

ANNUAL REPORT 2022/23





https://decipher.uk.net

1. INTRODUCTION

The Centre for Development, Evaluation, Complexity and Implementation in Public Health Improvement (DECIPHer) is a centre of excellence for research to improve the health and wellbeing of children and young people.

We develop innovative public health networks and new methods to evaluate social policies which has allowed the Centre to achieve a unique position as a test bed for new approaches to improve young people's health. These can be developed, evaluated, implemented and sustained at scale in Wales, as well as being diffused across the UK and internationally.

The Centre's experience and methodological expertise is recognised globally, through an internationally prestigious suite of short courses and informing official guidance for research and policy. This year has seen our collaborations enhanced via new Medical Research Council (MRC) guidance on adapting evidence across contexts and European Horizon funding for a parenting intervention study.

Within Wales, DECIPHer has worked to successfully establish the world's first national infrastructure for school health improvement. This year we have expanded into primary schools, developed enhanced data sharing agreements and strengthened partnerships with our public health colleagues. The work is so well regarded that it has diffused across the UK and internationally, establishing sister research infrastructure which has demonstrated that Centre research moves successfully to multiple policy contexts.

DECIPHer champions the opinions and experiences of children and young people to focus on the key issues facing them today such as mental health, substance misuse, nutrition, physical activity and positive social relationships. In this report you will hear directly from some of those young people and their experiences of working with us.

The Centre has a unique social science-led focus on children and young people which identifies policy solutions that address health inequalities early in life and which can have long-term life course impacts. This approach to improving public health policy-making and implementation is transforming the health of children and young people across Wales and beyond, as well as building public health research capacity and a new multidisciplinary public health research workforce.

On behalf of the DECIPHer team and our collaborators it gives me great pleasure to present our annual report.





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.



3. CORE METRICS

Reporting period: 2022/2023

Health and Care Research Wales infrastructure award to the group



Jobs created through direct funding



Grants won during reporting period

Grants won	Led by group	Group collaborating
Number	11	15
Value	£4.29m	£5.09m
Funding to Wales	£1.53 m	£0.76m
Funding to group	£1.35m	£0.32m
Additional jobs created for Wales	12	6
Additional jobs created for group	11	2



Number of publications



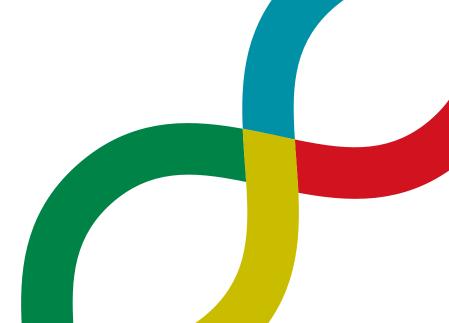
Number of public engagement events



Number of public involvement opportunities









DECIPHer is funded by Welsh Government through Health and Care Research Wales. This year we received a grant of £518,500 and our collaborations have secured 26 new research studies with a value of just over £9M, of which just over £2M came to Wales. Eleven of these studies were led by DECIPHer and £1.53M came directly to our centre.

Of particular note is the award of European Research Council Horizon Funding for the FLOURISH study, which is evaluating the adaptation of a parenting intervention from South Africa to Moldova and North Macedonia. This includes international researchers and practitioners in partnership with UNICEF, World Health Organisation and the Moldova Ministry of Health. Another highlight is a Wellcome Trust Data Award drawing on the SHRN data infrastructure to understand how school communities can promote mentally healthy students and practices.

Our success has resulted in 18 additional jobs created in Wales, 13 of them within our centre. DECIPHer has also supported a large number of collaborative activities and events with our stakeholders to co-produce and translate our research. This has included 101 public engagement events, which includes presentations by our centre staff and our international programme of short courses. and 69 public involvement activities. Meanwhile, we have produced 58 publications including refereed journal articles and published reports and guidance.

Over the year, DECIPHer made significant contributions supporting policy development and evaluation, with Welsh Government, UK and international activity. This includes membership of the Welsh Government Tobacco Working Group, the Ministerial Task and Finish Group for the Whole School Approach to Mental Health, the implementation of the Curriculum reform and work with the Namibian government, to support the diffusion of the School Health Research Network (SHRN).

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 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.

Public Health Intervention Responsive Studies Teams (PHIRSTs)

As part of our role within the PHIRST Insight team, co-located across University of Bristol and Cardiff University, DECIPHer have been leading two evaluations of local authority public health initiatives. The first is evaluating the Mindset Teams programme in primary schools in Scotland (Morgan; Garay; Murphy). This project began in April 2021 for two years and so the final report is currently being written. You can learn more about that project from researcher

Samantha Garay below. The second has been evaluating the use of the Patients Association Nutrition Checklist within health and social care settings in the Scottish Borders (Hawkins; Coulman; Murphy). This project ran from January to December 2022 and the final report has recently been published on the NIHR Open Research Platform.

Dr Samantha Garay, Research Associate

I joined DECIPHer as a Research Associate in December 2022, after previously undertaking a PhD and research position at Cardiff University. I was keen to be involved with DECIPHer as I recognised the extensive



expertise contained within the Centre and the focus on evaluating complex interventions fitted well with my research interests and background. My particular role is to work within the PHIRST Insight team on the Mindset Teams project. This sets out to evaluate the impact of the Mindset Teams programme in primary schools in Scotland. This extensive project utilises a mixed methodology and has involved various stakeholders, parents, teachers and children as participants. This project is now nearing completion and I am looking forward to the range of dissemination activities that have been planned. It has also been an invaluable opportunity to develop my experience in undertaking qualitative research and undertaking Pupil Public Involvement (PPI) activities, which are so important in the research process. I am excited to start the next assigned PHIRST project and the opportunities that this will bring. My experience so far within DECIPHer has only been positive. There is a wealth of knowledge and experience within the Centre and everyone is so supportive and willing to help others. Career development is

strongly encouraged and there are plenty of opportunities to attend courses. I have also been given the opportunity to co-supervise a summer placement student with my Line Manager, Kelly Morgan. Overall, I am so glad I applied for this role, it is a privilege to work within DECIPHer.

