

DECIPHER

Centre for Development, Evaluation, Complexity
and Implementation in Public Health Improvement
A Public Health Research Centre of Excellence



ANNUAL REPORT 2023/24



Ymchwil Iechyd
a Gofal **Cymru**
Health and Care
Research **Wales**



Ariennir gan
Lywodraeth Cymru
Funded by
Welsh Government

<https://decipher.uk.net>



1. INTRODUCTION

On behalf of DECIPHer (The Centre for Development, Evaluation, Complexity and Implementation in Public Health Improvement), I am pleased to present our fourth annual report.

As a centre, we bring together multidisciplinary experts to tackle key population health issues with a focus on the health and well-being of children and young people. However, we increasingly apply our world-leading methodological expertise across a broader range of populations. In this, we collaborate with academic centres across Wales, the UK and internationally, and work closely with partners in Public Health Wales (PHW) and other national and local stakeholders. We place great emphasis on involving the public in our work, from research development and study conduct, to translation and impact.

We build unique transdisciplinary capacity in Wales to address public health research issues. This includes research-led teaching, internationally renowned short courses, undergraduate and postgraduate placements, international secondments and a researcher development programme. Our emphasis on capacity development has supported Early Career Researchers to move from PhDs to Fellowships and on to become Principal Investigators. Many current DECIPHer investigators have benefited from this programme. We are now developing the next generation of research leaders who are co-leading our research programmes and are pleased to share some of their career development experiences in this report.

We develop Public Health Improvement Research Networks (PHIRNs) that build capacity across research, policy, practice and public communities. These have supported the development of effective structures and systems to deliver benefits for multiple audiences. For example, The School Health Research Network (SHRN) supports Welsh Government national indicators. It is mentioned in over 30 Welsh strategy documents and provides data for Public Health Boards (PHBs), Educational Consortia and schools across Wales. We continue to develop our networks, including UK and international SHRN diffusion.

With this capacity, we facilitate Research Development Groups (RDGs) to secure research funding for the centre and for Wales, support the conduct of studies and translate evidence across four research programme areas. These are i) Healthy Public Policy, ii) Healthy Settings and Organisations, iii) Healthy Social Relationships and iv) Methodological Innovation in Intervention Science. Our progress in these cross-cutting programmes is outlined within, along with our successes in developing collaborations and achieving population impacts.



A stylized handwritten signature in black ink, appearing to read 'S Murphy'.

Professor Simon Murphy
Director of DECIPHer

Mae'r ddogfen hon hefyd ar gael yn Gymraeg. This document is also available in Welsh.

2. WHO WE ARE AND HOW WE OPERATE

DECIPHer investigators are drawn from the School of Social Sciences and School of Medicine at Cardiff University and Public Health Wales. We come together as a Strategic Partnership Board to oversee the work of the Centre and are supported by a Public Involvement Steering Group and a Scientific Advisory Board. The day-to-day delivery and management of the Centre resides with the DECIPHer Executive Team.

DECIPHer Executive Team



Dr Rhiannon Evans

Co-Lead Healthy Families and Relationships



Dr Jemma Hawkins

Co-Lead PHIRNS and Methodological Innovation in Public Health Science



Dr Sara Jones

DECIPHer Centre Manager



Prof Graham Moore

Deputy Director of DECIPHer and Co-Lead Healthy Public Policy



Dr Kelly Morgan

Contract Research Representative



Prof Simon Murphy

Director of DECIPHer and Co-Lead SHRN and Healthy Settings and Organisations



Dr Honor Young

Co-Lead SHRN and Healthy Settings and Organisations

DECIPHer Co-Investigators



Dr Julie Bishop

Co-Lead PHIRNS



Prof Amanda Robinson

Co-Lead Healthy Public Policy



Prof Mike Robling

Co-Lead Methodological Innovation in Public Health Science



Dr Jeremy Segrott

Public Involvement Lead and Co-Lead Healthy Families and Relationships



Prof James White

Research Development Support Group

3. CORE METRICS

Health and Care
Research Wales
infrastructure award
to the group



Direct
funding
awarded

£509.5k

Jobs created
through direct
funding



Grants won during reporting period

Grants won	Led by group	Group collaborating
Number	10	13
Value	£0.80m	£20.10m
Funding to Wales	£0.80m	£3.81m
Funding to group	£0.69m	£1.30m
Additional jobs created for Wales	6	24
Additional jobs created for group	5	10



Number of publications



Number of public
engagement events



Number of public
involvement opportunities



During this last reporting period DECIPHER has secured 23 new grants with a value of just under £21M.

Of this, £4.61M came to Wales and just under £2M to our centre. This meant we created 30 new research posts in Wales, half of them in DECIPHER. A number of large scale, high profile grants include:

- A major award from the National Institute for Health and Care Research (NIHR) Public Health Research Programme – to create a Health Determinants Research Collaboration (HDRC) within Rhondda Cynon Taf.
- A new UK hub for behavioural research - Behavioural Research UK (BR-UK), funded with a £12m five-year grant from the Economic and Social Research Council (ESRC), which will form the centrepiece of ESRC investment in behavioural research to help tackle societal and economic challenges. This is a collaboration across eight UK universities covering all four UK nations. The Wales arm will be led from DECIPHER in collaboration with the School of Psychology.

- Funding from NIHR for the Public Health Review Team who will produce reviews that respond to knowledge gaps in priority areas within the NIHR Public Health Research Programme's remit. They will identify research questions that can inform future public health research and have a significant policy and practice impact.

The Centre's research agenda focuses on the most critical public health issues facing society. We published 54 outputs during this period, covering academic papers, reports and briefing papers for a wide range of audiences. Academic publications are focussed on the leading national and international journals across a wide range of disciplines including public health, education, social policy and social care.

We also communicate with briefing papers for public and third sector audiences including Exchange Wales and Thrive Magazine for care-experienced groups. We also place great emphasis on engaging with and involving the public in our work. This year we undertook 117 engagement events and supported 74 public involvement opportunities. You can read more about these activities later in the report.

4. DEVELOPING CAPACITY

4.1 Public Health Improvement Research Networks (PHIRNS)



Dr Jemma Hawkins



Dr Julie Bishop

DECIPHer develops network infrastructure to co-produce intervention research and promote translation into policy and practice by drawing on strong partnerships. Over the past 12 months this has included continued work as part of the National Institute for Health and Care Research Public Health Intervention Responsive Studies Teams (PHIRSTs) where we partner with local authorities to evaluate local health interventions, as well as contributions within other UK-wide networks such as the GENIUS food network.

Alongside this, our close collaboration with Public Health Wales continues to include co-location of staff within DECIPHer, alongside new capacity development, engagement and our collaborative work on the School Health Research Network (SHRN). Some updates on this work are provided below.

£5 million awarded to reduce health inequality

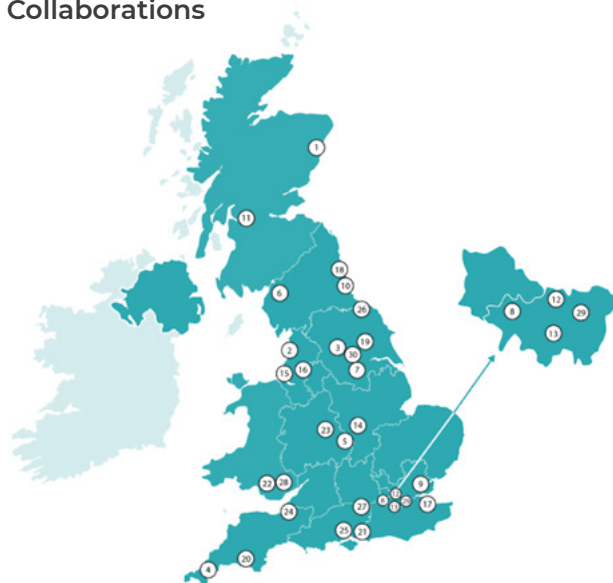
DECIPHer was successful in supporting Rhondda Cynon Taf Council in its £5M bid to become a Health Determinants Research Collaboration (HDRC). The collaboration, co-led by the Wales Centre for Public Policy, will bring together partners from Cardiff University, Cwm Taf Morgannwg Health Board, Interlink RCT and Public Health Wales.

We are now part of a network of 30 HDRCs across the UK. These are hosted by local authorities who work with universities or institutions with expertise in the wider determinants of health. Wider determinants of health refer to the broader factors that influence a person's overall health and well-being, such as air and water quality, housing quality, access to green spaces, employment and working conditions, education and literacy.

The project will bring together local government knowledge with research skills from the academic community. The HDRC will be looking to actively work with Rhondda Cynon Taf residents and listen to people's views. It will also involve them appropriately in shaping and undertaking research.

More information can be read here: <https://www.nihr.ac.uk/explore-nihr/support/health-determinants-research-collaborations.htm>

Current Health Determinants Research Collaborations



- | | | |
|-----------------------|----------------------------|------------------------|
| 1. HDRC Aberdeen | 13. HDRC Lambeth | 24. HDRC Somerset |
| 2. HDRC Blackpool | 14. HDRC Leicestershire | 25. HDRC Southampton |
| 3. HDRC Bradford | 15. HDRC Liverpool | 26. HDRC South Tees |
| 4. HDRC Cornwall | 16. HDRC Manchester | 27. HDRC Surrey |
| 5. HDRC Coventry | 17. HDRC Medway | 28. HDRC Torfaen |
| 6. HDRC Cumberland | 18. HDRC Newcastle | 29. HDRC Tower Hamlets |
| 7. HDRC Doncaster | 19. HDRC North Yorkshire | 30. HDRC Wakefield |
| 8. HDRC Ealing | 20. HDRC Plymouth | |
| 9. HDRC Greater Essex | 21. HDRC Portsmouth | |
| 10. HDRC Gateshead | 22. HDRC Rhondda Cynon Taf | |
| 11. HDRC Glasgow | 23. HDRC Sandwell | |
| 12. HDRC Islington | | |

Dr Sara Long, Research Fellow, on her new joint DECIPHer/Public Health Wales post:

In 2014, I made the move to Cardiff to take up a research role in Public Health Wales (PHW). Through this role, I had the pleasure of working with PHW colleagues, including our named collaborator, Julie Bishop. It was during this time that I began working, albeit less formally, on the joint PHW and Cardiff University agenda. Guided by senior colleagues in PHW, I began to develop a relationship with DECIPHer. In these formative years, I explored ways to collaborate, setting the foundations for reciprocal relationships with policy, practice and research colleagues. I unofficially had a foot in both Cardiff University and PHW camps, whereby I would go to DECIPHer for a day a week to hear about the research going on. At the same time, via my role in PHW, I heard about the successes and challenges of delivering Public Health programmes, and the research and evaluation of such programmes. I officially joined DECIPHer in April 2016, where I have spent the best part of a decade establishing my research career.

