



### **UKPRP Network Awards, Call 2 – Successful outline applicants**

The table below lists the five applicants who were invited to submit full proposals for the UKPRP network award under the current call. Additional information on each outline proposal can be found by clicking on the name of the Principal Investigator. The information provided is taken from the outline applications and provided with the permission of the Principal Investigator (and the network).

#### **Network**

<b>Principal Investigator</b>	<b>Institute</b>	<b>Title of proposal</b>
<a href="#">Professor Stephen Friend</a>	University of Oxford	Our Menopause: Building knowledge and support through digital technology
<a href="#">Professor Dame Hazel Genn</a>	University College London	Health Justice Network
<a href="#">Dr Anil Namdeo</a>	Newcastle University	CleanAirNet: a network to maximise air quality gains of transport interventions, prevent non-communicable diseases and reduce health inequalities.
<a href="#">Professor Judith Stephenson</a>	University College London	WiNDOWNet. Wider preconception Determinants Of Wellbeing Network
<a href="#">Dr Andrew Williams</a>	University of St Andrews	The (Dis)Connection Network

Grant reference	Principal Investigator	Institution	Title of Proposal
MR/T044993/1	Professor Stephen Friend	University of Oxford	Our Menopause: Building knowledge and support through digital technology

**Summary**

Our network vision is to build knowledge, support and empowerment through a digital health community created by and for women to nourish each other during their menopause transition. Aligning with the UKPRPs mission to prevent poor mental health and promote well-being during a life course transition that all women experience, we aim to use cross-cutting approaches to enable women to play active drivers in their health through the development of a digital community and innovative participant driven data strategies involving wearable devices and smartphone apps.

The purpose of our network is to pull together the needed expertise and experience to tackle the major clinical, technological, analytical, social and ethical challenges associated with building knowledge and support for women during the menopause transition. We plan to build on an existing coalition of partners involving leading experts in app development, and digital data storage and integration, artificial intelligence and machine learning, women's health, psychiatry and epidemiology that foster co-dependence and knowledge exchange in an open-source environment. Our immediate objective is to enrich our existing network to the needed disciplines to tackle these major challenges, which will need to cut across diverse disciplines while importantly involving co-development models of collaboration with women.

80% of women in the UK experience symptoms associated with menopause, including hot flashes and night sweats, sleep and cognitive problems, urinary incontinence, vaginal dryness, anxiety and mood swings, while 25% of women experience severe forms of these symptoms. Recent surveys highlight the substantial negative impact this transitional period has on work-life and relationships. General knowledge on the menopause transition is sparse and inaccessible. There is a disconnect between standard knowledge provided by healthcare providers and that found online compared to individual experience of early signs. There is little systematic evidence to guide interventions and inform mechanisms of why some women experience certain symptoms compared to others. The root of this issue is in the challenging measurement of heterogeneous and dynamic symptoms within and across individuals that poses major technological and analytical challenges. The menopause also has a damaging history with ingrained social stigmas. Recent surveys have under covered that these stigmas still exist at home, at the workplace, but most surprisingly, within the healthcare system of which care for the menopause transition is fragmented. There is a clear out-cry from women experiencing the menopause transition reporting feeling isolated, dismissed, and helpless, outlining the desperate need for knowledge and support.

We intend to build a community of women with the shared experience of menopause and enable their voices and desires to shape the technology, health systems and social change that will nourish them during this transition. We anticipate that in the building of this community we will add benefit to the participating women, and those not participating through starting the conversation on currently "not talked about symptoms and experiences". This will in turn lay the foundation for systems mapping and feasibility work and larger research programmes co-developed by women and centered on empowerment and nourishment, rather than being driven by pharma or tech companies interested in consumerism.

Our proposed network will be sustained through activities centered on engagement, outreach, raising awareness and identifying co-developed strategic priorities that will further help shape the needs of women entering this transitional period, systems thinking and learning about the feasibility of our approach through an online survey, meetings, workshops, forums, and building capacity for larger funds for a pilot study, followed by larger programmes of work.

Grant reference	Research Director	Institution	Title of Proposal
MR/T045094/1	Professor Dame Hazel Genn	University College London	Health Justice Network

## Summary

### Rationale

People experiencing disadvantage and vulnerability are likely to face social difficulties with legal dimensions that may make or keep them unwell. These include social welfare problems such as insecure housing, access to benefits, discrimination, and employment difficulties. Such issues are involved in most of the known social factors underpinning the unequal distribution of physical and mental ill health across society. Although the law provides rights and protections, the most disadvantaged groups often fail to receive the benefits and conditions to which they are entitled. Legal support can help people facing social welfare problems, for example, by challenging unfavourable welfare benefits decisions, inadequate housing conditions, unfair treatment at work, supporting people experiencing domestic violence and so on. Legal professionals working in partnership with health professionals can intervene in these health-harming social welfare legal issues to improve health and quality of life. Legal support can be targeted to those most at risk of developing or worsening poor health linked to social problems, for example, by embedding free legal help into healthcare settings. However, the law's role is poorly understood and underused in health-led initiatives aimed at preventing and reducing inequalities in ill health.