Dr Kelly Morgan, Senior Research Fellow The GENIUS Food Network

The GENIUS school food network is a UK Prevention Research Partnership (UKPRP), focusing efforts on health-promoting food and nutrition systems in UK schools. It aims to harness collective expertise, experience,



and efforts across the UK to support excellence in the school food system and ultimately improve pupil health and wellbeing. With use of a pump-priming award, a review of Secondary School Food Policy (SSFP) approaches across the devolved UK nations (England, Scotland, Wales and Northern Ireland) was undertaken. This included a scoping review of government papers, academic research, and grey literature. The research team comprised key members of each nation, including myself, who have expertise and interest in the area of food and schoolbased research. Review findings were presented across themes of school meals, education and broader SSFP areas and highlighted an overall lack of coherence across approaches with some identified similarities. Findings were used to inform key recommendations for policy and practice stakeholders across the UK.

Collaboration with Public Health Wales

Our most established collaborative network is SHRN, and you can read more about the developments over the last year within SHRN on page 20, including enhanced data sharing and partnership approaches to national and regional reporting, as well as the transformation of the Healthy Schools programme. We are also taking steps towards exploring a similar approach to the network infrastructure in relation to workplace health (further information on page 19). DECIPHer staff have also been involved in the launch of the Public Health Wales Community of Practice on evaluation, with Dr Rhiannon Evans and Dr Kelly Morgan delivering talks at the launch event in March 2023.

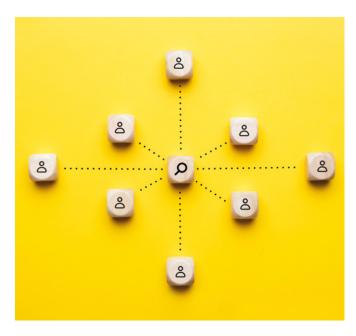
Linked to our schools-related network activity, Amy Davies, a Principal Public Health Practitioner in Public Health Wales, has been co-located with DECIPHer since September 2022. Here she shares her experience.

Public Health Wales and DECIPHer already have an established partnership which includes the School Health Research Network and the Welsh Network of Health Promoting Schools. As part of Public Health Wales staff team



supporting the implementation of the Whole School Approach to Emotional and Mental Wellbeing throughout Wales, I have been able to build on this existing relationship in relation to this specific programme of work.

Developing this relationship has benefitted evaluation activity to understand the implementation of the Whole School Approach to Emotional and Mental Wellbeing. Discussing methods and emerging findings across teams working on evaluation at different levels has optimised the value of the work. We have protected against duplication of effort, supported one another in maximising involvement of participants and ensured learning is utilised to shape programme direction. Being more integrated has also allowed us to work together to influence practice. For example, through the delivery of a joint webinar for schools to promote the use of SHRN data as they embed Whole School Approach to Emotional and Mental Wellbeing within their school communities.



4.2 National and International Short Courses



DECIPHer Short courses 🙀









Over the past 12 months we have started to reinstate some of our in-person short course offerings, as well as continuing with some courses taking place entirely online or in new hybrid formats. Building on the experiences of delivering a condensed online version of our annual five-day training course in 2021, we refined the format and designed two, two-day workshops delivered over consecutive weeks in June 2022, supported by pre-recorded offline sessions. This allowed for coverage of a wider variety of topics more consistent with our previous five-day offerings whilst also avoiding multiple consecutive days of screen time. 22 delegates attended from across the UK, Europe and South Africa from a variety of fields including public health, healthcare, social care, global mental health, epidemiology, surgery, infectious disease, oncology, palliative care and dentistry.

Following this experience, our focused one-day course on process evaluation was scheduled as an in-person course, alongside a newly developed one-day course based on DECIPHer's recently published MRC-NIHR funded methodological guidance on adapting interventions to new contexts. All three courses received very positive feedback with the quality of teaching being rated the most positive. The policy reach of the courses continues to grow with our process evaluation course recently being delivered to government employees in the Department for Environment Food & Rural

Affairs (Defra) following a request for a bespoke online version. The course content, which was adapted to the organisation's area of work and to incorporate their own internal methodological guides, was incredibly popular, with 55 employees expressing an interest in attending.

Whilst our Cardiff-based courses continue to attract an international audience, we have also continued to deliver our established international short courses in Sweden (Karolinska Institute) and Denmark (Aalborg University). The Swedish course takes the form of a three-week accredited doctoral training course, which ran for the third time in May-June 2022 but for the first time in its originally intended hybrid format. The course received very positive evaluations from those that attended. Our courses have also been recognised through the inclusion of elements of our complex intervention methods teaching within two recently funded proposals for new graduate schools in two universities in Sweden. One of these will involve DECIPHer staff delivering teaching at residential training courses for staff and students of the research school. As a result of our involvement in the short course at Aalborg University, two DECIPHer staff members contributed a chapter to the Public Health Handbook used for undergraduate and postgraduate degrees across Denmark which is being used in several courses. Finally, we continue to receive requests to deliver bespoke versions of the courses in a variety of international contexts, with requests from Germany, Peru and Chile currently being discussed.

4.3 Supporting Staff Development

This year we were again able to congratulate a number of our staff in their career progression, with James White promoted to Professor, Rhiannon Evans to Reader and Kelly Morgan to Senior Research Fellow. In terms of awards for achievements: Dr Rhiannon Evans was awarded the Churchill Fellowship to spend time working in USA, Dr Rebecca Anthony, the Mental Health Research Incubator Award for work examining mental health among children in adoptive families and Prof Graham Moore was shortlisted as part of a research team for the Moondance Cancer Award.

This year also saw Caitlyn Donaldson awarded a PhD for her work on primary and secondary school transition and mental health and Isabel Lang, who joined us as a postgraduate this year, secure a UKRI Policy Internship with Senedd Research. Ed Janes, our previous PhD student and ALPHA youth worker, secured a Post-Doctorial Fellowship for Social Work and Social Care from the ESRC and Lianna Angel was awarded an MSc with Distinction in Social Psychology Research Methods. We also saw Dr Sara Long playing a leading role in EMPOWER, a cross disciplinary group of investigators that aims to set up a support network for female investigators across Cardiff University to promote their development into successful research leaders and facilitate opportunities for grant capture.

Below we hear from a number of staff who recently joined DECIPHer and those who have moved to new roles outside the centre.

Dr Caitlyn Donaldson

I joined DECIPHer in 2019 as a PhD student. My previous roles had involved research and writing on a wide range of public health topics, but I had become increasingly interested in young people's mental



health and wellbeing. My speculative email to Prof Simon Murphy was treated positively and resulted in me having discussions with potential supervisors about possibilities for applying for funding. With their support, my funding application to the ESRC was successful and soon after I began my PhD looking at young people's mental health across the primary to secondary school transition with Professor Graham Moore and Dr Jemma Hawkins as my supervisors.

