

Scottish Dementia Research Consortium

Annual Report 2023/24



**Alzheimer
Scotland**



Scottish Dementia
Research Consortium

Welcome from Chair

Professor Terry Quinn

There is an ancient saying that roughly translates as 'may you live in interesting times'. There has long been debate about whether this phrase is a blessing or actually a curse. Well, times have certainly been 'interesting' for Scottish researchers working in the dementia and brain health space, and the last year has seen many opportunities and equally many challenges.

If we start with the positives, more than at any other time I can remember, dementia and brain health have featured prominently in politics, policy and the lay press. Much of this increased visibility has been driven by high profile announcements around new tests and treatments for dementia. Opinions are divided on the potential value of these new interventions, and both the proponents and the detractors offer passionate and compelling arguments. What I think is not controversial is that we need robust research to help us develop and implement any new technologies in dementia, and that is what the Scottish Dementia Research Consortium has always strived to support.

In terms of visibility, Scottish modesty and self-effacement can mean that our research does not always get the attention and praise it deserves. So, it is always nice when someone else shines a light on the great things that are happening in dementia and brain health in Scotland. Earlier this year Scientific America did just that, with a special themed issue on dementia that described Scotland as an exemplar of a collaborative, forward thinking, and person-centred nation. No disagreement from me.

As further evidence of the international standing of Scottish dementia research, when the Global Alzheimer's Platform (GAP) were looking for a partner to help them share their biomarker data at scale - they came to Scotland. Using our networks, experience and enthusiastic teams, we were able to successfully run a national data research initiative that is already producing exciting results. The CEO of GAP commented that Scotland was the 'Goldilocks country' not so big that they are inefficient, not so small that they can't have meaningful impact, but just right.

Of course, not everything in Scotland is perfect and in these 'interesting' times dementia research continues to face very real challenges. Universities across the country find themselves in difficult financial positions and many in our community, especially those earlier in their career, will be worried about their future employment. At the same time, the NHS in Scotland is increasingly stretched and is struggling to deliver core services, let alone create structures to support new diagnostics and treatments. Our Consortium is trying to help in as many ways as possible, we have run training webinars, offered seed funding, supported grant bids and many other activities that you will read about in this report. If we can do more, then I want to do more, and I am always happy to hear your ideas about how we can help you.

Personally, I believe that when faced with challenges, and opportunities, the best approach is to work together. The Scottish Dementia Research Consortium is here to support that collaboration, community and commitment that exemplifies Scotland. Do I predict 'interesting' times in 2025? Well, I certainly think we will have no shortage of things to write about in next year's report.

Contents

Introduction	3
About the SDRC	4
SDRC Executive Committee Members	5
SDRC dementia research themes	7
Diagnosis	9
Fundamental Science	11
Informatics & Technology	13
Living with Dementia	15
Prevention	17
Mapping Scotland's key contribution to global dementia and brain health research: 2023	19
Funding levels and sources	20
Published Papers	21
Researchers based in Scotland	22
International Collaborations	22
Early Career Researcher Spotlight	23
Brain Health ARC	25
Alzheimer Scotland Student Research Programme	26
Brain Health Scotland	27
NHS Research Scotland	28
ENRICH Scotland	29
SDRC Conference 2023	31
Join the SDRC	32

Figures

1. Grant award by theme in 2023	20
2. Grant award by year	20
3. Grant income by year by theme	20
4. Funding source by type of organisation	21
5. Funding source by organisation by year	21
6. Publications by theme in 2023	21
7. Number of publications by year	21
8. Top 20 Country Collaborations	22
9. Collaboration in 2023	22

Introduction

Welcome to the Scottish Dementia Research Consortium Report 2023/4.

This is the sixth report that the SDRC has released and like every year there is a wealth of high-quality, impactful dementia and brain health research to share from the past year.

The first section of the report provides an update from each of the five SDRC themes: Diagnosis, Fundamental Science, Informatics, Living with Dementia and Prevention. This section, authored by SDRC Executive Committee Members, presents recent research successes and achievements across all research disciplines.

The results of the researcher mapping are in the second section of the report. We have published the results of our research mapping of all dementia and brain health research in Scotland from 2023. We have collected information on grants awarded, papers published, and the extent of collaboration with researchers outside of Scotland.

We have an update on SDRC activity from the past 12 months, including a summary of our Annual Conference 2023 and our work supporting the Alzheimer Scotland Student Research Programme.

In addition to SDRC specific activity, there are also updates from our friends and partners within dementia and brain health research in Scotland. This includes Brain Health Scotland, the Brain Health ARC, The Neuroprogressive and Dementia Network and ENRICH.

About the Scottish Dementia Research Consortium

The SDRC, supported by Alzheimer Scotland, is a network of dementia researchers, policy makers and people living with dementia from across Scotland. Our work celebrates and supports all dementia and brain health research taking place across the country.

The SDRC, supported by Alzheimer Scotland, is a network of dementia researchers, policy makers and people living with dementia from across Scotland. Our work celebrates and supports all dementia and brain health research taking place across the country.

We do this by championing the work already ongoing as well as nurturing growth. We also promote and facilitate collaboration among researchers from across institutions and disciplines, to help them gain a better understanding of each other's work.

The SDRC was formed as a membership organisation in 2013. We currently have around 1100 members, representing a network of researchers, policy makers and people living with dementia from across Scotland. The following are some examples of what we do for our members:

- Organise learning and networking events
- Produce blogs featuring researchers who discuss their work and share experiences.
- Conduct our own research and produce publications which analyse the dementia and brain health research landscape in Scotland
- Support researchers, particularly early career researchers, by providing personal and professional development opportunities.

SDRC membership is free and open to all. If you are not already an SDRC member, details of how to join us are at the back of this report.

SDRC Executive Committee Members

Professor Terry Quinn (Chair)

Terry holds the post of David Cargill Chair of Geriatric Medicine and Honorary Consultant Physician in Stroke and Geriatric Medicine. He combines his research with clinical work and teaching.

Terry has a broad research portfolio, including coordinating editor of Cochrane Dementia and leading the national Brain Health ARC. He is passionate about evidence-based practice and raising standards in clinical research.



Dr Jennifer Macfarlane

Jennifer is a Clinical Scientist based at Ninewells Hospital, Dundee and Director of SINAPSE (Scottish Imaging Network: A Platform for Scientific Excellence) a research pooling group which brings together clinical and academic expertise in imaging research throughout Scotland, encouraging a multidisciplinary, collaborative and supportive approach to tackling Health and Wellbeing.

Her interests include functional neuroimaging and breast magnetic resonance imaging (MRI).



Prof Debbie Tolson

Debbie is the Alzheimer Scotland Professor of Dementia and Director of the Alzheimer Scotland Centre for Policy and Practice at the University of the West of Scotland.

As a registered nurse she is committed to practice-based research and best research involvement practice. Current studies include advanced dementia, family caring and living with young/late onset dementia.



Dr Leah Macaden

Leah Macaden is a Senior Lecturer in Nursing at the University of Edinburgh and registered nurse with a rich and diverse range of academic, clinical, management and research expertise in India and the UK for over 30 years.

Leah's teaching and research include award winning dementia education initiatives and complexities of care for older people with dementia, frailty, and sensory impairments.



Prof Frank Gunn-Moore

Frank is Head of the School of Biology at University of St Andrews.

He combines all three science disciplines in leading a research group that has made major discoveries in understanding the early stages of Alzheimer's disease, pioneering new models and identifying potential therapeutic targets.



Dr Louise Ritchie

Louise is a Reader in Dementia Research in the Alzheimer Scotland Centre for Policy and Practice at the University of the West of Scotland.

She is a psychologist with a focus on applied psychological research that aims to improve the lives of people living with dementia, their families and people who care for them.



Dr Mario Parra Rodriguez

Mario graduated as a Medical Doctor in 1993 and as a Clinical Neurophysiologist in 1997. He worked at the Cuban Neuroscience Centre and at different University Hospitals in Cuba and in Colombia.