Coming full circle

To further solidify the strategic relationship between DECIPHer and PHW, towards the end of 2023, a joint post with a 50/50 funding model was advertised. I was appointed to this post in January 2024. Based on the principles of Academic Public Health (Academy of Medical Sciences, 2020^[i]) and embedded researchers (Kneale et al., 2023^[ii]), I am excited and cautious about this post in equal measure. There is a lot of work to be done, and working across different disciplines, agendas and organisations can be challenging.

I have first-hand experience of this through an Economic and Social Research Council (ESRC) funded study led by myself, which consisted of co-applicants from a range of disciplines. This meant different levels of understanding of certain aspects of the study (for example, discipline specific technicalities), and different languages, expectations and priorities. Striving towards a mutual understanding and common objectives on projects like these requires time,



patience and a strategic approach, and my experiences so far have set me in good stead for my new role.

Planning and goal setting

In terms of how this role works in practice, I have a virtual and in-person presence at both organisations. I have strong and established relationships within the University and I am working hard to strengthen these in the context of my new role. I am also busy embedding into PHW structures, developing relationships and listening to others about what they think the priorities are. Through this post, I am in the process of establishing a dual-organisational workplan to outline key priorities over the next 1-3 years. In the broadest sense, we aspire to carry out policy and practice relevant research and facilitate evidence-informed policy and practice. We will achieve this by:

- 1) Developing and implementing policies and structures that enable joint research between both organisations.
- 2) Establishing and delivering joint research questions, projects and outputs.
- 3) Creating and facilitating capacity development opportunities for PHW colleagues that enable them to work towards 1) and 2).
- 4) Finding a way to promote and celebrate our work and develop research culture.

I am proud to say that I have been building my career with the DECIPHer Centre and PHW for the best part of a decade, and I'm excited about what the future holds.



[i] <https://acmedsci.ac.uk/file-download/23932583>

[ii] https://eppi.ioe.ac.uk/CMS/Portals/0/EmbedResReport_LO051023.pdf

4.2 National and International Short Courses

DECIPHER Short Courses



A key element of DECIPHER's methods research programme is our suite of short courses that provide training on methods for public health intervention science, covering intervention development, evaluation and adaptation. Each year we deliver a one-week summer course that covers an introduction to a variety of methods and principles, this is followed later in the year with individual one-day courses which take a deeper dive into particular methods. We also deliver bespoke versions of these courses to research and practitioner groups across the UK and internationally.

Back in the classroom

The past 12 months have been particularly busy with course delivery. The 2023-24 period has seen the full return to in-person delivery for our Cardiff-based courses, with our one-week summer course taking place in person for the first time since 2019. In total, 31 delegates attended the course, and it was brilliant to be able to get to know them between sessions and in the social events running throughout the week. We hosted the course in DECIPHER's new location, Cardiff University's Social Science Research Park (SPARK). The attendees had diverse backgrounds, representing 13 different fields of health and care sciences, and were from several locations across the UK as well as internationally. This included five members of Health and Care Research Wales faculty currently

undertaking fellowships. The course received the most positive feedback to date, with one delegate commenting: "This has been a brilliant learning experience. The whole week was so well thought through. The length of lectures, break times and social events created an informative, supportive and friendly environment".

This year the courses attracted an international audience, including a group from Peru that we are collaborating with, who hope to use DECIPHER-developed methods for adapting interventions.

Extending our reach

In September 2023, we delivered our specialist one-day courses on Feasibility Studies, Process Evaluation and Adapting Interventions to New Contexts, which provide an in-depth look at specific methods based on methodological guidance DECIPHER has led or been involved with. These courses are a key way through which our methodological innovations, developed in Wales, become diffused to other national and international contexts. For example, this year the courses attracted an international audience, including a group from Peru whom we are collaborating with. They hope to use DECIPHER-developed methods for adapting interventions to transfer a dementia support intervention from the USA into the Peruvian context.

A tailored approach

We've also been busy with bespoke courses this year, with five delivered in total. We delivered a one-day online course on process evaluation to government employees in the Department for Environment Food & Rural Affairs (Defra) in March 2023. The course content was adapted to the organisation's area of work and to incorporate their own methodological guides. The course was incredibly popular and oversubscribed with 55 employees expressing an interest in attending.

“Feedback was outstanding from all... There was a great buzz in the air each day” Prof Laurence Taggart

In May 2023, we delivered a three-day in-person course to staff at Ulster University in Belfast which focused on introducing methods used for developing and evaluating complex interventions. The course was hosted by Prof Laurence Taggart. Reflecting on the course, he said: “We had nearly 40 PhD researchers, early career researchers and university Lecturers/ Professors attend this course. Feedback was outstanding from all. The relevance of the content, the expertise of the staff delivering the course, the real-life research examples used to support the theory/methodology, the interactive sessions, and the space and time to talk to the DECIPHer staff was amazing. There was a great buzz in the air each day. I would highly recommend other universities to consider inviting the DECIPHer staff to deliver this course.”

International audiences

In May and June 2023, we delivered our accredited doctoral training course at Karolinska Institute in Stockholm for the third time to fifteen new students, including a combination of online, pre-recorded and in-person lectures and discussion groups. In August, we delivered another bespoke online Process Evaluation course, this time to staff at Monash University Central Clinical School in Australia, who identified DECIPHer as an internationally recognised provider of content in this area. Course feedback was very positive and we learned a lot about ways of working in the health sector in Australia. This was a great opportunity to build new connections and networks.

Finally, in December 2023 and March 2024, we delivered a two-part course to 28 academic and clinical researchers working across Oxford Brookes University's Institute of Applied Health

Research (OxInAHR) and Oxford University Hospital Trust. Attendees represented a range of healthcare fields. The course covered most elements of our Cardiff summer course and received very positive feedback.

Dr Samantha Garay, Research Associate, attended the 2023 DECIPHer five-day short course ‘Methodological Innovation in Public Health Intervention Science: Development, Evaluation, Adaption and Implementation’.



In July, I was lucky enough to have the opportunity to attend the DECIPHer summer short course. I had previously come across this course during my PhD, but was not able to attend, so when I started my role at DECIPHer I knew this was something that I really wanted to do. I was especially motivated to take part as I recognised that it would be extremely helpful in my current role, which involves evaluating public health interventions as part of the PHIRST scheme.

This was an extremely engaging and comprehensive course, with speakers from both within DECIPHer and from external organisations. The aspects of the course that I found particularly helpful were the sessions on logic models and evaluability assessments.

“It was a fantastic opportunity to meet others interested in the area of behaviour change and interventions”

The course contains numerous interactive group sessions which I always looked forward to, as these really helped me to consolidate and put into practice what we had been learning about in the sessions.

It was a fantastic opportunity to meet others interested in the area of behaviour change and interventions and offered opportunities to develop collaborations with those with similar research interests. Networking was encouraged throughout and plenty of opportunities were provided to do this, whether over Welsh cakes and tea, table tennis competitions or the social events in the evenings.

Overall, it was a brilliant week and I highly recommend anyone interested in behaviour change and interventions to consider taking part.

4.3 Supporting Research and Professional Services Staff Development

This year marked further success for both our research and professional service staff in their career progression and we are pleased to congratulate them here and share some of their experiences and stories.

In terms of postgraduate success, Dr Rachel Parker was awarded a PhD from Cardiff University for her work on adolescent self-harm prevention intervention and Dr Amy Bond was also awarded a PhD from Cardiff University for her thesis on *Engaging Low-Income Families in School-based Health Interventions: A case study of Food and Fun Clubs in Wales*. Dr Swetha Sampathkumar (Warwick University) was awarded a PhD for her thesis on *Personalized, interpregnancy lifestyle intervention to prevent Gestational Diabetes Mellitus in India: Co-development and Testing*. Whilst Bethan Pell won the 2023 Cardiff heat of the Three Minute Thesis (3MT) competition.

Other notable achievements include Dr Yulia Shenderovich who was nominated for a 2023 Cardiff University Celebrating Excellence Award in the category of Rising Star – Early Career Academic. Dr Rebecca Anthony was awarded a place on the Great Western 4 (GW4) Crucible programme on Tackling Health Inequalities and Driving Social Justice through Radical Interdisciplinarity. Rebecca was also nominated for a prize as part of the Association for Child and Adolescent Mental Health's (ACAMH) award ceremony. Cardiff University also elected the ADAPT team as their nominee for an MRC Impact Prize for team science on the basis of this work in developing methodological guidance for the adaption of evidence to new contexts.

Prof Simon Murphy was invited to be on the Advisory Board for the new NIHR Research Support Service Specialist for Public Health, whilst Prof James White was invited to be an expert advisor on the Joint Combating Drugs Unit (JCUDU) on preventing children and young people from using drugs to inform the UK Government's 10-year Drugs Strategy. In terms of research funding panels, Dr Jemma Hawkins was appointed to sit on the funding panel for the Medical Research Council Public Health Intervention Development funding scheme.

Below we hear from a number of staff and students working in different roles within DECIPHer and those who have gained experience from internships.