### Vision, aims and objectives

Current activity in this area is fragmented and lacking strategic oversight. The Health Justice Network's (HJN) vision is to support the development and evaluation of 'Health Justice' initiatives which bring together the legal and health sectors to prevent and reduce inequalities in ill health. To do this, the Network aims to develop skills, capacity and connections among public health and legal sector representatives for cross-sector working. This includes people from policy, service delivery, practice, research and professional education. The Network will develop shared understanding of the role of law in preventing ill health and design interventions which bring together legal and health services. It will also increase capacity for research and evaluation of Health Justice interventions and incorporate Health Justice into legal and health sector education.

### Potential benefits

This network is very timely. Health inequalities are widening and at the same time cuts to legal aid are affecting the poorest and most vulnerable in society. This also increases pressure on health services, bringing social problems experienced by patients to them which they are not able to address. The health sector alone cannot prevent physical and mental ill health or reduce health inequalities. Joined up work across health and non-health sectors is needed but is difficult to achieve without support and infrastructure. Potential benefits of the HJN therefore come from providing a platform to support cross sector working beyond the health system. Ultimately, potential benefits will be felt by people and communities most at risk of poor health and least able to access legal support.

### Plans for sustainability

We will take steps to promote the sustainability of the HJN over time, including:

- Raising public and professional awareness of Health Justice and the Network.
- Building sustained relationships between different health and legal sector roles.
- Developing the workforce by supporting early career researchers, building Health Justice into research and practitioner education, and enabling exchange between health and legal professionals.
- Broadening our membership nationally and internationally, connecting with existing networks abroad.
- Helping establish regional hubs of Health Justice activity.
- Developing a programme of research to build the evidence base for Health Justice initiatives which considers the priorities of those responsible for funding and putting them into practice.
- Providing pilot funds for initial research needed to develop larger projects.

Grant reference	Research Director	Institution	Title of Proposal
MR/T045361/1	Dr Anil Namdeo	Newcastle University	CleanAirNet: a network to maximise air quality gains of transport interventions, prevent non-communicable diseases and reduce health inequalities.

### Summary

CleanAirNet is a network to maximise air quality gains of transport interventions, to prevent non-communicable diseases (NCDs) and to reduce health inequalities. Air pollution is the greatest environmental harm to our health, and the fourth greatest threat to public health after cancer, heart disease and obesity. The World Health Organization identifies air pollution as the second leading cause of deaths from non-communicable diseases, after tobacco smoking. Additionally, air pollution is a major driver in health inequality – it disproportionately affects children, younger families, poorer households, older people and people living with pre-existing health conditions. Improving air quality in the UK is therefore not only critical for preventing NCDs, but also reducing health inequality and improving the lives of the millions of people already living with NCDs. CleanAirNet will address the fundamental challenge of how to maximise the air quality impact of traffic-related interventions to prevent non-communicable diseases (NCDs) and reduce health inequalities across the life course.

Our vision is to strengthen UK policy and health impact. We will achieve this by generating new knowledge and understanding of the socio-behavioural and biomedical mechanisms which link upstream air quality interventions and related environmental and structural factors with downstream human health impacts, and then translating this into policy change.

CleanAirNet will focus on transport policies and interventions with particular emphasis on clean air zones (CAZ) in the first wave cities and the Ultra-Low Emission Zone in London. The majority of local clean air plans are being rolled out in 2020 and beyond, so the work of this network will be extremely timely and deliver maximum impact for policy-makers.

The network will draw together experience and expertise in all aspects of the TRAP (traffic related air pollution) and NCDs linkages including policy, planning, economic, cultural and behavioural causes of TRAP sources and exposure and nuances of NCD and health outcomes. The network includes health inequality expertise to ensure any proposed research takes into account impacts on health inequality. The network includes expertise in qualitative and quantitative measurements of the elements in this system.

Network seminars & workshops will provide a new space for the exchange of unique insights from these diverse disciplines with a focus on TRAP, NCDs and intervention effectiveness. By bringing together clinicians, toxicologists, health economists, sensor developers, regulators, policy developers, industry, equity, environment, NCD experts, epidemiologists, behaviour scientists, atmospheric scientists, air quality modellers, transport planners, active travel campaigners and civil society groups we will develop practical proposals for evaluating effectiveness of current TRAP interventions with respect to NCDs and ensure the UK's future capacity to develop collaborative, interdisciplinary research proposals for investigating broader and novel urban - air quality - health improvement interactions and preventing NCDs.

Grant reference	Research Director	Institution	Title of Proposal
MR/T045108/1	Professor Judith Stephenson	University College London	WiNDOWNet. Wider preconception Determinants Of Wellbeing Network

### Summary

Our vision is one where the notion of preparing for healthy pregnancy is normalised, where environmental, social and economic conditions are conducive, effective interventions are accessible to women and men, and support is optimised for wellbeing before a pregnancy.