Mario was as an Assistant Professor in Psychology at Heriot-Watt University, Edinburgh from 2015



Dr Sophie Bradley

Sophie is a Director in Translational Biology (Neuroscience) at Sosei Heptares, an international biopharmaceutical company focussed on the development of G protein-coupled receptor (GPCR) targeted therapeutics and an Honorary Senior Research Fellow at the University of Glasgow.



Dr Tom Russ

Tom trained in medicine and psychiatry in Edinburgh, the Highlands, and London and completed a PhD in dementia epidemiology at the University of Edinburgh.

He is a consultant psychiatrist in NHS Lothian, Network Champion of the NRS Neuroprogressive and Dementia Network, and Director of the Alzheimer Scotland Dementia Research Centre at the University of Edinburgh.



Nancy Brown

Nancy is a PhD candidate in dementia care at the University of Edinburgh. She has 18+ years' experience as a group supervisor in a memory day centre. Her research interests lie in the importance of community support for memory day centres and moving its built environment to an online platform developing meaningful activities among immigrant populations living with advanced dementia.



Dr Stina Saunders

Stina is a Research Scientist at Linus Health, a US-based company focused on improving brain health through the early detection and monitoring of neurodegenerative disorders.

Stina also holds a Postdoctoral Research Fellow position at the University of Edinburgh. Stina's educational background is in Clinical Brain Sciences (PhD) and Clinical Psychology (MSc and MSc by Research) and Psychology (BSc).

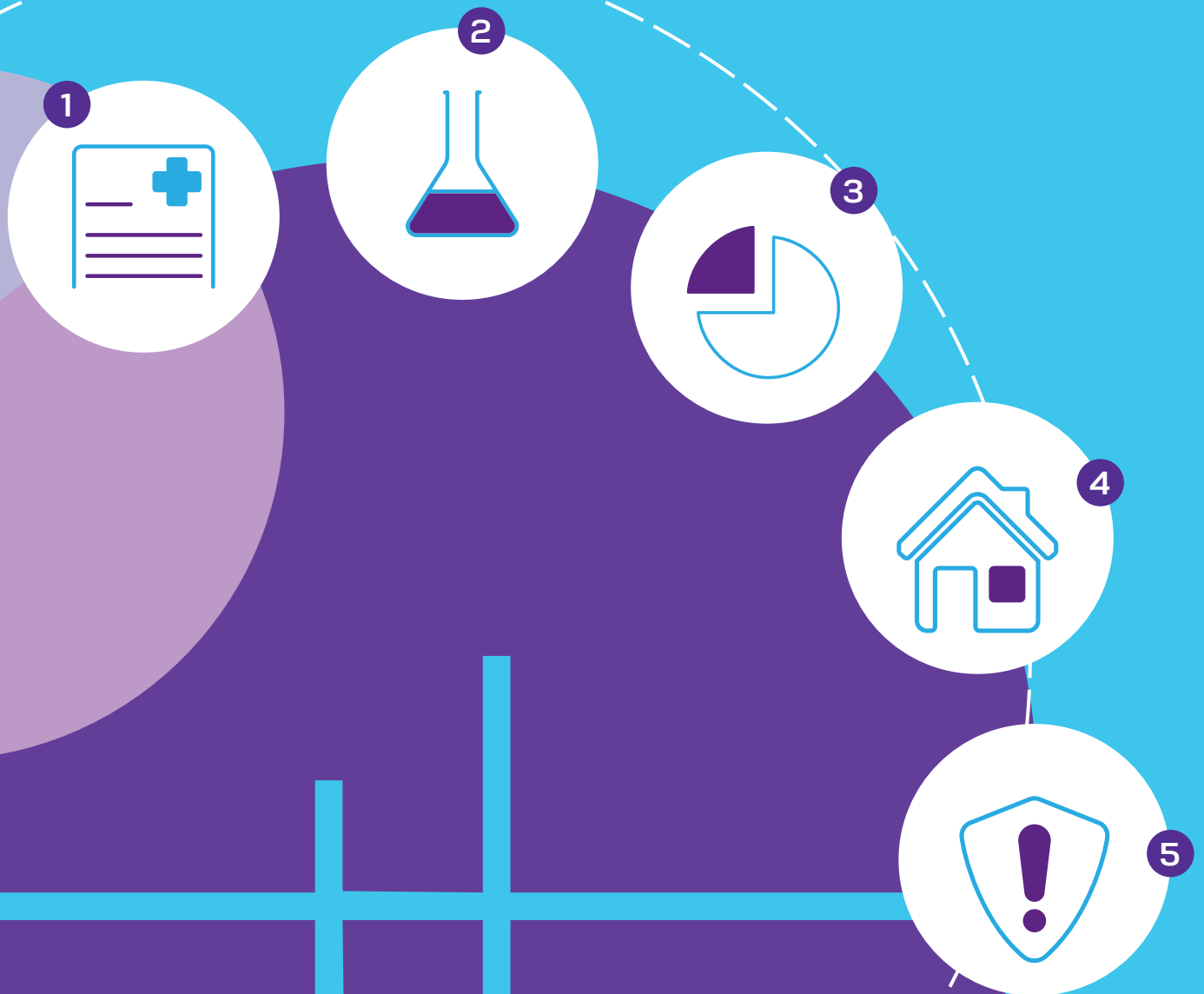


Alison McKean

Alison is Executive Lead for Brain Health and Research at Alzheimer Scotland. Alison graduated in Occupational Therapy in 2000 and worked across settings in dementia in the NHS before joining Alzheimer Scotland. Alison is passionate about ensuring the voice of lived experience is central to research activity.



SDRC dementia research themes



What we know, where we are now and future ambitions within each of the key areas of dementia and brain health research.

- 1 — **Diagnosis**
- 2 — **Fundamental Science**
- 3 — **Informatics & Technologies**
- 4 — **Living with dementia**
- 5 — **Prevention**



1

Diagnosis

There was a lot of activity relating to diagnosis research in Scotland around dementia. This particularly concerned biomarkers and neuroimaging with a focus on developing advanced diagnostic tools and techniques to detect Alzheimer's disease and other dementias at earlier stages. These efforts aimed to enhance the accuracy of dementia diagnosis through cutting-edge technologies.

Developments in the theme in the past 12 months

PET Imaging: Advanced neuroimaging techniques, such as positron emission tomography (PET) and magnetic resonance imaging (MRI), continued to be instrumental in diagnosing dementia subtypes.

Amyloid PET imaging, in particular, was used to visualise the accumulation of amyloid plaques, a hallmark of Alzheimer's, and help distinguish it from other neurodegenerative conditions. In addition, glucose metabolism imaging with FDG-PET helped differentiate Alzheimer's from other types of dementia by identifying specific patterns of brain hypometabolism.

Total Body PET – Imaging development for a wide range of conditions and applications. While this facility will not be dedicated to dementia research projects, it will be a significant expansion in imaging capability within Scotland which could be used in dementia studies. It opens the possibility of investigating dementias as part of a whole-body system. Its increased sensitivity could have significant impact on clinical imaging throughput which, if capitalised upon, could increase capacity for more imaging-based studies.

EEG: A new EEG group in Dundee are developing spectral fingerprinting analysis techniques, with Dr Anne Keitel having an interest in auditory processing in multi-noise source environments and how processing changes through the lifecourse.

Retinal Imaging: The University of Edinburgh's arm of the PREVENT Dementia study continues to collect and study retinal images from participants. The concept is to utilise the retina as a window to neurovascular health (<https://www.nature.com/articles/s41433-023-02830-3>) as these mid-life individuals age and might start to show signs of early brain changes that we can see through the eye.

There has been the development of some novel analysis methodologies for studying retinal images that will aid dementia related investigations. <https://pubmed.ncbi.nlm.nih.gov/39119001/>, <https://pubmed.ncbi.nlm.nih.gov/38833259/>

Biomarker research: There was a strong focus on blood-based biomarkers, which offer a less invasive alternative to traditional cerebrospinal fluid (CSF) analysis. Studies explored the use of amyloid-beta (A β) and tau protein concentrations in plasma to predict the onset of Alzheimer's disease. Researchers are developing these biomarkers to detect pathological changes in the brain before clinical symptoms appear, aiding in early diagnosis and intervention.

