @ SULSA

Scottish Universities Life Sciences Alliance (SULSA) are delighted to launch their International Coffee Break @ SULSA which is a new initiative to help build international collaborations between Scotland and Europe (initially France and Germany) via short, informal coffee breaks facilitated by SULSA. This pilot scheme is using climate change as an umbrella for available topics of discussion, and is open to all disciplines (not just Life Sciences).

[Register](#)



Publications

The latest publications from GCU staff are listed below and to view the article, please click on the title.

'A Social-Ecological Approach to Understanding Adolescent Sexting Behaviour' in Archives of Sexual Behavior. Co-authored by Professor Simon Hunter, Stefania Pagani, Sofia Pimenta.

'Are images of seized knives an effective crime deterrent? A comparative thematic analysis of young people's views within the Scottish context' in PsyArXiv. Co-authored by Professor Simon Hunter.

'Multiple myeloma: therapeutic delivery of antibodies and aptamers' in Therapeutic Delivery. Co-authored by Dr Mark Williams.

'Effect of Vaccination on Transmission of SARS-CoV-2' in The New England Journal of Medicine. Co-authored Professor Sharon Hutchinson and Professor David Goldberg.

'Physical Function and Health-Related Quality of Life in Older Adults with or at Risk of a Mobility Disability Post-discharges: 8-month follow-up of a randomized controlled trial' in the Journal of Aging and Physical Activity. Co-authored by Professor Dawn Skelton.

'Population-level estimates of hepatitis C reinfection post scale-up of direct-acting anti-virals among people who inject drugs' in the Journal of Hepatology. Co-authored by Dr Alan Yeung, Dr Norah Palmateer, Dr Scott McDonald, Shanley Smith, Professor David Goldberg and Professor Sharon Hutchinson.

'Psychomotor learning theory informing the design and evaluation of an interactive augmented reality hand hygiene training app for healthcare workers' in Education and Information Technologies. Co-authored by Lucyna Gozdzielewska, Dr Kareena McAloney-Kocaman, Professor Lesley Price.

'Risk of hospital admission with covid-19 among teachers compared with healthcare workers and other adults of work age in Scotland, March 2020 to July 2021: population based case-control study' in The BMJ. Co-authored Professor Sharon Hutchinson.

For more information and the latest articles, please visit the ReaCH website.

[Read more](#)

If you have any news stories, please contact Janice Burns, Senior Communications Officer
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