Isabel Lang, DECIPHer PhD student, writes about her three-month placement in the Children, Young People and Education research team within Senedd Research.



After securing funding for four further years of study from the Economic and Social Science Research Council (ESRC) through their 1+3 studentship, my Master's was followed by a PhD, which I am now in the second year of. My PhD explores university student and staff perspectives on university culture and student well-being in a Welsh context using mixed-methods, and is based within the School of Social Sciences at Cardiff University and affiliated with DECIPHer. I am very grateful that the ESRC 1+3 studentship supports students to take time out of their PhD to undertake an internship that is relevant to their research, with their PhD funding and submission date extended for the equivalent time of their internship.

“This knowledge is invaluable for my PhD and beyond”

I was excited to see the three-month UKRI policy internships advertised as they combined my interest in research and policy. After applying, when I received an offer to undertake the internship, I felt surprised and excited.

An ideal opportunity

In Senedd Research I was placed within the Children, Young People and Education (CYPE) research team, which I was immediately welcomed into. My main tasks included:

- Writing responses to enquiries from Senedd members or from their research support staff.
- Writing briefings.
- Writing an article and a constituent factsheet on childcare entitlement in Wales and England.
- Sending a weekly email to the CYPE research team.

- Attending weekly CYPE committee meetings on 'access to education and childcare for disabled children and young people', which was the main enquiry topic the CYPE committee was looking into at the time of my internship.
- Attending weekly CYPE internal team meetings.
- Attending a workshop for all the Senedd researchers where we received a talk from a BBC Wales news correspondent about their role.

What have I learned?

This internship has taught me about the importance of evidence being presented concisely and accessibly, and how evidence is used to shape and scrutinise policy. Also, the importance of collaboration between different groups of people (e.g. the public, researchers and staff in third sector organisations) to develop evidence that can be used to improve policy and practice. This knowledge is invaluable for my PhD and beyond, and will influence how I collect data and present the findings of my own research.

Jess Lennon, DECIPHER Research Assistant, updates on the SCeTCH project, which asks: Could providing free e-cigarette starter kits in homeless services aid smoking cessation?



Up to 82% of people experiencing homelessness smoke, compared with around 14% of the wider population. E-cigarettes are the most popular cessation aid but those experiencing homelessness often cannot afford the initial start-up cost. SCeTCH (Smoking Cessation Trial in Centres for the Homeless) is a multi-centre cluster randomised controlled trial that aims to compare provision of an e-cigarette starter kit to usual care in a sample of homeless services.

- Data collection was completed in December 2023.
- 32 centres across England, Wales and Scotland took part. We trained 220 members of staff and recruited 477 participants.
- Analysis is underway and our team has been reflecting on the lessons and challenges.

SCeTCH was originally designed to be undertaken in day centres, but in response to the pandemic, homeless services in Wales

predominantly shifted to a residential model of support. We therefore had to expand our recruitment parameters to include residential centres. The centres taking part in the trial experienced many challenges including lack of funding and staff shortages. This may have resulted in many potential centres deciding not to take part in the trial.

“Being a friendly face, explaining the trial to them directly and developing trusting, non-judgemental relationships was key”

Individuals experiencing homelessness are often under-represented in research, and this population can understandably be cautious of outside individuals and services based on past experiences. Recruitment and follow-up visits meant that I spent a considerable amount of time at the centres and with the residents, developing friendly and trusting relationships with many. This resulted in participants being more likely to return for follow-up assessments. Other residents helped when I was struggling to make contact with some individuals. Being a friendly face, explaining the trial to them directly and developing trusting non-judgemental relationships was key.

It was important to consider the unique needs of those taking part. While we had a defined protocol to ensure the trial was carried out in the same way in all centres, it was important to be flexible and pragmatic within the confines of this. Being part of SCeTCH has been a unique

and unforgettable experience. It has challenged the perception we often hear in research or services aimed at individuals with high health and social challenges as being ‘hard to reach populations’. Our participants made it clear that they wanted to stop smoking, we recruited easily and had good follow-up rates. They were not ‘hard to reach’ – we, as researchers just have to understand and be flexible to the unique needs of this population.



Megan Hamilton, Master's International Criminology and Criminal Justice student, took on a five-month internship at DECIPHer.



I became interested in a career in research due to my undergraduate course and the heavy focus on research methods.

During my Master's degree, I completed a 60-hour placement in SPARK with the Violence Research Group. In this placement, I expressed my interests in learning more about qualitative research. This led me to meet the Implementation and Process Evaluation of South Wales Hospital Based Violence Intervention Programmes (PREVIP) team and begin a five-month internship with DECIPHer through Cardiff University Jobshop.

"I have gained confidence expressing my views in meetings and talking to professionals"

My supervisor, Jordan Van Godwin, was very welcoming and ensured I had the opportunity to take part in DECIPHer events and to communicate with other research teams. I was encouraged to learn new qualitative research skills, such as the use of NVIVO, and was aided in improving these skills. On the project, I took part in interviews, analysis and the write-up process. I have gained confidence expressing my views in meetings and talking to professionals.

DECIPHer was extremely welcoming; when I had a question, staff outside of my research group would always be willing to assist me and answer my questions. I specifically enjoyed attending the DECIPHer forum where other DECIPHer teams presented the research they were working on.

The skills that I learnt and developed in my placement have given me the skills for a career in research. I have recently started my new role as a Research Assistant in SPARK with the Violence Research Group. I believe my internship with DECIPHer has assisted me in getting my current role.

I thoroughly recommend an internship with DECIPHer!

Sneha Salel, Master's Psychology student at Cardiff University, took a three-month summer placement at DECIPHer.



I have always had a keen interest in people, their behaviours and understanding why they do the things that they do. While I always knew I wanted to pursue a career in psychology, I was unsure about what kind of role I would want to work in. The course I am currently doing is very research intensive, which was when I realised that I enjoyed research. I secured a three-month summer placement at DECIPHer as the research they did aligned with my interests.

I was impressed by the range of research being done at DECIPHer. Although I was primarily working on the Healthy Working Wales project with Dr Jemma Hawkins, Dr Kelly Morgan and Dr Sara Long, I also expressed that I would like to work on multiple projects to develop different skills.

Jemma put me in touch with staff on other projects. As a result, I got to work on reports from the recent SHRN survey in primary schools, help with literature searches for a publication and assist Sara Long to facilitate a training course for Healthy Schools Coordinators. I also picked up new skills, for example in qualitative research.



"I am now confident in my decision to work in research"

It was a great experience being in a work environment surrounded by other researchers, who were very friendly and always open to answer any question. I also had the opportunity to meet other placement students working at different research centres within Spark. It was hard for me to come out of my shell as I was new to the UK and I usually take some time to be comfortable, but DECIPHer helped accelerate that. I should mention that Jemma was a great supervisor! She was always in touch, we had weekly meetings and she kept me accountable and motivated.

Overall, I have learnt so much from my time with DECIPHer and I have so many great memories. I am now confident in my decision to work in research and I am currently working as a Research Assistant in the School of Psychology at Cardiff University. I highly recommend doing a placement at DECIPHer.

Clare Olson, Communications Officer

After my degree in English Literature, I stayed in London and worked as a copy editor for women's magazines. After the birth of my first child, I moved back to Cardiff and jumped around in admin jobs working out my next steps. As print journalism was in decline this no longer seemed a viable option. After the birth of my second child I started a new job as Publicity Officer at DECIPHer. I didn't have a huge amount of experience in social media in an academic context, but I learnt on the job.



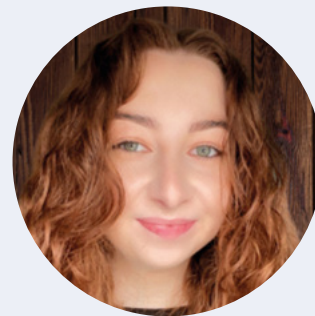
“What I like about working at DECIPHer is that you are given freedom, and along with that, trust, to grow and learn”

Even now I have a lot of head-scratching moments breaking down complicated findings into something engaging. My baseline is that if I can understand it, everyone else can! What I like about working at DECIPHer is that you are given freedom, and along with that, trust, to grow and learn. Whereas in previous jobs I was given a strict brief to follow, here I can generate ideas and see them through from start to finish. A couple of years into my role, it was decided that we needed a new website. I asked to take it on as a long-term project as I wanted a more in-depth understanding of web design and found I really enjoyed building websites and design in general.

Last year I moved up a grade from Publicity Officer to Communications Officer and I have become a line manager for the first time and again, thanks to the supportive systems in place in DECIPHer, have found this an easy and enjoyable progression. Since starting at DECIPHer, I have regained the confidence I had in my 20s and discovered a creative side I didn't know I had.

Lucy Griffiths, Events and Communications Assistant

From the age of 20 I have had more hospitality jobs than I can shake a stick at. However, since graduating with a degree in Business Studies in 2019, I decided it was time to get a 'big girl' job and start putting said degree to use. I decided to get my foot on the corporate ladder by applying for a Grade 2 position in Cardiff University, and to my amazement, I got the job! I worked as an Administrative Assistant for two and a half years and was fortunate to be given opportunities to try my hand in a few different areas of work, alongside my day-to-day duties. It was here that I decided on my chosen career path - Communications!



“I feel grateful to be able to contribute to even a small part of the drive to seek positive change and awareness”

After a brief hiatus from Cardiff in attempts to gain some further communications experience, I returned in the summer last year when I landed a role in DECIPHer as a Communications and Events Assistant. This has been a joy and a rewarding experience since joining the team, and I am grateful to be working with such a wonderful array of people. The nature of my role allows me to engage in a diverse range of tasks, keeping me on my toes as I learn on the go, navigating my first proper job in events and communications. Whether it's helping to plan and deliver short courses, website maintenance, designing anything on Canva (my personal favourite as it plays to my creative side), or planning social activities for our team, there's always something new and fresh to work on. This variety has given me invaluable opportunities for learning and skill development.