Demonstrating that a biomarker is associated with a condition of interest is only the first step in assessing whether the test could have a role in practice. The READ-OUT study will explore the potential of blood-based dementia markers in the NHS, and we are delighted that the study will come to Scottish sites.

Machine learning and AI, use of datasets:

Machine learning algorithms were integrated with neuroimaging and biomarker data to improve diagnostic accuracy. These computational models help interpret complex imaging data, identifying patterns linked to different types of dementia, thus supporting more personalised diagnosis and treatment plans.

Notable collaboration: In 2023 collaborations were put in place between universities of Edinburgh and Dundee which secured funding for SCANDAN Scottish AI in Neuroimaging to predict Dementia and Neurodegenerative Disease.

Dr Alex Doney is a physician specialising in stroke and has already published an algorithm for identifying dementia diagnoses in the population using electronic medical records. This method is the foundation of the SCANDAN dementia labelling algorithm for training an AI. Dr Doney's work also allows setting up a unique aspect of the SCANDAN study, which is predicting future dementia, so that treatments can have maximal impact before dementia develops. Prof Douglas Steele, a neuropsychiatrist and an expert in quantitative brain imaging and AI, has developed and published evidence for a method for training an AI to make clinically useful predictions for individual patients. The combination of Dr Doney and Prof Steele's work comprised Exemplar 2 of the 5 year, MRC funded PICTURES Programme Grant, led by University of Dundee, which has resulted in the collaboration with Edinburgh and the SCANDAN study.



2

Fundamental Science

In 2023, Scotland continued to advance its research into the fundamental science of dementia. These ongoing studies contribute significantly to understanding the biological underpinnings of dementia, with the hope of developing targeted interventions in the future.

Fundamental science research in the field of dementia focuses on a variety of cellular and molecular mechanisms that contribute to neurodegeneration exploring how these insights could inform new therapeutic targets. These efforts are part of Scotland's growing focus on translational research, bridging lab discoveries with clinical applications.

Developments in the past 12 months

In the past 12 months, globally, blood tests are improving for a range of different neurodegenerative diseases with the potential that they will go live in 2026. Whether they will replace some of the imaging requirements in the future is a hot topic. Meantime, the action of microglia and astrocyte biology, rather than neuronal activity per se, still dominate a lot of the fundamental research field.

The continued mapping of dementia (see page 12) research (with examples mentioned below) in Scotland highlights the country's commitment to fundamental science in pursuit of breakthroughs in treatment and early diagnosis, leveraging cutting-edge technology and data analysis to support these efforts.

Activity in 2023-2024

In addition to the research taking place in labs across Scotland, Scotland's excellence in fundamental science has been represented by our Theme Lead, SDRC Executive Committee member Prof Frank Gunn Moore. Frank has promoted and presented at a political level - both at the Scottish Labour and Scottish National Party conferences, and also the Scottish Parliament Cross Party Group for Life Sciences. Frank and Bettina Platt (Aberdeen) were also delegates in a developing collaboration between Scotland and the Rhineland-Pfalz region of Germany. They were asked by the Scottish Government to meet the new UK ambassador to Germany for a round table discussion.

The third Brain Health St Andrews Summit also took place in 2024. This meeting brought together a diverse mix of academics, NHS clinicians, industry professionals and patients. Broad themes including breakthrough science, data challenges and brain health policy were discussed in a mix of talks and open discussion.

Research Awards in 2023-2024

Highlights: Following a successful run of Fellowships in Scotland, Alzheimer's Society awarded Chris Henstridge (Dundee) £550,000 for a Dementia Research Leaders Fellowship

The Scotland Alzheimer's Research UK (ARUK) network co-led a pilot ECR mentorship scheme that has been the exemplar for the new UK-wide ARUK mentorship programme. Results of the pilot study were published in March 2023 (<https://doi.org/10.12688/amrcopenres.13091.2>), with authors from Scotland including Josie Fullerton (University of Glasgow), Michael Daniels (University of Edinburgh), Fiona Mclean (University of Dundee), Susan Simpson (University of Dundee), Nathan Woodling (University of Glasgow), and Fiona Kerr (Edinburgh Napier University).

The Woodling lab (University of Glasgow) has been successful in receiving a prestigious Career Development Award from the Wellcome Trust. This long-term grant (eight years) will fund their research until 2032 to investigate the fundamental biological mechanisms of ageing, including those that predispose the aged brain to dementia.

At the University of Edinburgh, studies by Dr Szu-Han Wang and others contributed to unravelling the complex neuron-glia interactions that occur in the brain during dementia. This research, part of a broader programme supported by Alzheimer's Research UK, aimed to uncover how inflammatory processes and dysfunctional synaptic networks contribute to cognitive decline.

What's happening in 2024

SDRC Executive Committee members will continue to raise the profile of fundamental science research in Scotland in the media, across television, print and online. The SDRC will highlight these as they are published.

There will be a third round of the Scottish Neurological Research Fund, supported by the Brain Health ARC, the Chief Scientist Office and the RS Macdonald Charitable Trust.

We will also maintain our links with policymakers by engaging with government and opposition politicians to influence and raise awareness of research at Scotland and UK-wide level.



3

Informatics & Technologies

In Scotland in 2023, significant dementia research was conducted in the fields of technology and informatics, focusing on innovative approaches to improve the diagnosis, care, and quality of life for individuals living with dementia.

One key initiative was the ongoing collaboration between the Scottish Dementia Research Consortium (SDRC) and the Digital Health & Care Innovation Centre (DHI). This partnership is driving new projects that integrate technology to support people at risk of dementia and enhance brain health. It has led to international collaborations, including engagements with Norway and Denmark, focused on how technology can assist dementia patients. Furthermore, this initiative led to the creation of the **Special Interest Group on Technologies or Brain Health and Dementia Prevention**. The group was launched in 2022 during a joint symposium and met in 2023 to advance the agenda towards a white paper which aims to pave the way for future collaborations and stakeholder engagement.

A notable 2023 research project was **AMPER**, which stands for 'Agent-based Memory Prosthesis to Encourage Reminiscing'. This project, funded by the EPSRC, involves creating a memory-prosthetic technology aimed at supporting people with dementia by helping them access personal memories. This work is a collaboration between experts at the National Robotarium (Heriot-Watt University) and the University of Strathclyde.

An impact achieved by AMPER in 2023 is linked to increasing awareness about the role that AI can play in the development of technologies to assist people affected by dementia and those who care for them. We anticipate that an enhanced level of awareness will help the AMPER team, our collaborators and partners to overcome barriers novel healthcare technologies face, such as stigmas and low acceptance. We have discussed why increasing trust is key to ensuring end-users will embrace new technologies and will adhere to interventions that rely on them. We have demonstrated that a way to achieve that is by involving them in the process of developing and delivering such technologies. The AMPER outreach agenda has proved fruitful and it continues to attract the attention of the media and various outlets. Working with our NHS partners, panel of volunteers, and other stakeholders we will continue paving the way towards improved understanding and acceptance of healthcare technologies. This will promote a favourable context wherein technology-driven interventions can be successfully carried out.

Publications (Conference Proceedings):

Embodied Conversational Agents: Trust, Deception and the Suspension of Disbelief)(<https://dl.acm.org/doi/10.1145/3597512.3597526>)

Archetype or Stereotype: A case study in choosing a graphical character to support reminiscence therapy for those living with dementia (*in press*).

Media engagement:

BBC Radio 4 – Digital Human – Reminiscence, (November 2023) <https://www.bbc.co.uk/programmes/m00l5d5w>

AI in Healthcare: Aiding Dementia and Alzheimer Patients, (October 2023) <https://www.goodfirms.co/blog/ai-in-healthcare-industry>

Another 2023 development is the **RadioMe** project, which is being trialled to assist people with mild dementia in their homes. RadioMe uses wearable sensors to monitor individuals' emotional states, adjusting live radio streams to play calming music or provide reminders, aiming to reduce stress and support independence.