DECIPHer is at the forefront of schools' health research in Wales and being a student within the department provided fantastic opportunities to build expertise and take advantage of the extensive Welsh schools data available for analysis. Towards the end of my PhD, DECIPHer started the process of extending the secondary SHRN work into primary schools, and a Research Associate role became available. I applied and was successful. I have found the transition from DECIPHer student to staff member very positive. Over the next year I plan to publish some papers from my thesis, as well as begin thinking about future research projects and funding opportunities.

Dr Lauren Copeland

I joined DECIPHer in January 2019 as a Research Associate primarily working on a study developing guidance for adapting interventions to new contexts. It was a great

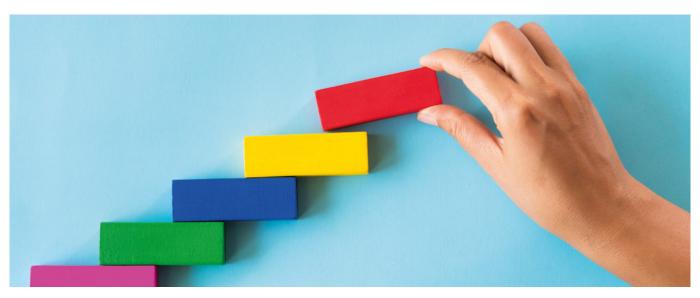


opportunity to be part of a study that would influence future adaptation practice and to be part of a world-leading research centre.

My research areas of interest are mental health and counselling so joining DECIPHer allowed me to research these areas and gain valuable skills and experience in grant writing, networking and informing government policy.

In addition to this, I received mentorship which was instrumental in my career progression. I was supported to attain experience in areas critical for a lectureship.

This has led me to successfully achieve a lectureship in the School of Psychology at Cardiff University, where I am currently teaching across undergraduate and postgraduate levels and developing research ideas in counselling and education.



Dr Hannah Littlecott

My journey with DECIPHer began in 2012, when I was recruited as a Research Assistant. I obtained experience working on multiple projects, whilst also applying



for PhD funding. I began my PhD in January 2014, completing this in 2016 within the threeyear period. Alongside the PhD project, I had the opportunity to work casually on multiple projects and gain experience of writing and publishing multiple scientific papers. Following the PhD, I was supported to obtain fellowship funding. Whilst this project was negatively affected by the pandemic, it did provide me with important experience in successfully obtaining research funding as a Principal Investigator and managing my own project. Whilst working in DECIPHer, I have also had two periods of maternity leave, throughout which I felt supported by the Professional Services (PS) staff as well as academic colleagues. Ultimately, this support and experience has led to a fantastic opportunity with colleagues at the Ludwig Maximilian University of Munich, where I am currently working remotely leading on Cochrane reviews to synthesise research relating to SARS-CoV-2 and measures in the school setting.

Student placements at DECIPHer

DECIPHer has had significant success in securing competitive funding for internships and supporting student placements over the years. Student interns typically work on externally funded research projects and are involved in a variety of activities designed to help them develop key skills in research as well

as transferable skills that can be used in their studies and in future employment. To date, DECIPHer placement students have continued to be actively involved in academic research; six have undertaken their final year dissertation projects supervised by DECIPHer staff, at least five have successfully secured PhD studentships and eight have authored journal articles or conference presentations resulting from their placements. The employment destinations of our placement students include research positions, for example at the Office for National Statistics and in government research departments.

Here some of our recent placement students reflect on their experiences at DECIPHer.

Emma Wallace

I have recently graduated from Cardiff University with a BSc in Social Analytics and I was keen to start social science research as soon as possible. For my placement, I have been working with Dr Sara



Long on a study into the health and education outcomes of children who receive social services interventions. I also had the opportunity to use my quantitative skills for the Welsh curriculum reform project, also with Sara. This study looks at the health and wellbeing of secondary school children in Wales, and changes to health and wellbeing in schools as a result of the education reforms. Overall, I have loved my placement with DECIPHer and would recommend it to anyone considering a research career. The placement has developed my research skills and I have gained extensive knowledge of how academic research is carried out.

Ruby Bird

I have absolutely loved working within DECIPHer on the CHARMING project. I have found the work really diverse and engaging and I feel like I have had the opportunity to use some of the skills



I learnt during my degree, as well as discover some of my strengths. My supervisors have been so welcoming and supportive throughout my time here and have let me use my own initiative to tackle the work, which has given me confidence for when I do start my career. Reflecting back on the experience, I have definitely learned to trust in my ability to tackle different tasks that I may not feel confident with initially. I have also made some really lovely friendships and am certain that I want to be involved in academia and research throughout my career in some way as I have loved working towards something that has the potential to make real impact in people's lives.

Chantal Shrestha

Over eight weeks, I undertook a research placement in DECIPHer to help support expansion of the School Health Research Network (SHRN) into Primary Schools, including helping to recruit schools



to take part in a Key Stage 2 pupil survey. This has been a great opportunity to attend meetings with a multifaceted team of researchers and work within a professional setting as well as develop a set of both quantitative and qualitative research skills.

I also took part in DECIPHer's short course and was able to learn various theories and principles involving complex intervention research. Throughout this course there were real life examples used which further helped me understand how relevant this course context is when improving overall health and wellbeing of adolescents. It truly was an eye opener.

Overall, my placement has been an incredible opportunity to gain and develop transferable skills as well as an understanding of the mechanisms involved in research and development.

Sophie Borgia

As part of a placement year during my degree, I worked for Public Health Wales, which I really enjoyed. I also knew that I enjoyed academia and had skills in research from other work



experience, so I wanted to try combining these interests by working on public health research in DECIPHer. I worked with Professor James White and Dr Jemma Hawkins, using data from the FRANK Friends trial to conduct analyses on the association between gender identity and health-related quality of life in adolescents. One of my favourite parts of the experience was the working environment in the Sbarc|Spark building, as there were often seminars and talks happening which allowed us to get a feel for the work going on both in DECIPHer and other research teams. All the members of staff were so welcoming and willing to answer any questions we had about working in academia. My experience has confirmed to me that I would love a career in public health research, and I am excited to be working towards this by starting a PhD in DECIPHer in Autumn 2023.