I find much fulfilment in working for DECIPHer. Seeing the tangible impact of the courses, research and everything in-between, not only on a local level, but the reach the team has internationally, is inspiring. I feel grateful to be able to contribute to even a small part of the drive to seek positive change and awareness when tackling public health issues – as the DECIPHer team does so well. I look forward to the future of my career journey and am excited to see what my next chapter at DECIPHer brings.

5. RESEARCH PROGRAMMES

5.1 Healthy Public Policy



Prof Graham Moore



Prof Amanda Robinson

The Healthy Public Policy programme aims to:

- i) Provide timely and robust evidence to influence decisions by national and local government organisations, in order to improve population health and reduce inequalities.
- ii) Evaluate implementation and impacts of policy decisions on population health and inequalities.

A key study within the policy programme in the early stages of the current cycle of DECIPHer was our NIHR funded evaluation of the impacts of Tobacco Products Directive regulations on young people's use of e-cigarettes. The final report⁽¹⁾ for this study, which included findings which had already featured in a review informing NICE guidance⁽²⁾ and generated international media attention, was published in 2023. This project also developed a number of key academic partnerships which led to DECIPHer taking a minor role within a £6m UK Prevention Research Partnership award focused on commercial determinants of health, SPECTRUM. Within SPECTRUM⁽³⁾, we supported the scale out of the longstanding English Smoking and Alcohol Toolkit surveys to Wales and Scotland as a new data source to inform policy debates and decisions. Partnerships formed through this project also led to DECIPHer involvement

in research focused on use of e-cigarettes to support smoking cessation among people experiencing homelessness⁽⁴⁾.

Recently, these partnerships have led to more substantial DECIPHer involvement in a new £10m ESRC consortium, Behavioural Research UK⁽⁵⁾ (BR-UK). This new consortium is funded for five years from November 2023, forming the centrepiece for a wider ESRC programme to build national capability for behavioural research. It will conduct interdisciplinary behavioural research which aims to contribute to addressing major societal and policy challenges. BR-UK is led by Prof Linda Bauld from the University of Edinburgh and Prof Susan Michie from University College London. It involves behavioural researchers from a range of academic disciplines in eight UK universities, along with partners including the Scottish Government, Welsh Government, government departments and agencies in Northern Ireland, the UK Health Security Agency, Public Health Wales, the Transport Research Laboratory and Zinc (a company working with entrepreneurs). The Wales arm is led from DECIPHer by Prof Graham Moore, who will co-lead the Health and Well-being Theme in partnership with Dr Laura MacGowan in the Centre for Public Health in Queen's University Belfast. The Environments and Sustainability Theme is also co-led from Cardiff University within the School of Psychology.

Other key areas of work for the policy programme have included the ongoing Evaluation of Statutory Guidance for Embedding a Whole-School Approach to Mental Health and Well-being in Schools. This is currently mid-way through a three-year mixed methods study which seeks to understand not only the Framework's impact on mental well-being, but also the nuances of which school systems and practices work well, in what context, and for whom⁽⁶⁾.

1. <https://www.journalslibrary.nihr.ac.uk/hta/WTMH3198#/abstract>
2. <https://www.nice.org.uk/guidance/ng209/evidence/f-g-cigarettes-and-young-people-pdf-10890777857>
3. <https://spectrum.ed.ac.uk/>

4. <https://www.ucl.ac.uk/news/2021/jun/uk-wide-e-cigarette-trial-help-homeless-quit-smoking>
5. <https://www.ed.ac.uk/usher/behavioural-research-uk>
6. <https://blogs.cardiff.ac.uk/mental-health/taking-a-whole-school-approach-to-mental-health-in-wales/>

Taking a whole-school approach to mental health in Wales

Schools are increasingly being considered as a site for delivering interventions which promote good emotional well-being and prevent the occurrence or escalation of mental health difficulties. Research in recent years has shown that school-based health and well-being interventions are most likely to bring about change when applied across the whole-school system.

What is in the Welsh Government Framework?

The Welsh Government Framework on Embedding a Whole-School Approach to Emotional and Mental Well-being outlines the reasoning behind the implementation of a whole-school approach to mental well-being. It encourages schools to consider what they have in place to support emotional and mental well-being. All schools in Wales are required to

consider the Framework in the development of their vision, strategy and policies. Welsh Government are clear that they do not intend to give rigid guidelines. To support this, Public Health Wales (PHW) have developed an accompanying self-assessment tool and offers schools access to an assigned PHW coordinator.

What is our evaluation seeking to achieve?

Funded by the Wolfson Centre for Young People's Mental Health, our team within DECIPHER are conducting an evaluation of the Framework. The research will involve interviews with children, young people, teaching staff and relevant professionals working within education. We will also carry out analysis of SHRN survey data collected nationally within schools between 2002 and 2025.

As part of the evaluation, DECIPHER researchers working in the Wolfson Centre for Young People's Mental Health spoke with primary and secondary school pupils. They asked them to create posters of 'safe' people and spaces in school and how they would improve the school if they were Headteacher.

If I were headteacher for a day... Ideas for wellbeing from pupils across Wales

In 2023, we spoke with 132 primary and secondary school pupils as part of our evaluation of the Whole School Approach to Emotional and Mental Wellbeing and asked them, if they were headteacher of their school, what they would do to improve pupil wellbeing. Below is a summary of what they said.

OUTDOOR SPACES

A number of young people wanted to see more outdoor space (and more time in them), both for play and for being quiet and calm.



PUPIL VOICE

Many pupils wanted there to be more opportunities to feedback to teachers and make suggestions, and also wanted to see these acted upon. A few said they wanted to be able to shape school rules and see these implemented more fairly.

RELATIONSHIPS

Young people felt it was important that staff respected learners, and that older pupils are respectful of younger pupils. They wanted all pupils to feel safe to talk about any problems.



TOILETS

A common desire was to ensure that toilets are free from bullying, vandalism and vaping. Young people also wanted to have access to toilets during lesson times (especially girls).



WELLBEING PROVISIONS

A number of participants wanted to see designated wellbeing spaces - or larger ones where these already existed. One pupil suggested daily check-ins for pupils, and another wanted to see wellbeing support for teachers.



RECREATIONAL ACTIVITIES

Some young people wished their school had more extra-curricular activities, including more access to sports equipment and musical instruments.



Safe Spaces in Secondary Schools According to pupils across Wales

In 2023, we spoke with 98 secondary school pupils as part of our evaluation of the Whole School Approach to Emotional and Mental Wellbeing and asked them to create a poster of safe spaces in their school. Below is a summary of what they wrote.

Pupils valued spaces to decompress and get away from learning, challenging peers or being monitored by teachers. These preferred spaces were often quiet and secluded, such as the outer edges of the school grounds, in nature, the library, music rooms, or the classrooms of liked teachers.



Crowded spaces were almost universally experienced as stressful, for example, the school lunch hall and corridors. This was related to both the limited space and the volume of noise. In some schools this was alleviated a little by staggering break times and lesson changeovers.



In schools that had greater security and monitoring, such as key card access on site and security cameras to pick up bullying on the school grounds, pupils acknowledged that these improved feelings of safety.



For some pupils, toilets were problematic spaces in schools. This was due to them being the site for vandalism, and in some cases feeling unclean. Pupils were divided on whether having open plan toilets was positive due to reducing misuse of the space, or negative due to the lack of privacy. Some individuals identified toilets as a safe, secluded space to retreat to.



Pupils acknowledged that, for many, the safety of a space is heavily influenced by the people associated with it. Safe spaces were highly personal, such as where an individual spends break times with their friends. Unsafe spaces were often associated with the risk of bullying.



5.2 Healthy Settings and Organisations



Prof Simon Murphy



Dr Honor Young

The Healthy Settings and Organisations programme aims to develop and evaluate system approaches to improving population health, as well as understanding their implementation.

We have researchers working with schools and communities on a broad range of health priority areas, including mental health and well-being, healthy eating, smoking prevention, alcohol misuse prevention, sexual health and healthy social relationships. Increasingly, this work cuts across our research programmes, drawing on policy, relationship and methodological learning and applying this within complex settings.

Here we highlight a number of our key studies over the last year.

Abbey Rowe, PhD student, on her work about The role of schools in supporting the mental health of neurodivergent young people.

In October 2022, I was absolutely thrilled to be awarded a three-year PhD studentship with DECIPHer and the Wolfson Centre for Young People's Mental Health. Its overarching aim is to understand how the day-to-day practices of secondary schools might have particularly important effects on the mental health and well-being of neurodivergent young people, in particular those with Attention Deficit Hyperactivity Disorder (ADHD).



My ultimate hope is that this research project will lead to insights that can guide the development of neurodiversity-led mental health policies and strategies for schools across Wales. Working within DECIPHer in the new SPARK building has been an incredible journey so far, providing me with the opportunity to learn from leading professionals within the field of young people's mental health. One of the highlights has been attending regular learning events where researchers come together to share and critically discuss their research projects. I am grateful that this study is funded by the Wolfson Foundation via the Wolfson Centre for Young People's Mental Health and supervised by a fantastic, interdisciplinary team of supervisors, including Prof Graham Moore (Social Sciences), Dr Kate Langley (Psychology) and Prof Anita Thapar (Child Psychiatry).

Working with primary schools

DECIPHer has now completed a four-year study (2020-2024) which explored the feasibility of expanding SHRN into primary schools. The final year of the study included a pilot of the School Environment Questionnaire (SEQ) which was adapted from the survey used with secondary schools. In total 123 primary schools participated in the survey. This survey data will enable exploration of school policy and practice impacts on pupil outcomes across primary education. In conjunction, qualitative work explored staff and pupil experiences of completing the student survey in 2022/23, as well as recommendations for enhancing survey inclusivity. These qualitative findings are set to inform survey refinements and adaptations for future activities over the coming years. All reports generated as part of the feasibility study are available online.