We know that parental characteristics, including diet, body fat, metabolism, and stress, affect the health of people throughout their lives, but we know much less about how the 'wider determinants' of these factors, that is, pre-existing conditions - whether social, economic or environmental - shape preconception health, or how to optimise them.

Following our Lancet series on preconception health, which showed that 90% of women were not well prepared, in health terms, for pregnancy, we set up a UK Preconception Partnership without funding to articulate our vision and take forward an action plan to translate evidence into policy and practice. The Partnership has so far focused more on influencing the healthcare sector (with membership that includes the Royal Colleges of Obstetricians and Gynaecologists, General Practitioners, Psychiatrists, Faculty of Sexual & Reproductive Health, Public Health England and relevant charities) than the wider determinants of preconception health. A Network award would enable us to tackle the latter, and exert pressure for a whole government approach to preconception health, in keeping with our published vision. Without an intelligent focus on the wider determinants and the influence of socio-economic disparities on health, progress will be limited and individually targeted interventions alone risk burdening women with preconception health responsibility and widening health inequalities.

The purpose of the Network is to bring together researchers, policy-makers, practitioners and the public to explore the most promising approaches for tackling the wider determinants of preconception health, informed by 'big data' and systems mapping, and to co-develop a set of Network priorities (action plan) for intelligent targeting of public health interventions, including further funding applications and policy-influencing outputs, backed by pilot / feasibility studies. Our initial membership includes researchers, practitioners and other stakeholders who can bring new insights, including local councils, geography, housing policy, and citizen science, the Food Foundation, Sustain - the alliance for better food and farming, Tommy's pregnancy charity and the Young Women's Trust. Multidisciplinary and multi-professional membership, alongside a strong citizen science strategy, will ensure that our work is grounded in the lives of people for whom deprivation and vulnerability are a daily challenge.

Network activities will include three all-member events, training in systems approaches and citizen science, 'research sandpits' and mini-sabbaticals to enable members from different organisations to work alongside each other, a formal priority setting process, and round-tables with policy-makers.

Network Outputs will include a website with summary of relevant data sources and interventions, event reports, small-scale (pump-primed) projects, future grant applications, publications, plain language summaries and policy-influencing papers.

Grant reference	Research Director	Institution	Title of Proposal
MR/T045051/1	Dr Andrew Williams	University of St Andrews	The (Dis)Connection Network

### Summary

Most of us will remember the unpleasant experience of being lonely at some point in our lives. Research has started to reveal that lonely people may have a higher risk of mental and physical illness and even earlier death. Surveys of the UK population have found that loneliness can affect people from any background and age, with young adults reporting the highest levels of loneliness. It has also been found that disconnection is not just about personal circumstances, but is also affected by things like public transport, local facilities or politics. As more people are reporting being lonely and so are at higher risk of disease and premature death, the UK government and devolved administrations have been developing policy responses for each country. However, to date there is little research on what can be done at community or societal level to prevent and reduce loneliness.

The (Dis)Connection Network will bring together researchers, policymakers, practitioners and members of the public to develop a strategic approach and focus to the development, testing and implementation of interventions used to prevent or reduce loneliness and support health. The many reasons that people can become disconnected and lonely may not be addressed by a single government policy or area of research. Therefore, people from different backgrounds and expertise need to work together to bring about change.

We will begin by working with examples of some projects that have brought people together to learn about the possible causes of disconnection and loneliness in different communities and how these interventions attempted to re-connect people. These will include communities in urban and rural areas, people sharing a workplace and a community brought together by a shared interest in dancing. The Network will seek additional examples of ways communities have connected or disconnected, including online communities. The Network is not focused on specific groups of people, but the whole population, recognising that what causes disconnection among some people might connect others and therefore different approaches may be necessary.

The (Dis)Connection Network aims to ensure that research on connectivity and loneliness builds on previous research and theory, developing evidence and practice to strategically respond to an important risk factor for multiple poor health outcomes. The activities of the Network will provide policy makers with a well organised body of research to inform their decisions. The focus of the evidence will be on projects and interventions (including technologies) that can be delivered to whole communities or populations and have long-term effects at reasonable costs. The Network has been designed to focus on changing the circumstances that have led to high levels of loneliness across society. The Network will operate through small (but interconnected) working groups focused on case studies, but with expertise and experience being shared across the Network. Webinars will be organised to share the progress and encourage people to join the Network. The achievements and recommendations of the Network will be widely shared with people who can take action to prevent and reduce loneliness.

The members of the Network will also develop research projects and seek funding to support their delivery. This will further grow the Network and ensure its relevance to the communities it is working with. Building on the initial Network membership we will strive to add members who represent relevant major fields of policy, practice and research that can support the ongoing activities of the Network. It is hoped that the Network will also establish methods and approaches to this issue, which will become embedded during the three years of the Network including some transferable to other similar problems.