Jen Christensen

I am interested in a career in research, so doing a research-based internship has helped me massively to understand how the research process works. Not only did we all have a lot to learn from the studies we were involved in, but we also had the amazing opportunity to take part in the DECIPHer short course. This has been a good learning experience for all of the interns who have taken part and we have been able to have an insight into how the interventions that we have been working on came to life. The Innovation and Industry Internship is a great opportunity to learn all of the ins and outs of the research process and how a study is carried out. I would recommend doing an internship like this to any student interested in a career in research because the knowledge, skills and connections you make are so valuable to supporting your future career.

5. RESEARCH PROGRAMMES

5.1 Healthy Public Policy





Prof Graham Moore

Prof Amanda Robinson

The Healthy Public Policy programme aims to:

- 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.

In the past year, connecting to the Healthy Settings programme, we have continued our work focused on the intersection between health and education policy. This has included ongoing work to evaluate the Welsh Government framework for embedding whole school approaches to mental health and wellbeing, following on from our earlier Welsh Governmentfunded evaluability assessment. A new paper has been accepted in the **British Education Research** Journal from Dr Sara Long's Health and Care Research Wales-funded fellowship on curriculum reforms, which places health at the heart of what schools are 'for'. To support schools in the implementation of curriculum reforms, and new approaches to promoting good mental health, we have continued our work expanding the School Health Research Network into primary schools in Wales. Our first survey across the whole of Key Stage 2 is currently in the field, with approximately 18,000 pupils across 200 schools having completed the survey to date.





5.2 Healthy Settings and Organisations





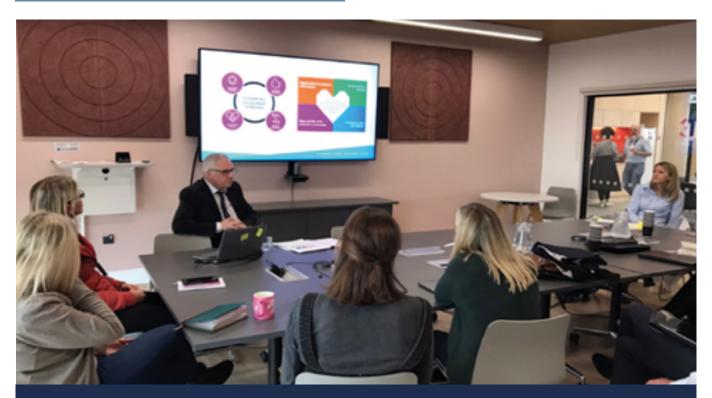
Prof Simon Murphy

Dr Honor Young

This programme develops and evaluates whole systems approaches to improving population health and understanding their implementation. We have researchers working with schools and communities on a broad range of health priority areas, including mental health and wellbeing, healthy eating, smoking prevention, alcohol misuse prevention, sexual health and healthy social relationships.

School policies

We have strong links to the Healthy Public Policy programme and together we have supported school-based evaluations of key Welsh Government policies, including the Whole School Approach to Mental Health and Wellbeing curriculum reform. We also work to develop our work across the UK. Colleagues from **Education Scotland** recently visited us to present their reflections on the Curriculum for Excellence, its implementation, and lessons learned over the last decade. We also held several roundtable discussions with policy, practice and academic colleagues, including representation from Welsh Government and Estyn. The visit was organised by our Health and Care Research Wales Fellow Dr Sara Long. Cross-UK policy work also includes a study evaluating Mindset Teams in Scotland, an intervention to improve learning resilience for health and education outcomes, with considerable policy interest in its potential application in Wales.



We thoroughly enjoyed our visit to DECIPHer, which gave us a number of points to take back to Scotland. We were very grateful for the opportunity to speak to you all and your colleagues in the Welsh Government and Estyn. We would like to extend our thanks to all colleagues who supported us. We are looking forward to working with you again in the future.

TJ Johnston, Education Scotland



Data-led school practice

This year's highlights also include a range of studies that have focussed on innovative data use in schools. This includes a partnership with young people and school stakeholders to co-produce a high-quality video animation to help communicate key SHRN findings to young people and for health action planning and student voice groups. Another collaborative project between DECIPHer, Prof Ann John (Swansea University) and Dr Jo Inchley (Glasgow University) as part of the Health Data Research (HDR) UK Datamind initiative, brought together SHRN and its sister network in Scotland (SHINE) to explore stakeholder views on enhancing data science approaches to addressing poor mental health and wellbeing in children and young people.

This area of work also covers a multidisciplinary team (led by Segrott, Reed and Page) working on a **Wellcome Trust Data Prize study** which aims to empower school communities to build environments that promote mentally healthy students and practices. Using linked student and school-level SHRN survey data, it identified key areas for schools to effectively promote school connectedness especially for those with lower levels of family support. The next phase will focus on working with schools to develop access to and use of the key indicators related to pupils' school connectedness and mental health to inform policy and practice.

Community settings

Other work initiated this year has focussed on community settings. This includes a HCRW Fellowship across DECIPHer and Health Data Research UK (HDRUK) examining associations between aspects of the built environment and adolescent mental health to inform Welsh Local Authority and government planners (Mizen). A further study is evaluating an intervention to prevent homelessness and promote health amongst prison leavers (White). For people leaving prison, substance abuse, poor mental health, and absence of a stable support network, reinforced by a lack of affordable housing and employment opportunities, make them particularly at risk of homelessness. The study in four male prisons will determine whether to progress to a future full-scale study assessing effectiveness and cost-effectiveness of a local authority housing-led intervention.

5.3 Healthy Social Relationships





Dr Rhiannon Evans

Dr Jeremy Segrott

The Healthy Social Relationships programme continues to make significant progress, both in terms of scope and number of research studies. Over the previous year, key research grants have been successfully delivered to completion.

These include the UKRI-funded
Transdisciplinary Research for the
Improvement of Youth Mental Public Health
(TRIUMPH) Network (Evans; Murphy), the NIHRPHR funded Care-experienced cHildren and
young people's Interventions to improve
Mental health and wEll-being outcomes:
Systematic review (CHIMES) (Evans; MacDonald;
Robling), and the ESRC-funded longitudinal
analysis of a retrospective cohort to establish if

local authority care makes a difference to the lives of vulnerable children (Long; Moore). There are a number of new and in-progress research studies, key areas where the programme is building capacity, and important advancement in engagement and knowledge translation.