Additionally, work continues to use linked health and social care data to improve dementia research and patient care. This includes the **Scottish Brain Health Register**, which connects patients with ongoing research opportunities.

The School of Mathematical & Computer Sciences and the **National Robotarium at Heriot-Watt University** have become a unique asset in Scotland in developing applied robotics to tackle limitless health, social and industrial challenges. It has also become a forum to explore new ideas and launch new projects in the fields of AI/Robotics. Some key publications:

1. Socially Assistive Robots and Sensory Feedback for Engaging Older Adults in Cognitive Activities, E Nault, L Baillie, F Broz - ACM Transactions on Human-Robot Interaction, 2024
2. Comparing Ultrasonic and Force Feedback to Foster Older Adults' Engagement in Cognitive Activities Facilitated by a Robot
3. E Nault, L Baillie, F Broz - Eurohaptics 2024, 2024

The **University of Glasgow** launched the **Centre for Neurotechnology** which is committed to developing intelligent devices that communicate with the nervous system and stimulate it in ways to restore or improve its function. Although it was officially launched on 25th March with a scientific workshop which was attended by around 150 delegates, the project has been developed over the last few years. We are delighted to see that it is now progressing well to:

1. Develop new technology to measure and stimulate the nervous system to improve/modulate cognitive function in health and disease.
2. Fuse silicon-based and neural computing to develop next-generation brain computer interfaces (BCIs).
3. Develop new statistical/BCI tools to deliver personalised stimulation protocols.
4. Address philosophical, ethical and legal aspects of neurotechnology.
5. Investigate the potential of neurotechnology in education and health inequalities.

The **Digital Mental Health Innovation Cluster and Health Ageing Innovation Cluster** in partnership with **Alzheimer Scotland** have supported the development of a new programme to include **virtual reality experiences for football fans with dementia**. The initiative aims to support football fans living with dementia to access and relive big match memories. VR can help them travel back to Scotland's national stadium in the 1960s where such events were held. <https://www.alzscot.org/news/virtual-reality-experience-could-be-a-game-changer-for-football-fans-with-dementia>. This is another example of how technologies can support people with dementia to restore the sense of self and improve quality of life.

The **Quantum ARC, Brain Health Arc, and the Technology and Informatics Theme of the Scottish Dementia Research Consortium** have entered a new space of exploration, which was motivated by discussions held during the Brain Health ARC Biomarkers meeting in February 2024. They are currently exploring areas of synergy and shared interests where quantum technologies/computing could help tackle key priorities in the field of brain health. A new event will be held on 14-15 November 2024, to progress with such discussion.

These initiatives highlight the strong role technology and informatics play in Scotland's cutting edge dementia research in 2023.

Living with dementia



Recent developments

It has been an active 12 months for Scottish dementia policy work with an autumn launch of Scotland's latest National Dementia Strategy *Everyone's Story* setting out a 10-year vision for change. These new strategy documents set an ambitious path of care and practice improvement and the creation of a dementia inclusive environment.

The quest for best practice resounds throughout another important resource also published in 2023, namely SIGN 168 Assessment, diagnosis, care and support for people with dementia and their carers. This national clinical guidance for the first time foregrounds dementia care alongside clinical aspects. The SIGN development methodology identifies and makes recommendations for clinical and dementia care practices based on a robust review of the strongest available evidence. Drawing attention to what we know and don't know, SIGN168 is replete with research opportunities for Living with Dementia Researchers.

What activity has taken place

We have continued to work closely with lived experience partners in SDWG and NDCAN, carrying out research, identifying new priorities and developing grants. **University of the West of Scotland's** (UWS) three-year project, led by Professor Louise Ritchie and funded by the **Alzheimer's Society** has been working closely with members of SDWG co-producing a support for people with dementia in work, using career guidance approaches. As part of this work, the researchers have co-produced a video about experiences of work post-diagnosis which will be used to challenge stigma around the contribution people with dementia can make to the workplace. The SDWG have written about their experiences of co-producing the film [here](#).

Scottish dementia research activity within secure communities is growing. Dr Rhoda MacRae (**University of the West of Scotland**) and collaborators from **Napier University** and **University of Edinburgh (UoE)**, have completed a major multi-method study funded by the **Dunhill Medical Trust** investigating **dementia care in prisons**. Outputs include a co-designed innovative care pathway and model of care to support staff working in prison to provide pre and post-diagnostic care for those with diagnosed or suspected dementia. The final report from what promises to be an important impactful study and co-produced resources will be available on a microsite, that will be hosted by various networks and organisations from May. Funding from the **Royal Society of Edinburgh** has enabled Dr MacRae and co-investigators to explore the feasibility of introducing **cognitive screening into prisons**.

Further details of the outputs of the research workshops and literature review will be available before the summer and profiled on the SDRC website. **Dementia care within a high-secure forensic setting** is under scrutiny thanks to a UWS fully funded PhD studentship. These pioneering studies are addressing previously neglected dementia-related vulnerabilities.

For two days in the sunny Scottish mid-winter, members of the **Multi-Species Dementia International Research Network (Funded by Wellcome)** met in person and online at the **University of the West of Scotland (Ayr Campus)** to explore dementia in our multi-species world. With the help of our graphic illustrator, you can read the summary of our event [here](#), including a visit from our friends at Dementia Dog!

Now in its final year, **the Designing Homes for Healthy Cognitive Ageing** project led by Professor Alison Bowes at the **University of Stirling**, has been incredibly successful, and continues to develop resources for industry leaders, policymakers, and the general population (www.deshca.co.uk/resources). The project findings have informed both the Westminster Government and the Scottish Government's discussions on revisions to Housing for Varying needs. The work of the project is carried forward in both the Intergenerational Living theme of the Changing Intergenerational Relationships Project, and a forthcoming mobile demonstrator, which is expected to tour Scotland to provide people with real world examples of what age-inclusive design can look like, and advice for how they can integrate this into their homes.

The **University of Edinburgh's** five-year project **The BOLD** (Bringing out Leaders in Dementia) was completed this year from Edinburgh Centre for Research on the Experience of Dementia (ECRED). For further information contact Dawn Irvine dirvine3@exseed.ed.ac.uk.

For many early career researchers, completion of a PhD is a key milestone. We congratulate all new Drs and their supervisory teams for recent successes. We invite SDRC members to let us know about their research milestone achievements and success so please contact us to share good news. We were delighted to share in the success of Dr Mohamad Mollah, an international student from **Bangladesh**. He arrived in Scotland in December 2019 just months before pandemic lockdown and attained his PhD from the **University of the West of Scotland** at the start of 2024. His research, which focuses on policy learning from the Scottish context, has potential to improve dementia care and dementia education within Bangladesh.

Looking ahead -2024 and beyond

We anticipate strong representation at the Alzheimer Europe conference this year from Scottish researchers, co-researchers and other representatives associated with our theme. We have exciting plans to co-present our collaborative Nominal Group Technique research undertaken in partnership with NDCAN and SDWG which was highlighted in the 2023 SDRC Report.

The year ahead also has some exciting development for Scottish dementia researchers working with INTERDEM. Dr Leah Macaden (**UoE**) is co-leading a taskforce proposal on education and training. People with lived experience of dementia from Scotland will be invited to the taskforce through membership of the PPI group. Professor Louise Ritchie (**UWS**) and Dr Laura Lebec (**UWS**) are members of the taskforce on young onset dementia and will be specifically focused on the workstream on working with dementia. These new initiatives will be presented at the annual INTERDEM meeting ahead of the Alzheimer Europe Conference in October 2024 in Geneva.

Please continue to check the SDRC website for breaking news from this research theme throughout the year as exciting announcements are on the horizon.



5

Prevention

In the SDRC we consider dementia and brain health across the whole of the life course. Increasingly we are realising that the condition that we call 'dementia' is the end result of biological processes that can begin decades before a person may experience any symptoms. The thought that dementia brain changes may be happening in middle age will be a concern for many, but this realisation also offers opportunities for prevention.