Following study completion, the SHRN survey will be rolled out to all mainstream primary schools in Autumn 2024. This will enable the full integration of network activities among primary and secondary schools across the national education and public health system. Subsequently, the next four-year phase of the SHRN will enable future data to shape policies concerning children as young as seven years old and provide a unique and ongoing evidence base for decision making, monitoring and evaluation at national, regional and local levels in Wales.

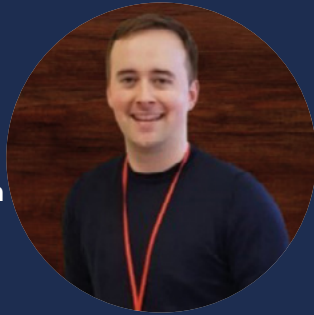
Wellcome Mental Health Data Prize

The School Health Research Network (SHRN) School Level Dashboard was developed as part of the Wellcome Mental Health Data Prize project and is one of three projects to make it through to the Sustainability Phase.

Dr Nick Page, Research Associate, explains its progress so far.

A multidisciplinary team (co-led by Dr Jeremy Segrott, Dr Hayley Reed and Dr Nick Page) aiming to empower schools to use research data to create health promoting environments was declared a winner of the inaugural Wellcome Mental Health Data Prize. The team, which included members of DECIPHer, the Centre for Trials Research, and the Wolfson Centre for Young People's Mental Health, successfully navigated all three phases of funding to be one of three winning teams.

During the **Discovery phase**, the team explored influences on youth perceptions of school connectedness (as a potential protective factor against mental health difficulties) using data from SHRN's Student Health and Well-being (SHW) survey.



The **Prototyping phase** involved the team working in partnership with young people, schools, and public health stakeholders to co-develop a dynamic dashboard (with support from Cardiff University's Development and Integration Team) to enable schools to access bespoke SHW survey data. This first-generation dashboard is available to view (populated using 'dummy' data) on the DECIPHer website. It allows schools to explore patterns and trends in their pupils' (aggregate) responses to the survey by gender and age across a range of key indicators (e.g., mental health, substance use, and school connectedness), providing important context for school-level action. The dashboard also enables schools to track changes in pupil outcomes over time and benchmark against national averages to support localised evaluation.

The team have recently begun the **Sustainability phase** of the project, which involves piloting an updated version of the dashboard with schools in South Wales. The aim of the pilot is to explore potential implementation challenges, as well as considering scale-up and planning for long-term sustainability. Learning from this final phase will help ensure the dashboard is fit for purpose and can be effectively integrated into the school health system in Wales to better support schools in developing health-promoting environments.



5.3 Healthy Social Relationships



Dr Rhiannon Evans



Dr Jeremy Segrott

This programme aims to develop, adapt, and evaluate interventions that focus on children and young people's relationships, particularly relationships within the families that they live in. In the past year, the programme has continued to extend the scope and number of relationships that it studies. It has progressed work with a range of underserved populations, including individuals who experience homelessness and Gypsy, Roma and Traveller communities.

Family-based intervention studies

The **FLOURISH study** is evaluating parenting interventions in Moldova and North Macedonia. In the last year we have generated data on the context of parenting in these countries and have successfully piloted the programmes.

Dr Jeremy Segrott is currently leading a feasibility study on remote delivery of the group-based version of the Triple P parenting programme. Funded by the Nuffield Foundation, the study is exploring how the programme was adapted for remote delivery during the pandemic and identifying what further optimisation may be needed for long-term implementation using this approach. Following this, the feasibility of a future randomised controlled trial is being tested in four localities in England and Wales.

We are also extending our work on interventions that support families where children are at risk of entering care. In 2023 DECIPHer and CASCADE were commissioned by The Fostering Network in Wales to evaluate the Step-Up Step-Down programme. This programme offers specialist, highly trained support for

foster carers to provide preventive assistance to families. Led by CASCADE, we are continuing to deliver the Family VOICE project, which is an implementation evaluation of Family Group Conferencing in the UK.

Care-experienced children and young people

We have studies focused on the health and well-being of care-experienced children and young people. In 2023, Dr Rebecca Anthony commenced her **Health and Care Research Wales (HCRW) Post-Doctoral Research Fellowship**. The mixed-method study will explore young people's experience of feeling loved and appreciated in their relationships, and how this is associated with mental health and well-being. Meanwhile, Lorna Stabler is continuing with her **ESRC PhD studentship**, which is examining the needs of sibling kinship carers. Again, we are continuing to deliver ongoing research grants, including the Health and Care Research Wales-funded **Well-being in Schools and Colleges (WiSC)** study led by Dr Gillian Hewitt and Dr Sarah MacDonald. It is exploring the experiences and needs of care-experienced individuals in educational settings in Wales. We are currently in the process of developing research, policy, and practice recommendations to translate our findings into actionable change.

Underserved populations

In 2023, Dr Rachel Brown, Dr Rhiannon Evans and Prof James White were part of a team from Cardiff University to become registered evaluation providers for the Centre for Homelessness Impact. They are now working to undertake their first evaluation for the Centre, conducting a randomised controlled trial of **Test and Learn**, which provides outreach with a health specialism for individuals experiencing homelessness. This is building on ongoing work by the team, including Dr Rachel Brown and Jess Lennon's research on interventions targeting smoking in this population (see page 11) and Prof James White's systematic review of mortality in the same group. Dr Rhiannon Evans has recently completed a collaboration with Gypsies and Travellers Wales to map communicable disease provision for Public Health Wales to help inform future service delivery.

Dr Rebecca Anthony, Post-Doctoral Research Associate, discusses her four-year fellowship 'Feeling Loved and Appreciated', funded by Health Care Research Wales.



The quote 'Feeling loved and appreciated...' comes from materials created by care-experienced young people to highlight what matters to them and their research priorities. The importance of feeling loved came through as a clear theme.

We know very little from children and young people themselves about their experience of relationships with people such as their carers and teachers. There are currently over 80,000 children and young people living in local authority care in England and Wales ^(1,2). Research indicates that half of care-experienced children and young people have clinically significant social, emotional and behavioural difficulties ⁽³⁾. Research shows that relationships with caregivers that are warm, sensitive and responsive are associated with better mental health and well-being outcomes ⁽⁴⁾. However, many children in care, experience changes to placements. These changes may make it more difficult to feel loved and appreciated and trust

people going forward, aspects associated with mental health and well-being.

My PhD focused on the influence of a young person's relationship with their adoptive parent. This Fellowship is a continuation of that research, using more advanced methods and looking at a wider group of children and young people who have experienced care. I will produce a scoping review of available international evidence and also conduct interviews with care-experienced children and young people in Wales. Following this, there will be a significant quantitative work package, which will involve conducting repeated cross-sectional analysis of the School Health Research Network (SHRN) Student Health and Well-being (SHW) surveys. The final aspect will link the SHW surveys with social care and health datasets using SAIL databank to examine if relationships can moderate the link between early adversity and later mental health and well-being. Two groups of care-experienced children and young people across the UK and a recruited group of foster and kinship carers will be involved throughout. The findings will be available to the public, researchers, local authority organisations and relevant charities through conference presentations, webinars, podcasts, summary findings and academic publications. I also hope to get additional funding to design an animation with children and young people to share widely.



1. UK Government. Children looked after in England including adoptions: Reporting year 2022. In: National Statistics, editor. UK, 2022.
2. Welsh Government. Children looked after. In: StatsWales, editor. Cardiff, Wales: Welsh Government, 2022.
3. Sempik J, Ward H, Darker I. Emotional and Behavioural Difficulties of Children and Young People at Entry into Care. *Clinical Child Psychology and Psychiatry*. 2008;13(2):221-33.
4. Boeldt DL, Rhee SH, Dilalla LF, Mullineaux PY, Schulz-Heik RJ, Corley RP, et al. The Association between Positive Parenting and Externalizing Behavior. *Infant and child development*. 2012;21(1):85-106.

5.4 Methodological Innovations in Public Health Science



Dr Jemma Hawkins



Prof Mike Robling

DECIPHer's methods research programme aims to advance methodological innovation for the development, evaluation and implementation of interventions to improve health and well-being. This includes the development of methodological guidance and the delivery of methods-based short courses to researchers, practitioners and policy makers. To learn more about the training courses we have delivered over the past year, see pages 8-9.

Generating discussion on public health and complex systems intervention science

One mechanism through which DECIPHer researchers contribute to methodological developments in complex intervention science is through the publication of editorials and methodological 'think-pieces' to generate discussion around ways forward for intervention research. In the past 12 months, this has included publication of an editorial exploring best practice in the use of methodological guidance in intervention science⁽¹⁾. The editorial was led by Prof Graham Moore in collaboration with several DECIPHer colleagues and advocates for more critical consideration and explanation of how guidance is applied within complex intervention research.

Another mechanism through which DECIPHer develops methodological innovation is through the publication of case studies from within

our intervention research. One example of this from the past 12 months is the publication of a case study detailing the optimisation of a co-production framework for use in school-based public health intervention research⁽²⁾. This was developed as part of Dr Hayley Reed's PhD and is co-authored by Dr Rhiannon Evans and Prof Simon Murphy. The study puts forward several recommendations for integrating co-production into real world practice for the development of school-based interventions.

Reviewing evidence to inform public health policy and practice

The National Institute for Health and Care Research (NIHR) has recently commissioned its new Public Health Review Team. DECIPHer was successful in the commissioning process as part of a team led by the University of Exeter, and also including the University of Birmingham. Dr Rhiannon Evans from DECIPHer will serve as Deputy Director of the team. The aim of the Review Team is to conduct public health evidence reviews that respond to knowledge gaps in priority areas in the NIHR Public Health Research Programme's remits. Public health evidence reviews can examine research on a wide range of topics, which have an impact on the health and well-being of the population, either as a whole or for specific communities or groups. The job of the team will be to carry out reviews that will look for, bring together, and evaluate research that has already been carried out. The reviews will support the identification of research questions that can inform future public health research that has major policy and practice impact.