Family-based Interventions

The programme launched two large evaluations in 2023. The first is a **Nuffield-funded evaluation** of the Triple P parenting programme. The study involves the optimisation of the intervention for remote delivery, and testing of its feasibility (Segrott; Robling). The second is the Horizon and UKRI-funded FLOURISH study, which is evaluating the adaptation and implementation of a South African originated parenting intervention for Moldova and North Macedonia (Shenderovich; Evans; Moore; Pell). This study will draw upon DECIPHer's methodological innovation, notably its MRC-NIHR funded guidance on the adaptation of interventions for new contexts. Ongoing studies include the NIHR-funded Family VOICE research study, which is evaluating the effectiveness and implementation of Family Group Conferencing, an intervention that brings together family members to discuss children who need support and protection.



Health and Wellbeing of Care-experienced Children and Young People

In the last year, two first-time Principal Investigators, Dr Gillian Hewitt and Dr Sarah MacDonald, have obtained **Health and Care Research Wales** funding for a study exploring how educational settings support the mental health and wellbeing of care-experienced young people in Wales. The study will consider both secondary school and further education pupils, also working with social care teams and specialist mental health professionals (e.g. CAMHS), to identify how support may be improved moving forward.

Preventing Domestic Violence and Abuse

The programme continues to undertake novel research in the area of domestic violence, with Bethan Pell progressing a PhD on Child to Parent Violence. Throughout the last

year DECIPHer (Evans; Young) have worked closely with partners from the University of Namibia and Ministry of Arts, Education and Culture, to develop research around healthy social relationships and girls' educational empowerment in Namibia. Dr Honor Young and Dr Rhiannon Evans will visit colleagues in Namibia during July 2023 to further extend the collaboration, with a specific focus on testing a local version of the School Health Research Network (SHRN) to understand the health and wellbeing experiences of children and young people.

Relationship-based Service Delivery

In 2022 Dr Lucy Maddox commenced an NIHR-funded PhD, which is a collaboration between the University of Bath, Birkbeck University and Cardiff University. The study is exploring compassion fatigue among mental health practitioners that work in adolescent mental health wards, with the aim of developing a system-based intervention.



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 wellbeing. 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 page 8. DECIPHer researchers continue to publish case studies of methodological innovation and methodological 'think-pieces' to generate and encourage discussion around new ways forward for health intervention research. One example is a paper published in October 2022 focused on providing guidance and recommendations for how co-creation methods may be better utilised within implementation research. This is the result of a new collaboration between DECIPHer and experts in implementation science in the United States.

Application of our methodological guidance in Wales and beyond

Our internationally recognised methodological guidance continues to inform the design and conduct of research in both Wales and around the world. In particular, the recently published MRC/NIHR-funded ADAPT guidance for adapting interventions to new contexts has informed several new studies which DECIPHer researchers have begun working on during the last 12 months. One example in Wales is Dr Havlev Reed's new fellowship, the Schoolbased Adolescent Mental health intervention Adaptation (SAMA) study. The study is exploring the adaptation of an intervention to address mental health symptoms amongst adolescents unable to access mental health care due to not reaching diagnostic thresholds. Outside of Wales, DECIPHer researchers are involved in studies to adapt interventions to new contexts in Europe and South America. The FLOURISH study, which is evaluating the adaptation of a parenting intervention from South Africa to Moldova and North Macedonia. involves four researchers from DECIPHer (Shenderovich; Evans; Moore; Pell). The IMPACT Dementia study, which is funded by the NIHR Global Health Systems Research funding stream, is aimed at strengthening the health system in Peru to meet the various challenges associated with dementia. Two DECIPHer researchers (Hawkins; Moore) are co-leading two of the study's five work packages, one of which is focused on adapting a mobile health intervention for patients and their caregivers from the United States to four different regions in Peru.

Below we hear from one of the Principal Investigators of the IMPACT Dementia study on the application of our methodological guidance in Peru:

By producing scholarly work in the field of implementation science, the work of DECIPHer disentangles the underpinnings of effective interventions to understand how they operate or could better operate in challenging real-world scenarios. DECIPHer's presence in the scientific community not only saves an incalculable amount of resources by preventing research waste, but importantly creates valuable research with direct utility for many around the world. This unique contribution of the DECIPHer team has a well-gained seat on global health.

Prof J Miranda Director CRONICAS Centre of Excellence in Chronic Diseases, Universidad Peruana Cayetano Heredia, Peru

Capacity development for using routine data in evaluations of health interventions

The use of routine data in evaluations of public health and social care interventions continues to be a key methodological focus within DECIPHer and its partnership with the Centre for Trials Research (CTR). Building on previously funded work on developing training for researchers using routine data (CENTRIC) and identifying research priorities in routine data use (COMORANT-UK), DECIPHer investigator Prof Mike Robling is the Cardiff lead for a new five-year programme of training development funded by HDR UK. Led overall by Marion Mafham (Oxford) and Matt Sydes (UCL) the 'Useable Data: Transforming data for trials' infrastructure and research

funding will advance methods for the use of administrative data in trials. The team will develop a route map for researchers designing, accessing, analysing and sharing healthcare systems data, supported by training and other resources such as case studies. The Cardiff team (based across the CTR and DECIPHer) are also completing modularised training with HDR UK for promoting public trust when using administrative data in trials (**PRIMORANT** study, lead investigator Dr Fiona Lugg-Widger).

Innovations to support data-informed practices in workplace health in Wales

Over the last four years, DECIPHer has been working as the evaluation partner for the **Public Health Wales** initiative **Healthy** Working Wales (HWW) to develop evaluation methods for the new HWW delivery model. This involves online tools that will support employers in Wales to assess their readiness to implement health and wellbeing approaches and identify the priority areas they need to focus on to improve workforce health and wellbeing. The DECIPHer research team (Hawkins; van Godwin; Murphy); developed two online tools in collaboration with PHW/HWW: an 'employee' tool to assess workforce health and wellbeing and an 'employer' tool to assess workplace readiness to promote and support health and wellbeing. These were finalised in 2022 and HWW have launched the employer tool with their existing award holders. The next steps are to develop a web platform to host both versions of the tools. Each will incorporate an automated reporting function to provide employers with a tailored report and advice on recommended actions. Researchers from DECIPHer (Hawkins; Long; Morgan) have been funded by PHW to support this work in 2023 by exploring the potential for benchmarking the employee tool against national Welsh and UK data as part of the reporting functions.

6. COLLABORATIONS, ENGAGEMENT AND IMPACTS

6.1 Working with stakeholders in the School Health Research Network (SHRN)

SHRN brings together schools in Wales with academic researchers, policy makers and practitioners from health, education, and social care, to drive improvements in young people's health and wellbeing in the school setting. Following the successful delivery of SHRN's Student Health and Wellbeing Survey in 2021/22, which had the largest response to the survey to date, this year the focus shifted to stakeholder dissemination and strengthening our strategic partnerships to enable wider sharing of SHRN data for health improvement.