The SDCR theme of prevention has traditionally been one of our most active groups, but this year it has been in a state of transition with theme leaders and contributors moving onto other exciting ventures. At time of writing, elections to our SDCR executive are open and we hope to welcome new members who can take on the prevention theme.

This does not mean that there has been no activity in the dementia prevention space. Earlier this year saw the release of the updated Lancet Commission piece on dementia, which added new risk factors to the list of things that we can potentially modify to prevent or delay dementia. It is pleasing that Scottish research has informed many of the Commission's findings, including our world leading research and policy in areas such as head injury, smoking interventions and air pollution.

Some strategies for dementia prevention are suitable for everyone, while others should be targeted to those at highest risk. One method for quantifying risk is to use biomarkers that can detect those early brain changes that can lead to memory and thinking problems. There are many exciting projects in the biomarker space and we are fortunate that major research initiatives such as the READ-OUT programme are including Scotland in their activities. The principal investigator of READ-OUT Vanessa Raymont spoke at our SDCR annual conference. She has since been working with the NHS Research Scotland Dementia and Neuroprogressive Disease Network to look at how biomarkers could help improve care in remote and rural communities.

Blood-based, and other novel biomarkers were the focus of the Scottish Data Challenge. The SFC Brain Health ARC, in partnership with Global Alzheimer Platform, made the individual participant data from the BioHermes study available to researchers in Scotland. The response from the research community has been impressive and the scheme was featured in BBC news and many major newspapers. We look forward to a showcase event in early 2025 where teams will share the findings of this research.

Mapping Scotland's key contribution to global dementia and brain health research: 2023

The following section of the SDRC Annual Report shares the results of our mapping of dementia and brain health research activity in Scotland in 2023. Each year, the SDRC conducts this mapping exercise which analyses data of project grants and publications to academic journals in which researchers based in Scotland are involved. This report is the sixth time we have published these results. It includes information on grant awards and published papers from 2023. Also included are details on the Scottish-based researchers who have contributed to this activity and their international collaborators.

There is so much more to brain health and dementia research in Scotland than just the numbers and statistics from this mapping exercise. The rest of the SDRC Annual Report provides a more holistic and comprehensive overview of activity from our Scottish research community. This includes detail of specific projects being undertaken and the impact these have on the lives of people affected by, or at risk of, dementia.

Funding levels and sources

Number of awards: **51**

Total amount of funding: **£16.5 million**

Figures 1-3 focus on grant awards to Scottish-based researchers in 2023. Figure 1 shows how total grant funding in 2023 was divided between SDRC themes. Figure 2 shows the change of grant income over the past five years. Figure 3 also looks at year-on-year changes to grant income, categorised by SDRC theme. Grant awards to Fundamental Science have sharply increased over the past two years.

Figure 1: Grant award by theme in 2023

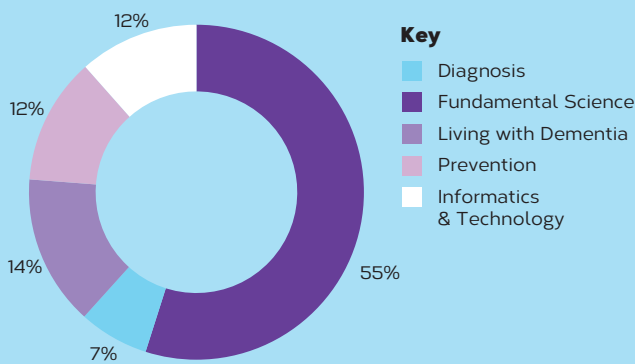


Figure 2: Grant award by year

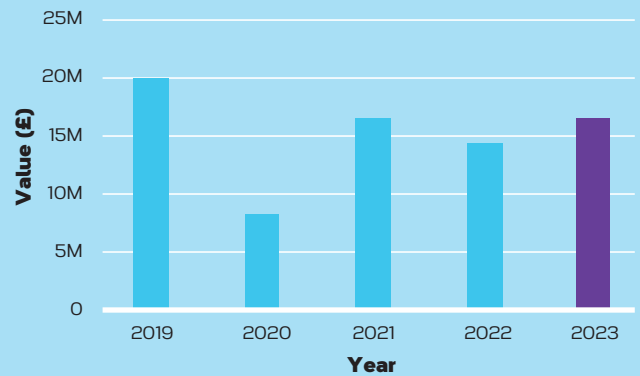


Figure 3: Grant income by year by theme

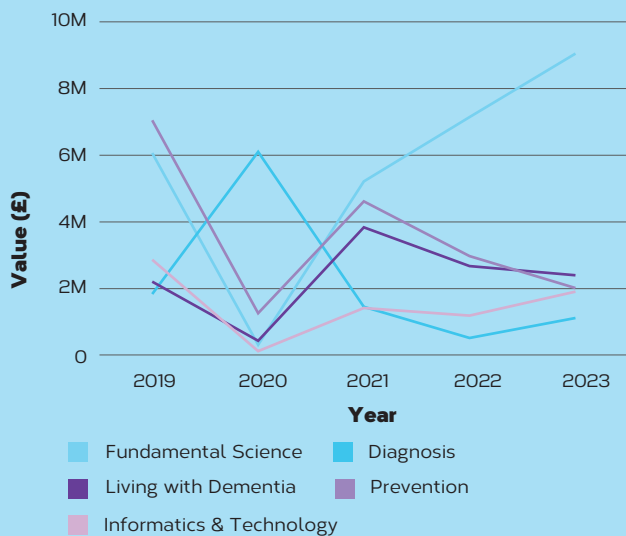


Figure 4: Funding source by type of organisation

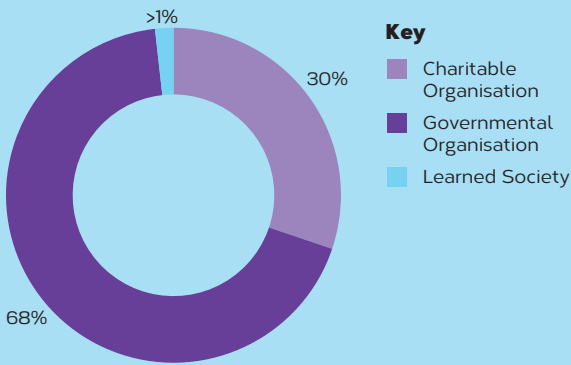
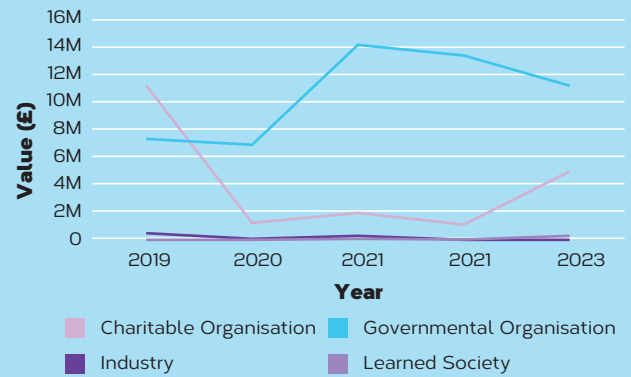


Figure 5: Funding source by organisation by year



Figures 4-5 provide more information on the source of funding into dementia research in Scotland. Consistent with every year we have conducted this mapping exercise, the majority of funding comes from UK governmental organisations such as the Medical Research Council or the Economic and Social Research Council. In 2023, 30% of funding came from charitable organisations - a substantial increase from 8% in 2022 and the highest percentage since 2019. This may suggest that charitable organisations are starting to recover financially from the effects of the pandemic and are resuming their grant award activity.

As discussed in previous reports, we are aware there may be a gap in our recording of the amount of investment from industry given their funding arrangements are often not reported in the same way as charity or government funding.

Published Papers

Total number of papers in journals in 2023: **352**

Figure 6 shows the percentage of papers in journals in 2023 by SDRC theme.