Dr Evans will lead the team's work around health inequities. This £1.5 million infrastructure funding is awarded for 2024-2028 (60 months).



1. Moore G, Evans RE, Hawkins J, Shenderovich Y, Young H. What does 'following the guidance' mean in an era of increasingly pluralistic guidance for the development, evaluation and implementation of interventions?. J Epidemiol Community Health. 2023 Dec 1;77(12):753-4.
2. Reed H, Murphy S, Evans R. Optimising a co-production framework for developing public health interventions: application and testing of school-based Research Action Groups. Health Research Policy and Systems. 2023 Dec 14;21(1):133.

Capacity development for using healthcare systems data in clinical trials

Using existing healthcare systems data (HSD) in clinical trials offers significant potential advantages over the collection of bespoke data from study participants or practitioners. It may reduce the burden on participants and professionals, enable more complete and valid data to be collected, do so at less cost and allow for longer-term follow-up more feasibly and reliably than traditional approaches.

However, this methodological innovation remains under-utilised in trials research. The TOP-CAT team in Cardiff (led by Prof Mike Robling and with Dr Fiona Lugg-Widger as deputy lead) are developing training resources to support researchers to make better use of such data in trials. Launched in April 2023, TOP-CAT is part of a five-year programme developing resources for trialists and further methods development funded by HDR UK.

The work programme is jointly led from Oxford and University College London, with further core investigators in Aberdeen. One of the first outputs from TOP-CAT was the PRIMORANT training package on how to build trust with the public when designing and conducting trials using HSD.

Launched via a webinar in June 2023 in association with the UK Trial Manager's Network and the MRCNIHR Trials Methodology Research Partnership, the training is freely available on the HDR UK Futures learning platform.

The next wave of online training products being developed by Cardiff will explore data utility comparisons and governance approaches when integrating HSD in trials.



6. COLLABORATIONS, ENGAGEMENT AND IMPACTS

6.1 Working with School Stakeholders in The School Health Research Network (SHRN)

What is The School Health Research Network (SHRN)?

We are a research-policy-practice partnership between Cardiff University, Welsh Government and Public Health Wales.

We are strategically integrated with the Welsh Network of Health and Well-being Promoting Schools Scheme (WNHWPS) providing key data for Public Health Wales and the Health Board Directors of Public Health to:

- Identify what works to promote health and well-being within schools.
- Provide free targeted services to areas with the greatest need.
- Inform joint networking and professional development events.
- Help support schools in responding to the health and well-being priorities of their communities.

Every two years we run The SHRN Student Health and Well-being Survey and The SHRN School Environment Questionnaire in all partnered secondary schools in Wales. Following successful piloting, we are now able to offer SHRN data collection to all mainstream primary schools in Wales.

Our data is used for public health surveillance, policy monitoring and evaluation activities at national and local level, as well as to inform health and well-being improvement planning across the school health system in Wales. SHRN data has clear public service benefits as it supports data-led approaches within schools



Lianna Angel,
Research Associate and
SHRN Survey Manager

and NHS (population health) service benefits by supporting research and evaluation activities across Public Health Wales divisions.

From September to December 2023, SHRN ran its data collection in all maintained secondary schools across Wales. 95% of secondary schools took part in administering The SHRN Student Health and Well-being survey with over 100,000 learners participating. 90% of schools also completed The SHRN School Environment Questionnaire, our highest return to date!

From June to July 2024, we will invite all mainstream primary schools to register for SHRN data collection. This will take place from September to December 2024.



The last year has seen the SHRN team lead a diverse array of engagement and capacity building networks which engaged with practitioners, leaders, researchers and policymakers.



Maria Boffey,
SHRN Knowledge
Exchange and External
Affairs Manager

These networks provided opportunities for people to share experiences, disseminate high quality research findings and learn together in order to promote evidence-informed approaches to improving young people's health and well-being in school settings.

To help schools understand health research evidence and how it can be used for health improvement, we produced monthly webinars that included vaping; school transition; depression; and digital support for well-being. We also provided research briefings which included gender-based violence, and the well-being of care-experienced children and young people.

We also hosted a series of secondary school events across Wales in the summer of 2023. The theme was 'Supporting school practice and using health and well-being data and research effectively in schools'. Keynote speakers included Welsh Government, Estyn and the Public Health Observatory. These events provided opportunities to exchange practice and share case studies in the use of SHRN Student Health and Well-being Reports, and to learn about current health research and the value of evidence-informed practice.



We continue to enhance partnership working for increased outputs and impacts, embedding a partnership approach to data analysis and outputs by working with key stakeholders including Public Health Wales, academia consortia, ADEW and Welsh Government. This ensures that our research priorities align with current evidence needs. SHRN is now embedded across the education and health and well-being delivery system at national, regional and local levels.

We continue to strengthen SHRN's brand and reputation to increase partnership support across Wales, whilst also enhancing the UK and international standing of our unique Welsh achievement.

The next phase of SHRN represents an exciting development undertaking the integration of secondary and primary school work across the national education and public health systems. Our vision is for an outstanding research and innovation system that gives everyone the opportunity to contribute and benefit from. Enriching children's and young people's lives, both locally, regionally and nationally, we continue to be recognised for our excellence in innovation and knowledge exchange in children's and young people's health and well-being.

New Senedd report asks: How can we stop gender-based violence?

According to the new report 'How we must all play our part: A public health approach to halting the epidemic in gender based violence', two women a week are killed by a former or current partner in England and Wales. Figures indicate that 1 in 3 women aged 15 to 59 years will experience domestic abuse in their lifetime. Underreporting means it is difficult to know the true scale of the problem.

The Equality and Social Justice Committee's inquiry set out to explore how a public health approach to preventing gender-based violence (GBV) is being applied in Wales, focussing in particular on primary and secondary prevention. Part of the enquiry involved gathering evidence via a public consultation and sessions with experts. In June 2023, Bethan Pell and Dr Honor Young from DECIPHer, along with Alexa Gainsbury and Emily van de Venter from Public Health Wales, provided oral evidence to the committee. The School Health Research Network (SHRN) also provided written evidence.

As requested, the submission highlighted relevant completed and ongoing research projects including SHRN, but also **Safe** sex and relationships in **Further Education (SaFE)**; **School-based interventions TO Prevent Dating and Relationship Violence and Gender-Based Violence (STOP:DRV-GBV)** systematic review, among others.

The final report contained 12 recommendations, concluding: 'We believe the root cause of this epidemic lies in social inequality, the most important of which is gender inequality. Implementing policies that promote gender equality must be the overarching imperative.'

Dr Honor Young said: 'We hope that our ongoing academic research can support the public health approach to addressing gender-based violence including sexual harassment, homophobic and transphobic bullying, and encourage policymakers and schools to take a long-term view of this important issue.'



SHRN data informs Public Health Wales vaping guidance

Public Health Wales has published new guidance for secondary schools to help tackle the rise in youth vaping.

The guidance provides key information to schools around e-cigarettes and their use (commonly known as 'vaping') among young people, as well as actions schools can take to address vaping. It draws on data from The School Health Research Network (SHRN) Student Health and Well-being (SHW) survey, which shows vaping has risen among 11–16-year-olds in Wales in recent years.

The 2021/22 SHRN survey also reported:

- 1 in 5 secondary aged learners (20%) from Year 7 to 11 had tried vapes.
- 5% of secondary aged learners reported use of vapes regularly (defined as at least weekly).
- Year 11 learners were more likely to use a vaping device at least weekly (14%) compared with Year 7 learners (1%).
- Secondary aged learners from less affluent families were the most likely to have tried vapes and use them regularly.
- A higher proportion of year 7 to 11 girls (7%) reported vaping at least weekly compared with boys (4%). Amongst young people who identified as neither a boy nor a girl, 8% reported vaping at least weekly.¹

Among the actions suggested to respond to and address vaping, Public Health Wales advises schools to undertake ten key actions in relation to vaping. When used alongside other priority areas as part of their curriculum delivery and implementation of a whole-school approach to health and well-being, these actions include:

- Using the [SHRN dashboard](#) to understand how vaping behaviours at their school compare with other areas and Wales-wide.
- Using the national SHRN Student Health and Well-being report alongside each school's SHRN report to help identify the age profile of vaping behaviour and plan curriculum delivery accordingly.
- Continuing to participate in the SHRN school surveys to help build a picture of smoking and vaping behaviours and responses and how they are evolving.



SHRN Acting Scientific Lead and Analyst, Dr Nick Page, said:

'This guidance is a great example of how SHRN is supporting public health improvement efforts across Wales by providing actionable data around youth vaping. A key strength of SHRN data is that it provides evidence at national, regional and local levels, enabling schools to identify the health and well-being needs of learners and target appropriate action.'

The 2023 Student Health and Well-being survey, which was in the field between September and December, included additional questions on disposable vaping devices and harm perceptions. This data, available in spring 2024, will add to the existing evidence base around youth vaping in Wales and inform future preventative strategies.'

¹ Page, N., Angel, L., Ogada, E., Young, H., Murphy, S. (2023). Student Health and Well-being in Wales: Report of the 2021/22 Health Behaviour in Schoolaged Children Survey and School Health Research Network Student Health and Well-being Survey. Cardiff University, Cardiff, UK. <https://www.shrn.org.uk/national-data/>.

6.2 Working with the Public and ALPHA

ALPHA

ALPHA, our young people's advisory group, has continued to play an important role in the Centre's work. A research advisory group of young people aged 14- 25, ALPHA's input helps ensure DECIPHER's research is relevant to young people and their needs.

Alongside providing input on specific research projects, a key focus of ALPHA meetings over the last year has been involving group members in shaping plans for the next phase of DECIPHER, and our forthcoming application for renewal of centre funding. This includes reviewing our strategic research priorities, and how we continue to develop public involvement in all our activities.