This past year in SHRN, all local authorities and SHRN schools received bespoke feedback reports to inform localised practice, and our School Environment Questionnaire final report was published, providing an overview of current school-level policy and practice in Wales and schools' responses to COVID-19. In August, we published a briefing report led by Dr Nick Page showing youth mental health and wellbeing had declined in Wales during the pandemic, the first publication drawing on the latest survey data, which was captured by several media outlets. Our 2021/22 National Indicators report published this year provided valuable insights into young people's physical and mental health and social relationships in Wales since the start of the pandemic. This year we also continued our support of the international Health Behaviour in School-aged Children (HBSC) study of adolescent health. By sharing national data with the study team, we ensured Wales maintained its strong track record for participating, having taken part in every wave since 1986.

Dr Nick Page, SHRN Analyst

To maximise the impact and reach of data collected by SHRN, two data sharing agreements were signed. The first, with Public Health Wales Observatory, maintained



and extended our existing partnership, with local authority level SHRN data soon to be made publicly accessible via an interactive dashboard. The second agreement, signed with the Secure Anonymised Information Linkage Databank (SAIL), will enable anonymised SHRN data to be made available upon application and review to researchers for data linkage. Linking of SHRN with other data sources (e.g. medical records, education) has huge potential for research in Wales and will improve our understanding of key drivers of young people's health and wellbeing.







Maria Boffey, SHRN Network Manager

I joined DECIPHer as SHRN Network Manager in 2022 to lead on the support for secondary schools, whilst developing national and regional level partnerships that include Welsh Government.



Public Health Wales, Local Education Authorities and Education Consortia. My passion for supporting the wellbeing of children and young people has been a constant throughout my career, having spent 20 years in the third sector developing a range of programmes to support health and wellbeing outcomes for looked after children.

I previously worked on DECIPHer research studies, as a named collaborator for the Centre and I have authored numerous wellbeing publications. DECIPHer is great place to develop your work with a community of experts on hand to advise, motivate, support and encourage you whenever you need it. The SHRN Network Manager role is an excellent example of how to improve the quality and efficiency of the research process by fostering a culture of collaboration, whilst making a huge difference to children and young people's health and wellbeing.

The Public Health Wales and SHRN strategic partnership was established in 2013 with a shared aim of integrating the research network with Welsh Network of Healthy Schools Schemes (WNHSS) programme delivery. Since then it has played a critical role in the delivery and development of WNHSS as well as a number of key policies including the Whole School Approach to Emotional and Mental Wellbeing statutory guidance launched in 2021 and the new mandatory Health and Wellbeing Area of Learning and Experience.

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The speed at which SHRN has become an integral part of the secondary school infrastructure as well as the positive response to expansion to primary schools is testament to the strength of the evidence into policy and practice partnership. SHRN is delivering real world impacts and I am very much looking forward to the next phase of our work together which will focus on building capacity for research-informed practice across the system.



Alexa Gainsbury, Consultant in Public Health, Public Health Wales
Health Improvement Division

Our partnership with SHRN has allowed me to justify the need for a dedicated Health and Wellbeing lead at Ysgol Aberconwy for the past 10 years. This crucial role has allowed me to transform the health and wellbeing experiences of thousands of students and hundreds of staff members.

SHRN has helped us to celebrate our many successes as well as to introduce targeted interventions where it is most needed. SHRN has helped us educate our students and staff to make healthy and informed lifestyle choices that will have farreaching impacts on their lifelong health and wellbeing.

Rhydian Jones, School Wellbeing Lead who joined us on a SHRN teacher placement

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Working with regional stakeholders

Within my own role I manage a range of services that support schools or children and young people directly to have improved physical and mental health. Over the last 10 years we have had limited local, realtime data to be able to



target services to respond to individual health and wellbeing issues and we have often had to take a universal approach to develop solutions which is not always cost effective. The SHRN data we now have access to gives us greater information to target resources more easily and effectively, which we hope in time will assist us to have greater impact on improving children and young people's health and wellbeing. Post pandemic this will become more crucial than ever to ensure we can respond to any children and young people who need help as quickly as possible and thus reduce the opportunity for issues to manifest as time moves on.

Jonathan Miller, Health and Wellbeing Lead Wrexham County Borough Council

Working with primary schools

DECIPHer has received funding from the Ministers for Health and Social Services and the Minister for Education and Welsh



language for a study to expand the SHRN survey and network activities into primary schools. This began in 2020 with a pilot Year 6 survey and feedback reports modelled on those provided to secondary schools via SHRN. This data aims to help schools with planning for delivery of the new curriculum and the Welsh Government's framework for mental and emotional wellbeing in schools, as well as providing data on regional and national trends. The joining up of primary and secondary activity within a single network will be critical to work around transition from primary to secondary school and mirrors the whole school system delivery models for health improvement policy and practice across Wales. Subsequent consultation work with parents, learners, school staff and education policy stakeholders across Wales has informed expansion of the survey down through the whole of Key Stage 2 (7 to 11 year old pupils). Following piloting of the survey with younger pupils from May to July 2022, our Key Stage 2 survey launched in September 2022 and has been promoted through our policy partners. The survey closed in March 2023, with over 26,000 pupils across almost 281 schools taking part.

6.2 Working with the Public and ALPHA

Since our move into the new Social Science Research Park (SBARC|SPARK), we are now supporting the development of SBARC|SPARK's Public Development Network (SPIN), where we share best practice and learn from other Public Involvement leads based here.

ALPHA

ALPHA, our young people's advisory group, has continued to play a huge role in our 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. Since April 2022, ALPHA has participated in 11 group sessions, co-producing 23 of DECIPHer's research studies, funding bids and external researchers, including the NHS.

ALPHA has 23 active members aged between 14-22 years old, who identify as 13 female, seven male and three non-binary young people. ALPHA has continued to be a partner in the TRIUMPH Network and assisted in co-ordinating

its national event in Edinburgh in October 2023, where 150 young people and professionals from across the UK attended. It was also recently nominated for an award in Glasgow University. ALPHA has worked with HCRW and co-delivered at Research Ethics Committee Development Day to over 60 people around the UK Public Involvement Standards.

Sophie Jones, Senior
Public Involvement
Officer, spoke at 'What
impact does living with
type 1 diabetes have on
children's education?'
event on behalf of Cardiff
University and Diabetes
Cymru at the Senedd in



February 2023 on her experience of ALPHA and living with Type 1 Diabetes herself. Sophie had been advising on youth public involvement work to share the findings from Cardiff University's six-year study looking at how childhood diabetes and diabetes management affects a child's experience of school.