Figure 6: Publications by theme in 2023

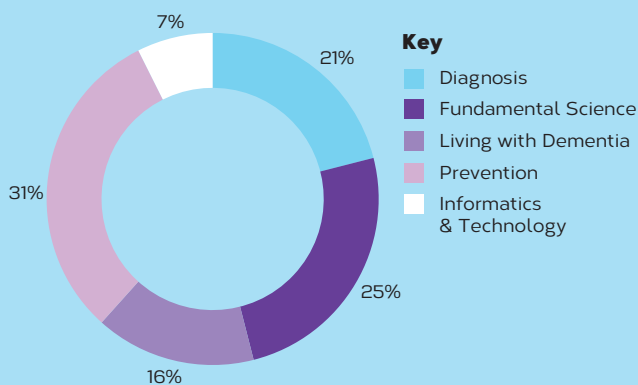
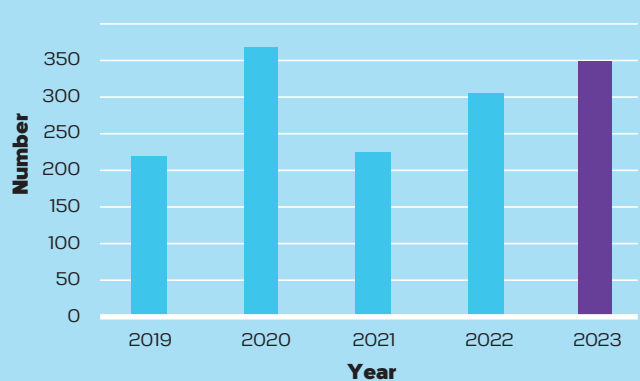


Figure 7: Number of publications by year



The number of papers being published to scientific journals is increasing steadily year-on-year, as Figure 7 shows. The exception was 2020 where there was a sharp increase in publications, which could have been attributable to the pandemic and there being less grant funding available.

Researchers in Scotland

We have analysed the data on how often Scottish-based researchers have contributed to a paper published in an academic journal, or were part of a team awarded a grant.

Number of Scottish contributions in 2023: 1516

Number of Scottish researchers active in 2023: 917

These are the highest numbers ever recorded in the six years the SDRC has conducted this mapping exercise. This shows more people than ever are contributing to dementia and brain health research in Scotland.

International Collaborations

Particularly with publications, researchers regularly work together with those in different countries. Therefore, as part of our mapping, we have recorded the collaborations between Scottish-based and international researchers. In 2023, while there has been extensive collaboration with those based abroad, there are fewer than in previous years. In future mapping exercises, we will look at this to assess whether there is a trend of Scottish-based researchers choosing to collaborate with others within the country rather than looking at outside collaborations.

Number of international collaborators: 1415

Number of collaborations: 1498

Number of countries: 42

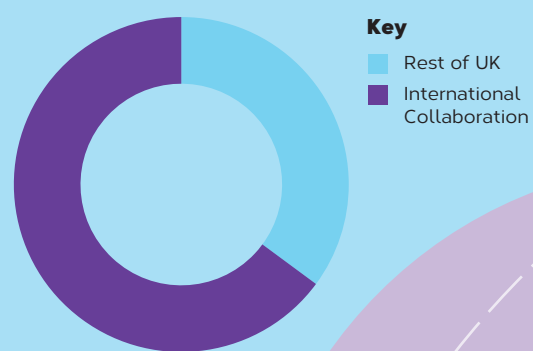
There was a great amount of diversity in international collaboration. The table below shows the top 20 countries that Scottish-based researchers collaborated with in 2023.

Figure 8: Top 20 Country Collaborations

England	475	Sweden	25
USA	213	Ireland	25
Netherlands	83	Israel	24
Canada	65	China	23
Australia	46	Wales	22
Belgium	45	South Korea	22
Spain	43	Japan	20
Chile	42	Czech Republic	20
Germany	40	France	19
Italy	29	Denmark	18

Figure 8 shows collaboration between the UK and non-UK countries. It clearly shows that while the UK is a significant partner to Scottish-based research, there are a lot more collaborations taking place further afield.

Figure 9: Collaboration in 2023



Early Career Researchers Spotlight

The Scottish dementia and brain health dementia and brain health early career researcher community is both exciting and diverse. There is a wealth of innovative research taking place across Scotland in all disciplines. Below are just a few examples of the work of early career researchers.

Samuel Gibbon, University of Edinburgh

I'm a UK Research & Innovation funded PhD student in Clinical Brain Science at the University of Edinburgh. Before coming to Edinburgh, I worked as a research assistant at the University of Cambridge. I completed an MSc in Psychological Research at the University of Edinburgh in 2015, and a BA in Linguistics in 2012.

My research focuses on the development of deep learning models for the analysis of retinal imaging data. I am particularly interested in the application of these models to the study of neurodegenerative diseases, such as Parkinson's, small vessel disease, and stroke, with the aim to find early disease markers. You can read more about my research here: <https://samuel-gibbon.github.io/>

Lisa Davison, University of Stirling

I am a Quantitative Research Fellow at the University of Stirling, with an MSc and PhD in Gerontology from the University of Southampton.

I currently work on two research projects. First, the Designing Homes for Healthy Cognitive Ageing (DesHCA) project which examines how housing design can support older people, including those living with cognitive change, to live well at home for longer. Secondly, the Intersectional Stigma of Place-Based Ageing (ISPA) project which explores how stigma attached to where people live intersects with experiences of disability and ageing.

I am also on the committee for the British Society of Gerontology (BSG) Emerging Researchers in Ageing (ERA) special interest group, whereby we provide opportunities for networking and professional development, and organise informal "Gerontology & Tonic" sessions on a range of topics for "accidental gerontologists". Our mentoring scheme also matches up early career researchers with mentors based on shared research interests and support needs.

My current aims for my research career are to develop my network and learn new quantitative methods, while publishing from my PhD research and from the projects on which I work. In the future I hope to remain in ageing research, whether in academia, government, or third sector organisations.

Nicole Byron, University of Strathclyde

I recently completed my PhD at the University of Strathclyde under the supervision of Shuzo Sakata. Prior to this I acquired my MSc in Biochemistry.

Throughout my MSc, I investigated if hearing loss exacerbated Alzheimer's disease. This was based on evidence showing hearing loss to be a modifiable risk factor of dementia.

Later, my PhD focussed on the development of a novel approach to monitor plaque pathology, to aid the assessment of disease modifying effects of therapeutics. By implementing state-of-the-art tapered fibre photometry, we exemplify assessment of plaque pathology across 1.8 mm of brain tissue in freely behaving mice. Throughout this, I published two peer-reviewed articles.

Now, I will take up a post-doctoral position in Shuzo Sakata's lab, investigating how sleep affects microglial function in Alzheimer's disease. This allows me to work towards my goal of helping identify potential targets and therapeutics for the treatment of neurodegenerative diseases.

Suzie Beresford, Queen Margaret University

I recently completed my MRes with QMU Edinburgh, my research project explored how using art-based methods created social leaders in dementia. It focused on a social leadership programme called BOLD (Bringing Out Leaders in Dementia). I have more than 18 years' experience within the field of social care, particularly dementia care provision, and personal experiences relating to dementia. I used autoethnography to help learn from both my own experiences of dementia and the processes used in the BOLD programme and compared these to the experiences of other participants.

In the future I hope to continue to develop my research skill set and find innovative ways in which to embed art-based methods to help people affected by dementia and work alongside them to maintain brain health and live as well as they are able.

Brain Health ARC

Brain Health ARC was launched in 2023. This is a Scottish Funding Council research programme which aims to establish Scotland as a world leader in brain health research.

Their vision is to:

- improve the nation's brain health
- make Scotland the 'go-to' destination for research
- find solutions to societal challenges associated with brain ageing

The key to realising this vision is collaboration with researchers and other key stakeholders across brain health. The ARC is innovative as it does not focus on individual diseases like dementia and stroke which may not adequately address the complexities of a multimorbid, aging population. Instead, its work addresses the fact cognitive decline is often the result of underlying biological processes that begin years before symptoms manifest. Recognising common pathologies and the potential for versatile interventions has led to the emergence of the brain health concept. Originating in Scotland, this holistic approach to brain health research is gaining global recognition.