An important output from our work with ALPHA this year is the production of a new animation video promoting the group's work, forming part of ongoing recruitment activities



to attract new members. In February 2024 we brought together ALPHA members and staff and students from DECIPHER to view the final version of the animation, which can be viewed on the DECIPHER website.



Kirsten MacKay joined DECIPHer in 2021, working as a Research Administrator for the SHRN team.



The team's focus on children's health and well-being attracted me to the role but, without a Master's qualification, I was unsure about my prospects for career progression. The collaborative and supportive nature of both the SHRN team and the wider DECIPHer centre encouraged and enabled me to take up opportunities and gain valuable knowledge and experience.

After assisting with one of ALPHA's research advisory group sessions, I took on a separate part time contract as the group's Sessional Youth Worker. Working closely with the public involvement team and ALPHA, this role has given me a greater understanding of public involvement and co-production, and has built my confidence and skills in engaging directly with young people in the context of public health research. It's also been great to get involved with some of the exciting projects that are going on in and around DECIPHer!

The valuable insights and skills that I've gained in DECIPHer recently helped me secure my new role as Youth Participation Officer for the Child Poverty Action Group (CPAG). Working on the organisation's new Cost of the School Day project in Wales, I engage with learners, their families and the wider school community to explore the impact of poverty in schools and find creative ways to improve awareness, attitudes and policies around school costs and the pressure these put on families. A large aspect of the role involves carrying out participant-led research and collaborating with young people to co-produce our research, engagement strategies and action plans. My experience working in DECIPHer has proved invaluable to this new role, where I benefit from the knowledge and experience I gained around survey design, stakeholder consultation, data collection, feedback reports and participant-led, co-produced research.

Recognising the value and enjoyment of working in DECIPHer, I have continued my role in ALPHA and the public involvement team, working part-time around my new role in CPAG.

Public Involvement Steering Group

Our ongoing Public Involvement Steering Group (PISG) draws from organisations across the Welsh research infrastructure

and organisations working around children and young people, including the Children's Commissioner for Wales office and third sector organisations. The group meets quarterly to develop collaborative strategies and has shaped our Public Involvement Strategy. Meetings over the last year have reviewed progress against the strategy's objectives and provided input on plans for public involvement as part of our application for renewal of centre funding.

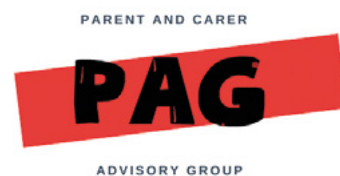
Recently, we have expanded membership of the PISG to include representatives from ALPHA, who have brought valuable insights to the group. We are grateful to all PISG members for their support and advice, both in reviewing progress over the last year, and renewing our vision for Public Involvement in the future.



Involving parents and carers

Work has continued on the development of a new advisory group of parents and caregivers. This group complements our existing ALPHA

group of young people, enabling us to embed the views of parents and carers within the design and conduct of studies. As part of our efforts to diversify public involvement within DECIPHer, we have also been creating new connections with community-based groups. For example, our feasibility study on the remote delivery of the Triple P parenting programme has partnered with a parents' group in Abertysswg, Rhymney Valley. The group – which is part of the Caerphilly County Parent Network, has worked with the research team to review strategies for adapting face-to-face interventions for remote delivery. It has also helped shape research data collection tools, including questions within the health economic evaluation.



Methodological innovation in public health research

Researchers in the Centre have published several papers which make important contributions to methodological innovation in public involvement within public health research. For example, Prof Graham Moore's work detailed how a research programme developed participatory methods to integrate the views of young people with attention-deficit hyperactivity disorder (ADHD) and autism in work exploring the emotional well-being of neurodivergent individuals. Similarly, Dr Hayley Reed's published work includes a recent paper describing optimisation of a co-production framework for developing public health interventions in the context of school-based research action groups. Dr Jeremy Segrott has received funding from the Taith Mobility Fund to collaborate with Dr Ina Koning at VU Amsterdam, a key focus of which will be undertaking a literature review of current approaches to public involvement in the development and evaluation of family-based prevention interventions.

To extend our public involvement work in DECIPHer, we have introduced two new public contributor roles to provide advice and support for the governance of the Centre and the public involvement strategy. Supported by our academic lead for public involvement, Dr Hayley Reed, the following individuals have been introduced to the Centre.

Martin Rolph

New perspectives have been brought in by recruitment of an additional experienced public contributor, Martin Rolph, via the Health and Care Research Wales Enabling Team.



I am a public contributor, with recent public and patient involvement (PPI) roles in health research mainly in Wales. I joined DECIPHer in March 2024 and am a co-applicant of DECIPHer's application for future funding.

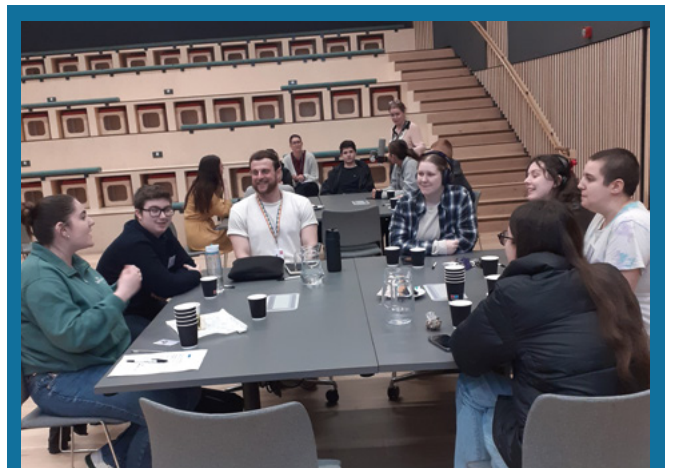
I think DECIPHer's main (but not exclusive) work focused on health equality, and on children's and young people's health outcomes, and methodological innovation, are as exciting for a PPI contributor as for researchers associated with its varied work.

Praveena Pemmasani

One of our two named public contributors joins the team from our long-standing young persons' advisory group, ALPHA.



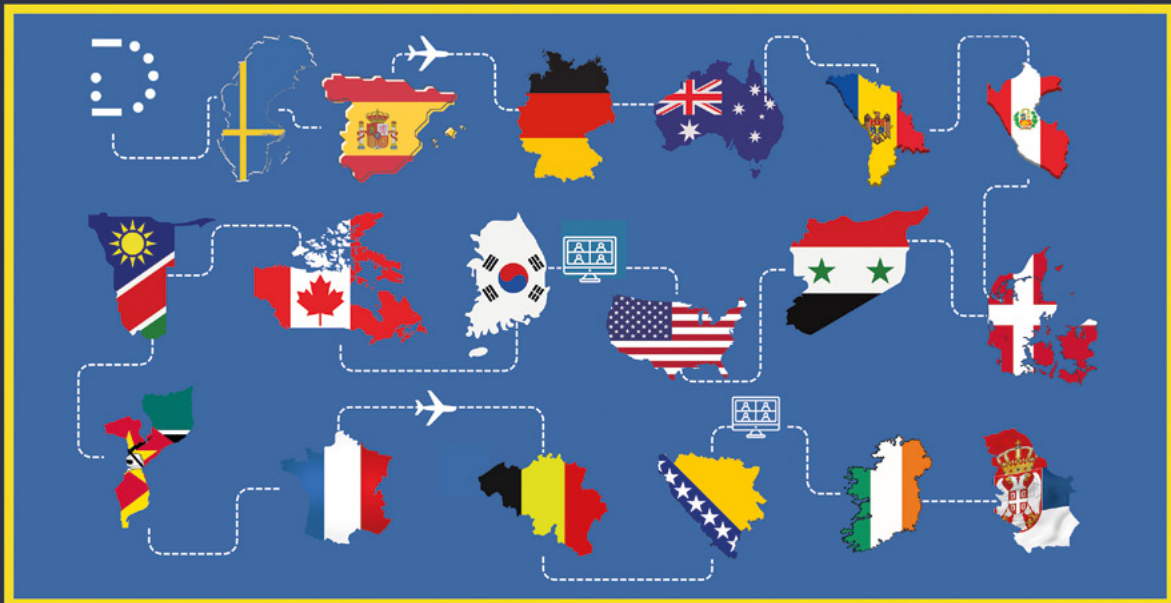
After five years of involvement with ALPHA, I have recently taken on the role of public contributor with DECIPHer. As a fourth-year medical student, I am passionate about public health research and its potential for preventing disease and fostering well-being. Through ALPHA I have been involved with various projects, including SHRN, MoodHwb, and the COVID-19 Evidence Centre, and have represented the youth advisory group at the UKRI-funded TRIUMPH Network which co-produced research on young people's mental health. I am excited to integrate my experiences of children and young people's research and take on a wider role in such an innovative environment.



In February 2023, ALPHA members met up with DECIPHer researchers in SPARK to discuss future research projects.

7. DEVELOPING INTERNATIONAL COLLABORATIONS AND ENGAGEMENT

International Links 2023-24



Teaching

May - June 2023 Graham Moore and Jemma Hawkins delivered a doctoral short course at Karolinska Institute in **Stockholm**, helping PhD students apply research methods (some developed in Wales) to diverse topic areas.

Yulia Shenderovich taught a session on process evaluation for the project Strengthening Social Support Systems For Migrant and Refugee Adolescents In Secondary Education (SURE), at the Autonomous University of **Madrid**.

July 2023 Graham and Jemma gave three lectures on developing and evaluating digital public health interventions at the inaugural Leibniz Science Campus Summer School on Digital Public Health in **Bremen**.

Yulia and Swetha Sampathkumar presented *Global perspectives on mental health programmes* to an international audience of Master's, PhD students and practitioners at the Wolfson Summer School.

August 2023 Rachel Brown and Rhiannon Evans delivered a bespoke online process evaluation course to researchers at **Monash** University.

September 2023 Yulia delivered training in **Moldova** on process evaluation to the Moldova network of youth-friendly health clinics.