We asked some of our ALPHA members what it's like to be part of DECIPHer.





Asha Mahamed

Praveena Pemmasani

Asha Mahamed and Praveena Pemmasani are two of ALPHA's most long-standing members. They are now both in their third year of studying medicine at university, having joined the youth advisory group (YAG) while in secondary school.

Working within ALPHA prepares us with the skills and, more importantly, the mindset to participate in research. Our voices are often ignored in traditional research settings, even on matters relevant to us. The YAG is a space for us to share our lived experiences and have our expertise appreciated whilst increasing our research capability.

In a typical ALPHA session, we collaborate with visiting researchers on topics relevant to children and young people, ranging from mental health and wellbeing to smoking, vaping and drugs. By sharing our perspectives as young people, we help researchers refine their research focus to tackle the most pertinent questions, improve their methods of collecting data from young people and develop implementable and beneficial solutions. Recently, we worked with the Wales COVID-19 Evidence Centre to synthesise ten research questions that we felt were the most urgent and relevant. In this way, our work will go on to benefit children and young people across the country. Regardless of the scale, we are always immensely proud of our impact.

Whereas most public involvement groups are short-term and built around a particular research focus, ALPHA innovatively places the young people at the centre. In ALPHA, the development of young people - personally, academically, and socially - is a key priority. By training us to participate in research and taking time to establish intra-group relationships, we collaborate efficiently with visiting researchers to help them achieve their

aims. Furthermore, witnessing the importance our opinions are given is extremely validating and fosters our confidence and self-esteem.

Through this YAG, we have had many more opportunities to develop our interests and skills. We have been co-producing research and outputs on young people's mental health. We are directly involved in writing academic papers, running the workshops to collect data and presenting at conferences - all encouraged and facilitated by ALPHA. Discussing public health topics has educated us in the latest thinking and research within these fields; this is especially beneficial to those of us who want to pursue a career in health and/or research. Our experience as part of ALPHA has helped us personally in our medical studies and we greatly value patient perspectives as we know how influential they can be in our delivery of healthcare. Even for those not interested in health or research, ALPHA empowers young people to aspire higher by equipping us with a broader knowledge base, valuable expertise, and a confident mindset.





Public Involvement Steering Group (PISG)

Alongside ALPHA, we have continued to develop our infrastructure in Wales and across the UK. 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. Through our PISG network we helped to host a Child Friendly Cardiff event 'Children in the Media' which was held in SBARC|SPARK through the Self Organised Learning Environment (SOLE). As our networks continue to grow, our connections will engage more people in our research at DECIPHer.

I have worked with DECIPHer and have found them to be rights centred, values led, inclusive and forward thinking in their work planning and projects. DECIPHer are hugely networked across the UK and Wales, bringing up-to-date, evidence-based practice into their daily work. Their appreciation of public coproduction, participation and diversity means they strive to meet the needs of all ages and communities. Their approach is person centred and the opportunities provided to communities to contribute to their work as active participants has a direct impact on wellbeing for individuals. DECIPHer are leaders in Wales and the UK and I'm delighted that my organisation has a small part to play on that journey.

Ceri Reed. Parents Voices in Wales CIC





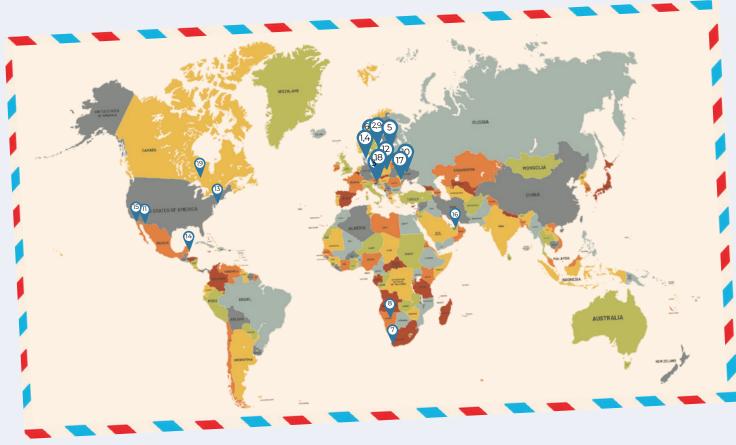
Parent and Carer Advisory Group (PAG)

Our Parent and Carer Advisory group (PAG) was established in late 2022 and has 29 active members who meet on a monthly basis online. The aim of the group is for parents and carers to have a voice by contributing feedback into current research. The group is made up of members from across Wales, representing different parenting roles, including parents, carers, step-parents, kinship carers, adoptive and foster parents. This year, consultations with parents and carers provided valuable input to our informed consent processes for school-based surveys and data linkage.





7. DEVELOPING INTERNATIONAL COLLABORATIONS AND ENGAGEMENT



<u>Teaching</u>

May '22

• Graham Moore teaches a masterclass on Complex Interventions at Aarhus University, **Denmark (1)**

June '22

• Jemma Hawkins and Graham also teach a three-week doctoral course at the Karolinska Institute, **Stockholm (2)**.

Sep '22

• Yulia Shenderovich contributes a free online course to the Sexual Violence Research Initiative Pathways to Research Impact course.

Nov '22

- Graham and Rhiannon Evans teach short course Process Evaluation of Complex Interventions at the University of Klagenfurt, Austria (3).
- Rhiannon and Rachel Brown teach Process Evaluation & Adaptation at Aalborg University, Denmark (4).

<u>Invitations</u>

June '22

Jeremy Segrott is invited to act as viva examiner for Karin Streiman's thesis at **Tallinn** University (5).

POSTCARI

- · Graham is invited to be part of a reference
- group for a new research school at the University of Gothenburg (6).

Nov '22

 Yulia is invited to serve as a Peer Reviewer for the South Africa (7) Medical Research Council grants.

<u>Visits</u>

July '22

• Rhiannon Evans and Honor Young visit Namibia (8) for the Phoenix Fellowships Exchange Project.

Sep '22

• DECIPHer hosts Devy Elling, a PhD student from Stockholm University (9), Dr Knud Ryom and Dr Julie Sandell Jacobsen from Aaarhus University (1) and Dr Louise Lund Thompsen from Aalborg University (4).

<u>Working groups</u>

POSTCARD

Yulia chairs an online working group on mental health problem prevention for war-affected children in and from Ukraine (10) and the region.