Some activities the ARC have done so far include:

- signposting to career/training opportunities
- providing prizes, travel support and grants
- sharing ideas through community meetings
- representing brain health research interests at the Scottish Parliament at the Life Sciences Cross Party Group.

One of the most significant activities for the Brain Health ARC is the establishment of their webinar series, which the SDRC has supported. The purpose of the webinar series is to provide an educational resource for researchers, particularly early career researchers, to support their career development.

Webinar topics were informed by early career researchers and have included advice on writing grants, getting published and working with people with lived experience. Speakers have been leaders in their respective fields.

Another important initiative that the Brain Health ARC was excited to be a part of was a collaboration with the Global Alzheimer Platform of the BioHermes Data Challenge. This is a dataset of over 1200 patients with a range of biomarker information. This data was open to Scottish-based researchers to support research teams who may have exciting ideas but no access to such extensive data. This challenge was even more innovative because it also gave opportunities for research teams to support data management and interpretation by providing in-house data scientists to help with analysis.

The outcome of these activities will be to educate the public, develop the workforce, and influence policy, but most importantly, to use Scotland's world leading research to find solutions to the societal challenges associated with poor brain health. The ARC will act as a vehicle to develop capacity and attract new research talent and funding into Scottish brain health.

The Brain Health ARC has ambitions to continue supporting research over the next three years. This includes jointly organising the Celebrating Scottish Research Conference 2024 in collaboration with the SDRC and NRS Neuroprogressive and Dementia Network.

Find out more about the ARC at brainhealtharc.com

Alzheimer Scotland Student Research Programme

In October 2022, Alzheimer Scotland, with support from the SDRC, launched a new research programme to support studentships for projects for dementia and brain health in Scotland.

This programme fully funds MRes projects including tuition fees, consumables, and a stipend for each student. In addition, the Alzheimer Scotland Student Research Programme wants to support our students by offering more than a financial contribution. We also provide networking opportunities, various platforms to build research communication skills and, importantly, the opportunity to learn about dementia from those with lived experience.

Since applications opened in late 2022, there was a two-stage written application process followed by in-person interviews of shortlisted candidates in April 2023. The selection panel involved in shortlisting has been made up mainly of people living with dementia and current or former carers which includes members of the Scottish Dementia Working Group (SDWG) and the National Dementia Carers Action Network (NDCAN) with technical guidance from the SDRC Executive Committee. The Chair of the Selection Panel is Professor Martin Rossor, who is NIHR National Director for Dementia Research and Alzheimer Scotland Ambassador.

At the end of 2022, the Alzheimer Scotland Student Research Programme announced our first ever MRes student, Kelly Kelly who is hosted by the Alzheimer Scotland Centre for Policy and Practice at the University of the West of Scotland. She is supervised by Dr Anna Jack-Waugh and Dr Eileen Harkess-Murphy.

Kelly already has extensive experience working with people with dementia and is passionate about enhancing the quality of life for individuals with dementia and their caregivers. She is a registered mental health nurse specialising in dementia care and has a BA (Hons) in Psychology.

Kelly's research project focuses on the gap in knowledge around the use of trauma-informed approaches within dementia care, with emphasis on the experience of people with young onset dementia. This research is important because people with young onset dementia experience a greater time on a diagnosis pathway than people with late-onset dementia. This can lead to a greater risk of harm associated with the psychological distress of a diagnosis that may cause trauma. Therefore, the outcomes of this research will help allow for a trauma-informed interpretation of the process and the patient/family perspective, which will improve the diagnosis pathway for people with young onset dementia.

Talking about the Studentship, Kelly said

"I am delighted to be part of the Alzheimer Scotland Student Research Programme hosted by the Alzheimer Scotland Centre for Policy and Practice at the University of the West of Scotland. I am looking forward to contributing to this innovative research and continuing my nursing career dedicated to dementia care."

Project supervisor, Anna, added:

"Eileen Harkess-Murphy and I are delighted to be supported by Alzheimer Scotland to develop this first MRes studentship. Our candidate, Kelly, has an excellent background, and clear support from the Active Voices Network. This will enable her to explore the potential for a trauma-informed diagnostic approach to the diagnosis of young onset dementia."

Kelly is enthusiastic about advancing her research initiatives in this field, aiming to make a meaningful impact on individuals affected by dementia.

As of this report's publication, Kelly's research is still ongoing. You can follow the progress of the project via Kelly's social media and on the SDRC website where we post regular updates.

Brain Health Scotland

Brain Health Scotland's mission is to inspire and empower the public to protect their brain health and reduce risk of diseases that lead to dementia.

They work with all ages, across the whole of Scotland, to provide information to better understand the brain and how to protect it. Read on to find out more about Brain Health Scotland's recent activity and achievements.

Education projects

The Brain Health Scotland team have been busy with many different education projects.

The *My Amazing Brain* Schools Programme features free resources aimed at 8-12 year-olds (P5-P7) to help children explore all about how to keep their brain healthy. In 2023, the programme was carried out in 235 further schools with 7225 children reached. We received a Scottish Charity Award for being 'Highly Commended in the Category of Campaign of the Year'. The programme was also shared with 1200 Boys Brigade leaders as part of their autumn/winter 2024 campaign.

Brain Health Scotland supported the Brodies LLP Tennis Invitational event with Judy Murray. Judy worked with us to deliver tennis coaching sessions to people of all ages and abilities to promote the importance of sports participation on brain health. More than 4,000 people took part in this, including attendees from 25 schools and Alzheimer Scotland Dementia Resource Centre in Edinburgh.

Brain Health Clinics

December 2023 saw the huge achievement of opening the first Brain Health Service and Clinic at the Aberdeen Dementia Resource Centre. So far, more than 30 people have attended the service, with 18 referred through the local Healthpoint phoneline. A communication plan has been delivered to inform people about the service through radio adverts, social media campaigns, and posters on buses. The next phase will look at reaching those underserved groups who would most benefit from brain health advice, due to being at higher risk of brain diseases linked to health inequalities. We have also created the *Recommendations for Clinical Practice* document, to enable a uniform approach to brain health

service provision across Scotland. We have had a number of national and international enquiries about the service and delivered a series of conference presentations.

Davos Alzheimer's Collaborative (DAC)

The Davos Alzheimer's Collaborative (DAC) is global partnership of various experts and organisations which aims to accelerate innovation and deliver solutions in Alzheimer's research, prevention and care. Brain Health Scotland has been an active member of DAC.

Specific work includes the Healthcare System Preparedness for the early detection of Alzheimer's, which has included Brain Health Scotland as one of seven flagship sites across the globe. A partnership was formed with NHS Dumfries & Galloway to understand how equipped healthcare systems are for early detection. This involved implementing novel diagnostic tools into clinical practice, a digital cognitive assessment and a blood-based biomarker (a first for Europe). Learning is being shared widely with the launch of a digital Blueprint for early detection with further publications and reports to follow in 2024.

National Survey on Attitudes to Brain Health

A national survey to understand what the Scottish population think about brain health and early detection of dementia was conducted in 2023. This work highlights the importance of continuing to raise awareness about brain health and risk reduction in the Scottish population, and the opportunities to target receptive young age groups. The final report *Attitudes Towards Brain Health, Dementia Risk Reduction and Early Detection* has been published on the Brain Health Scotland website and part of this work was presented as a poster at the Alzheimer Disease International Conference in Krakow 2024.

NHS Research Scotland

The SDRC supports the NDN in their work to ensure everyone with a neuroprogressive condition or dementia has the opportunity to take part in research. We share the same aim of collaboration and we know that interdisciplinary research is crucial to advance understanding of the diseases and new treatments.

The purpose of the NDN is to help researchers from a range of disciplines deliver research across Scotland in a wide range of healthcare settings, including primary and community care, mental health services and acute hospitals. They oversee research studies which are conducted within the NHS and care home settings including:

- research into the underlying mechanisms and causes
- prevention
- new symptoms
- disease modifying treatments
- better care

Their work provides clinicians early access to the latest treatments and technologies for diagnosing and treating disease, whilst offering more opportunities for people living with dementia and neuroprogressive conditions to take part in cutting edge research.