Teaching continued

September 2023 Three collaborators from Universidad Peruan Cayetano Heredia, **Peru**, attended our one-day specialist short courses in Cardiff.

November 2023 Jemma delivered two invited lectures on co-approaches in complex intervention science at the Prevention Laboratory in **Copenhagen** and at VIA University College Research Centre for Health and Welfare Technology in **Aarhus**. She also delivered a masterclass on complex interventions for PhD students at Aarhus University.

March 2024 Graham gave a seminar on the MRC-NIHR framework at the University of **Copenhagen**.

Invitations, contributions and awards

April 2023 Bethan Pell and Sara Long were asked to be mentors for CARA's **Syria** Programme Grant.

May 2023 Rhiannon and Honor Young visited **Namibia** to work on the pilot of the Namibian School Health Research Network (SHRN).

June 2023 Rhiannon was awarded The Churchill Fellowship, enabling her to travel to research innovation in suicide prevention among care-experienced young people. As part of this research, she visited **Colorado** in September and **Seoul** in December.

July 2023 Rachel met with Tim Aubry, University of **Ottawa**, to discuss potential collaborations for homelessness research. Rachel was also invited to co-supervise a PhD application at **Aarhus** University.

October 2023 Rebecca Anthony was shortlisted for the Research on Digital Impact prize at The Association for Child and Adolescent Mental Health (ACAMH) Awards.

January 2024 Jeremy Segrott was invited to be an assessor at the Applications for Associate Professorship, Department of Public Health, **Aarhus** University.

March 2024 Yulia, Jess Lennon and colleagues, with Yulia as Principal Investigator, organised workshops in **Pemba** to share findings from the linked project *Shared visions of a Good City: Host and internally displaced persons (IDP) perspectives in Cabo Delgado [Mozambique]*.

Conferences and presentations

June 2023 Kelly Morgan attended The International Society of Behavioral Nutrition and Physical Activity (ISBNPA) 22nd Annual Meeting in **Uppsala**.

September 2023 Abbey Rowe presented her poster *Exploring school-level variations in depression, anxiety and wellbeing outcomes for adolescents with ADHD symptoms* at the EUNETHYDIS Annual Meeting in **Montpellier**.

Yulia presented *Reflections on stakeholder consultations within the adaptation process for a family-focused intervention for adolescents and their caregivers* and *Adapting a violence prevention parenting programme as part of scaling-up* at the ISPCAN international conference in Edinburgh.

Kelly presented on the CHARMING study and implementing health-enhancing physical activity research at the HEPA Europe conference, **Leuven**.

October 2023 Yulia presented online at the Symposium Parenting in Crisis at the EUSPR 14th Conference and Members' Meeting in **Sarajevo**, where Jemma and Elinor Coulman also presented online on the PHIRST Insight evaluation project with Scottish Borders.

Jeremy presented *The Importance of Implementation: Findings from a Process Evaluation of the Kiva Programme* at the World Anti-Bullying Forum, **North Carolina**.

December 2023 Yulia presented *Parenting programmes: A global perspective* at the Population Health Division Meeting at Cardiff University to online researchers at Cardiff and **Utah** Universities.

January 2024 James White and Graham presented online *Association of cannabis, cannabis potency, cannabidiol, and synthetic cannabinoid use with mental health in UK adolescents* to University College **Dublin**.

Kelly attended the **Texas** Physical Activity Collaboration to find opportunities for international collaboration on physical activity.

February 2024 Yulia, Rhiannon, Graham, Swetha and Emma Wassell attended the FLOURISH consortium meeting in **Belgrade**.

March 2024 - Kelly presented on Mindset TEAMS at the World Education Summit.

Nick Page presented on DECIPHER/SHRN youth tobacco research to visitors from **Mississippi** State University.

Dr Rhiannon Evans talks about Developing a Namibian School Health Research Network (SHRN)



Dr Rhiannon Evans



Dr Honor Young

In April 2022, six Commonwealth Fellows from Namibia visited DECIPHer. The scheme was arranged by the Phoenix Project and the Fellows spent three months collaborating with Cardiff University colleagues to share ideas on how to support girls' empowerment in education. During the Fellows' visit, they learned about the Wales School Health Research Network (SHRN) and started to explore how they might implement a similar approach in Namibia. Nationally, Namibia has a strong history of understanding the health and well-being of children and young people, having collected data through the Global School-Based Student Health Survey in 2013. The Fellows were keen to understand how such data could be collected more regularly, and how government ministries and schools could be supported to best translate this information into impactful policy and practice.

We first visited Namibia in 2022, and were hosted again in June 2023 by the University of Namibia (UNAM), the Ministry of Education, Arts and Culture and the Ministry of Health and Social Services. This was to provide technical expertise and support in developing and piloting a

Namibian SHRN. The pilot, which is ongoing, is being funded by UNICEF and other funding partners.

Our first task during the visit was to host a workshop with 30 partners from UNAM, the Ministries, third sector organisations and funding partners to prioritize contemporary health issues faced by children and young people in Namibia. Our next focus was to set up a technical working group to translate the outputs of the workshop into a survey and to start building the network.



Following the visit, we have been reflecting on what we have learned and our next steps. Mainly we are excited to be working on such a meaningful project, collaborating with passionate and ambitious colleagues who want to transform the health of children and young people in Namibia. We are hoping to return in summer 2024, following the initial piloting of the Namibian SHRN, to support further roll out. We are also pleased that through our work we can support the international civic mission partnership between Cardiff University and UNAM. We were fortunate to attend the signing of the Memorandum of Understanding in June 2023.

Rhiannon and Honor's 2023 trip to Namibia was funded by Cardiff University Global Opportunities.



Dr Rhiannon Evans talks about her Churchill Fellowship *Suicide Prevention in Children who have been in Foster, Kinship or Residential Care: Learning from South Korea and the USA*

In 2023 I was awarded a Churchill Fellowship. The Churchill Fellowships support individuals to explore ideas and innovation throughout the world, and to use this learning to lead transformative change in the UK.

As part of my Fellowship, I was awarded three months funding to travel between October and December 2023. This Fellowship was jointly supported by the Samaritans under the theme of suicide prevention. It focused on understanding international programmes for preventing self-harm and suicide among care-experienced children and young people.

The work builds on an NIHR-PHR funded systematic review, which I led between 2020-2022. The review drew together evidence for effective mental health and well-being interventions for this population and identified a lack of evidence-based approaches in the UK. As a Churchill Fellow I spent ten weeks in the two internationally contrasting countries of South Korea and the USA. My first stop was to visit the Universities of Denver and Colorado. Here I worked with Prof Heather Taussig (Heather had previously been a visiting Fullbright Scholar at CASCADE, Cardiff University), who had developed and evaluated the Fostering Healthy Futures programme, one of the only evidence-based approaches for targeting suicide-related outcomes for young people in foster care.

While at the University of Colorado, I also met with colleagues in the Adult & Child Center for Outcomes Research & Delivery Service (ACCORDS) research group. ACCORDS offers world-leading methodological expertise in implementation science. During the meetings, I developed my knowledge around the translation of interventions to new contexts, while sharing DECIPHER's guidance on adaptation.

After an inspiring time in the USA, I spent the second half of my Fellowship in South Korea. During this time, I met with Prof Sungyoun Hong at the Catholic University of Korea, Dr Sejung Park at Pukyong National University and Prof Hyun Ju at Hallyn University Sacred Heart Hospital. I learned about the influence of online communities on self-harm, particularly in relation to the memorialisation of K-Pop idols who have died by suicide, and hospital and government prevention and treatment strategies.

Since returning to the UK, I have been exploring opportunities to introduce and evaluate evidence-based programmes nationally. I have also been working with colleagues at the Universities of Cardiff, Bath, Bristol and Exeter to strengthen the international community of researchers working in the prevention of suicide. DECIPHER PhD candidate Lorna Stabler is currently undertaking a Churchill Fellowship exploring international practice in supporting kinship carers.



Photos taken by Rhiannon during her research: Gyeongbokgung Palace in Seoul; Fan art of K-pop group BTS in Busan; University of Colorado Campus in Denver; Demilitarized Zone between North Korea and South Korea; Colorado State Capitol (centre image).

8. CONCLUSION

DECIPHer has a strong portfolio of research from a diverse range of funders. This includes NIHR, MRC, ESRC, Wellcome Trust, Health Foundation, Cancer Research UK, EU Horizon, Education Endowment Fund, Welsh Government and Health and Care Research Wales.

The portfolio covers significant cross-UK infrastructure awards that provide pathways to long-term sustainability for the centre.

This year, we have secured a £1.5M NIHR PHR investment for a Public Health Review team in partnership with Exeter University, supported a NIHR HDRC application by local government colleagues in Rhonda Cynon Taf and the £12m Economic and Social Science Research Council (ESRC) Behavioural Research Leadership Hub, a cross UK initiative led by Edinburgh University and University College London.

Whilst it is important to note these funding successes, we should not forget the ongoing impact our work is having in Wales and beyond.

Members of the Centre represent the institution at an international level at conferences, leading working groups, collaborations, steering groups and major projects. We have worked with UNESCO, to support the drafting of 'Guidelines to Mainstream Social and Emotional Learning (SEL) in Education Systems' and have been active influencers in the School Health in Europe Research Steering Group, Welsh Government Tobacco Working Group, the Ministerial Task and Finish Group for the Whole-School Approach to Mental Health and are acknowledged in the Relationships and Sex Education (RSE) Statutory Guidance and code.

This year we have also continued to develop our international reputation and collaborations, including universities in Spain, Sweden, USA, India, Denmark, Finland, Peru, Namibia, Austria, Moldova, North Macedonia, Germany, Ireland, South Africa, Serbia and Mozambique. Reflecting on the year, DECIPHer is in a strong position to capitalise on the support provided by Health and Care Research Wales and Cardiff University and our partnership with Public Health Wales in the coming year.