Yulia adds to WHO guidelines on parenting interventions.

Lectures and conferences

May '22

- Kelly Morgan flies to Phoenix (11) for The International Society of Behavioral Nurtrition and Physical Activity (ISBNPA) Annual Conference to give two presentations, on sugar-sweetened beverage consumption among adolescents from 1998-2017 and the National Exercise Referral Scheme (NERS).
- Yulia Shenderovich attends the Foundation Child international conference 'How to Ensure and Promote Mental Health in War Contexts', in Warsaw (12).

Prof. Catherine Ward presents joint work (incl. Yulia and others) on scaling parenting programmes at a UN General Assembly event in New York (13).

- Hayley Reed attends The International Society for the Prevention of Child Abuse and Neglect in Tallinn (5) to give a talk on improving communication in families affected by parental mental health disorders.
 - Yulia also attends; she presents on adapting a violence prevention parenting programme and providing parenting support in Cape Town.
 - Rachel Parker attends the The International Society for the Study of Self-Injury's 17th Annual International Conference, held online. She presents on young people's participation in adolescent self-harm preventative intervention research.
 - Rachel also participates in the Global Community Health Annual Workshop, a UNESCO online conference, where she showcases her community-based adolescent self-harm preventive intervention research work.

• Yulia attends The Ukraine Parenting: Online Dissemination of Materials; a series of meetings and conferences.

POSTCARD

- · Hayley Reed, Rhiannon Evans and Simon Murphy attend the European Society of Prevention Research Conference in Tallinn (5). They present Coproduction as an emerging methodology for developing school-based health and wellbeing interventions with secondary school stakeholders.
- Yulia also attends and presents on supporting families in challenged settings.
- Yulia attends the The Sexual Violence Research Initiative annual conference in Cancun (14). Led by Mackenzie Martin, she presents Implementer Quality of Delivery and Experiences at Scale in Tanzania.

Oct '22

- Jemma Hawkins presents Five principles to guide co-created implementation collaboratives with three applied case study examples at the Society for Implementation Research Collaboration Conference in San Diego (15).
- Kelly Morgan joins the International Society for Physical Activity and Health conference In Abu Dhabi (16), presenting on the National Exercise Referral Scheme in Wales.

Nov '22

- Rachel Brown's poster presentation Trends and experiences of delivery of breastfeeding peer support in England and Wales since 2015 features at the international online UNICEF UK Baby Friendly Initiative Annual Conference.
- Yulia attends the Conference of the International Association for Adolescent Health in Moldova (17), where she meets with local colleagues to discuss plans for research on parenting programmes for families with adolescents.

Jan '23

- · Yulia, Graham Moore, Rhiannon Evans and Bethan Pell attend the FLOURISH Project kickoff and workshop meeting in Vienna (18).
- They present on co-production and process evaluation activities.

• Yulia presents Resources for parenting support & family mental health in the context of conflict at the Refugee Health: Policies and Practice course at McMaster University, Ontario (19).

Namibian collaborations

Honor Young and Rhiannon Evans are taking a 10-day trip funded by the Cardiff University Global Opportunities Scheme to further our collaboration with the University of Namibia and the Namibia Ministry of Education, Arts and Culture.



As part of this they will work with research, policy and practice stakeholders to continue to explore the potential feasibility of the SHRN model in the Namibian context. They will also be undertaking some of our methodological short course training at the University and working with the Commonwealth Fellows who visited us in 2022 to complete outputs related to their fellowship projects.

Devy Elling: Reflections on a research placement from Sweden

As part of my doctoral training, I participated in a course that Professor Graham Moore and Dr Jemma Hawkins cohosted for Karolinska Institute in Stockholm. The course content was extremely relevant to my work, and since I



was also looking for a research centre where I could conduct a research visit, DECIPHer felt like a natural research environment where I could develop my area of work around alcohol misuse prevention in the workplace. Everyone

at DECIPHer was so helpful and welcoming. The research visit has affected my research massively! It has helped me to improve my ideas and how I approach intervention research. Hopefully, I can come back for potential collaborations in the future.

Dr Yulia Shenderovich: European collaborations

Yulia Shenderovich joined DECIPHer in 2021 as a Senior Lecturer. In January 2023, as part of the DECIPHer team, she started work on a fouryear project called Family-Focused Adolescent & Lifelong Health Promotion



funding is ~three million euros, via Horizon Europe and UKRI and linked with the Global Alliance for Chronic Diseases. The project is building on the topic expertise we have in DECIPHer.



I am from Belarus, and so I am especially glad that over the past year we have been able to work together with colleagues in Eastern Europe. Together with the Wolfson Centre, we have also been working to support young people and families affected by the war in Ukraine. In March-April 2023, I co-led, with Oxford University's social policy team, an effort to create online resources to support families. These resources have been disseminated by international organisations and local agencies in Ukraine and neighbouring countries. This work has sparked our involvement in other collaborations, including an international initiative to review digital tools that support the mental health of young people in the context of conflict globally. With FLOURISH, we are hoping to build on this by integrating the needs of refugee families into the programme design and delivery from the outset.

8. CONCLUSION

This year has again demonstrated DECIPHer's ability to support multidisciplinary capacity development for public health improvement.

This included a new Professor, Reader and Senior Research Fellow, alongside mid-career and early career researchers recognised by prestigious awards. We also offer a vibrant student placement programme inspiring a new generation to enter academic life and pursue research careers, including lectureships and research posts at the Office for National Statistics and the Department of Education.

Our research focus continues to be a health-inall policy approach to improve young people's health and reduce inequalities. In this, we make important contributions to the Welsh policy landscape including the Well-being of Future Generations Act (2015), Public Health Wales Act (2017) and Social Services and Wellbeing Act (2014); as well as the Whole School Approach to Mental Health, the National Obesity Strategy and the transformation of the Curriculum in Wales. In terms of research infrastructure, we take a partnership approach to developing and sustaining innovative collaborations. This includes a new cross education and health policy board in national government, an enhanced data sharing agreement with the Public Health Observatory and a joint approach to workforce development with the Welsh Network of Healthy Schools. We have been instrumental in diffusing our innovation across the UK and internationally, making big impacts beyond Wales. Most obviously this relates to our internationally renowned short courses, but we have also supported the development of SHRNs in Scotland, the South-West of England and Greater Manchester. This, together with progress in supporting SHRN in Namibia, means our approach to research innovation will continue to reap national and international benefits.