In addition to cross-institution and cross disciplinary non-commercial research, the NDN has also developed a portfolio of commercial research. Commercial research funded by pharmaceutical or medical technology companies helps to generate further research capacity and cover study related and overhead costs. Working closely with industry is an important part of keeping the NHS at the forefront of modern treatments and research. However, it should be noted that no individual profits are received by the network for working with industry.

For the 2023-24 financial year the NDN has been able to support participants from across Scotland to take part in high quality research into some of the most impactful medical issues we face today.

We have:

- maintained a complex and changing portfolio, with 52 unique studies being supported across eight health boards, in multiple locations.
- supported academic research studies such as EXENATIDE PD3, COBALT (COmBining memantine And cholinesterase inhibitors in Lewy body dementia Treatment) ROPAD, PD Probiotic and CHIEF PD (Cholinesterase Inhibitor to prevent falls in Parkinson's disease) as well as larger commercial endeavours with pharmaceutical companies such as Roche, Biogen, Abbvie, Novo Nordisk and Merck. In Tayside, we have been undertaking the LUMA, PADOVA and ACTIVATE studies for Parkinson's disease, being the first site in the UK to screen for LUMA and ACTIVATE. All these studies have meant that we have:
 - expanded our portfolio to include NDN staff in Lothian working on the Deep and Frequent Phenotyping study in collaboration with Dr Catherine Pennington, which is researching early symptoms of Alzheimer's disease.
 - had over 550 people sign up to our 'Permission to Contact' scheme which provides people with the opportunity to take part in research.
 - launched our book in September 2023 – Challenging Assumptions Around Dementia: User-led Research and Untold Stories – which has now had over 10,000 downloads and received coverage on news outlets as well as blog posts and articles.

ENRICH Scotland

Improving the lives and health of people living in care homes is a major priority, but care home residents are generally underrepresented in research studies. Enabling Research in Care Homes (ENRICH) aims to change this by strengthening support for research outside the NHS. It raises the profile of research studies to benefit care home residents, their families and those who care for them across Scotland. It also supports the planning and delivery of this research. ENRICH has received its core funding from the Chief Scientist Office (CSO) since April 2021.



Supporting studies

ENRICH Scotland has increased research capacity in Scottish care homes by supporting study recruitment and acting as specialist advisors to researchers unfamiliar with care home research but designing studies for this environment.

For the year 2023-24 we have:

- expanded the Research Ready Care Home Network from 147 in December 2022 to 295 in March 2024. These are distributed throughout Scotland (urban and rural), including homes in areas of high and low deprivation, and represent local authority, private and third sector homes. This means that more than one quarter of all care homes in Scotland are now registered as Research Ready. By comparison, NIHR ENRICH (which has been established in England since 2012) has registered 1000 from a pool of over 14,000 care homes as Research Ready.
- worked with a further 20 research teams since December 2022, offering individual support depending on the needs of each team.
- completed the first ENRICH Scotland research study in collaboration with Edinburgh Napier University, funded by NHS Lothian for £150,000. This explored staff retention in the care home sector from the perspective of care home managers ('CHURN' study).
- sent a monthly newsletter to all Research Ready Care Homes outlining current research opportunities available to them along with information about research-associated events, training and publications/reports of interest.
- changed the quarterly Care Home Research Forum to a hybrid event rather than online. Thirty-six researchers have signed up to this research forum.
- piloted a new Care Home Managers Forum where we bring together care home managers from across Scotland and researchers from across the UK who are interested in supporting research in care homes. Forty managers have signed up.
- bid for one feasibility trial in collaboration with the Neuroprogressive and Dementia Network (NDN).
- organised the second ENRICH Scotland conference, which was held in March 2024 in Edinburgh Zoo. The feedback was overwhelmingly positive.
- published a descriptive paper in an academic journal explaining ENRICH Scotland and our model to enable research in care homes <https://doi.org/10.12968/nrec.2022.0030>
- regularly updated our blog aimed at care home staff, and engagement on Facebook and X.
- attended four conferences where we introduced our ENRICH model through oral presentations, stalls and posters.

If you would like more information about ENRICH Scotland, visit www.nhsresearchscotland.org.uk/research-in-scotland/facilities/enrich

SDRC Conference 2023

The 8th Annual Scottish Dementia Research Consortium (SDRC) Conference was held on 25 and 26 April 2023 at the Radisson Blu Glasgow.

The two-day event, titled 'Looking back and looking forward', celebrated the 10th anniversary of the SDRC in which we marked our achievements and discussed plans for the future. We brought together over 180 researchers from all disciplines and career stages, clinicians as well as many others with an interest in dementia research.

The main sessions included a mix of lectures, presentations, workshops, and breakout sessions. The refreshment and lunch breaks included poster presentations from SDRC researcher members and exhibitor stands from organisations across the country. As with all SDRC events, there was plenty opportunity for attendees to network, learn about others' research and form new collaborative partnerships.

Ongoing research across Scotland

The Conference provided a broad platform for sharing brain health and dementia research activity. On the first day, members of the SDRC Executive Committee updated on ongoing research and achievements on their respective: Diagnosis, Fundamental Science, Living with Dementia, Informatics and Technology, and Prevention.

From beyond the SDRC, we also heard from research partners and friends from around Scotland:

- Alzheimer Scotland
- Brain Health Scotland
- SINAPSE
- SULSA
- Neuroprogressive and Dementia Network
- ENRICH
- Alzheimer's Research UK

Our programme reached beyond dementia research, covering many aspects of brain health including delirium, Parkinson's, small vessel disease, stroke and traumatic brain injury.

The conference, as with every year, provided an opportunity for early career researchers to share their work.

We were also delighted to hear from those with lived experience, including people living with dementia and carers, who discussed participating in research from their own perspective.

Celebrating achievements

One of the highlights of the SDRC Conference is being able to spotlight specific researchers' achievements and acknowledge the contribution from researchers across different career stages.

On day 1, we awarded the Most Published Prize to Professor Craig Ritchie, for publishing the highest number of papers in brain health and dementia research in Scotland in 2022.

On day 2, we awarded the Early Career Research prize to Dr Laura McWhirter, who was selected by SDRC Executive Committee members following an open nomination process.

In addition to these awards, there were also on-the-day prizes given out to researchers for each day: a best poster prize and a best early career researcher speaker prize. The poster prize winners were Nicole Edwards and Lisa Davison, and the speaker prize winners were Rose Penfold and Una Clancy.

Another exciting announcement that we made at the Conference was the recipient of the Alzheimer Scotland Student Research Programme funding. The recipients are Dr Anna Jack Waugh and Dr Eileen Harkess-Murphy from the University of the West of Scotland. This project will centre around trauma-informed approach to dementia diagnosis. You can find out more about this specific project on page 26.

Looking ahead

The programme allowed time for discussing future plans with attendees. This was the focus of our breakout sessions – an opportunity to gather insight from delegates on how we make Scotland the best place for research. Topics included: supporting early career researchers, contributing to the SIGN guidelines and discussing the priorities of the newly formed Brain Health ARC.

You can view a full summary of the SDRC Conference 2023 on our website. (www.sdrc.scot/past-conferences)

Become an SDRC member today

The SDRC is open to everyone who is taking part or is interested in dementia and brain health research.

There are many benefits to being an SDRC member. These include:

- Invitations to attend members only events to discuss dementia research
- Linking and networking with other members
- Opportunities to showcase your research and current projects to a wide audience
- Gain career advice from world leading dementia researchers

If you would like to become a member, please visit www.sdrc.scot/join



**Alzheimer
Scotland**



Scottish Dementia
Research Consortium

Scottish Dementia Research Consortium

A 81 Oxford Street
Glasgow G5 9EP
E SDRC@alzscot.org

 [@SDRC_research](https://twitter.com/SDRC_research)

www.alzscot.org

Alzheimer Scotland – Action on Dementia is a company limited by guarantee, registered in Scotland 149069. Registered office: 160 Dundee Street, Edinburgh EH11 1DQ. It is recognised as a charity by the Office of the Scottish Charity Regulator, no. SC022315.