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CLINICAL ACADEMIC TRAINING SCHOOL

RESEARCH SHOWCASE

23RD NOVEMBER 2023

ENGINEERS HOUSE
THE PROMENADE
CLIFTON DOWN
BRISTOL
BS8 3NB

CLINICAL ACADEMIC TRAINING SCHOOL

GRIP

We are delighted to welcome you to the 2023 Bristol Clinical Academic Training School Research Showcase taking place in Engineers House.

The theme this year focuses on clinical academic careers and we are pleased to be joined by many wonderful colleagues to share their work and experiences.

Yoav and Helen

Professor Yoav Ben-Shlomo and Professor Helen Winter
Heads of Clinical Academic Training School

PROGRAMME

12:30	ARRIVAL & LUNCH
13:30	ARE THE CULTURAL BARRIERS TO A CAREER IN CLINICAL ACADEMIA GETTING BETTER? JANE BLAZEBY, HELEN BOULD AND PIPPA BAILEY
15:05	BREAK & POSTERS
15:35	WORKSHOPS
16:25	ORAL PRESENTATIONS
17:10	NEW VISION FOR BRMS CHRISSIE THIRLWELL
17:40	FROM CLINICIAN TO ACADEMIC TO ENTREPRENEUR MOIN SALEEM
18:30	DINNER & SOCIAL

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SPEAKER PROFILE

PROFESSOR JANE BLAZEBY

Jane Blazeby is Professor of Surgery at the University of Bristol. She is director of the Royal College of Surgeons Trials Centre in Bristol and co-directs the Surgical and Orthopaedic Innovation theme of the Bristol Biomedical Research Centre. Jane collaborates with surgeons, methodologists, trialists and patient partners to design and deliver randomised controlled surgical trials and early phase studies. She enjoys working with colleagues to develop and test methodological innovations to improve study design and conduct whilst simultaneously evaluating surgical procedures. Ultimately, her vision is that surgical practice in the NHS becomes evidence based: All surgeons and patients participate in research for future patient benefit.

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SPEAKER PROFILE

DR HELEN BOULD

Helen Bould is a Consultant Senior Lecturer in Child and Adolescent Psychiatry at the University of Bristol, and works clinically in Gloucestershire Health and Care NHS Foundation Trust. She completed her clinical training in Severn Deanery and her PhD at the University of Oxford. Her particular area of research expertise is around eating disorders – particularly their epidemiology and the cognitive processes that contribute to their development and maintenance.

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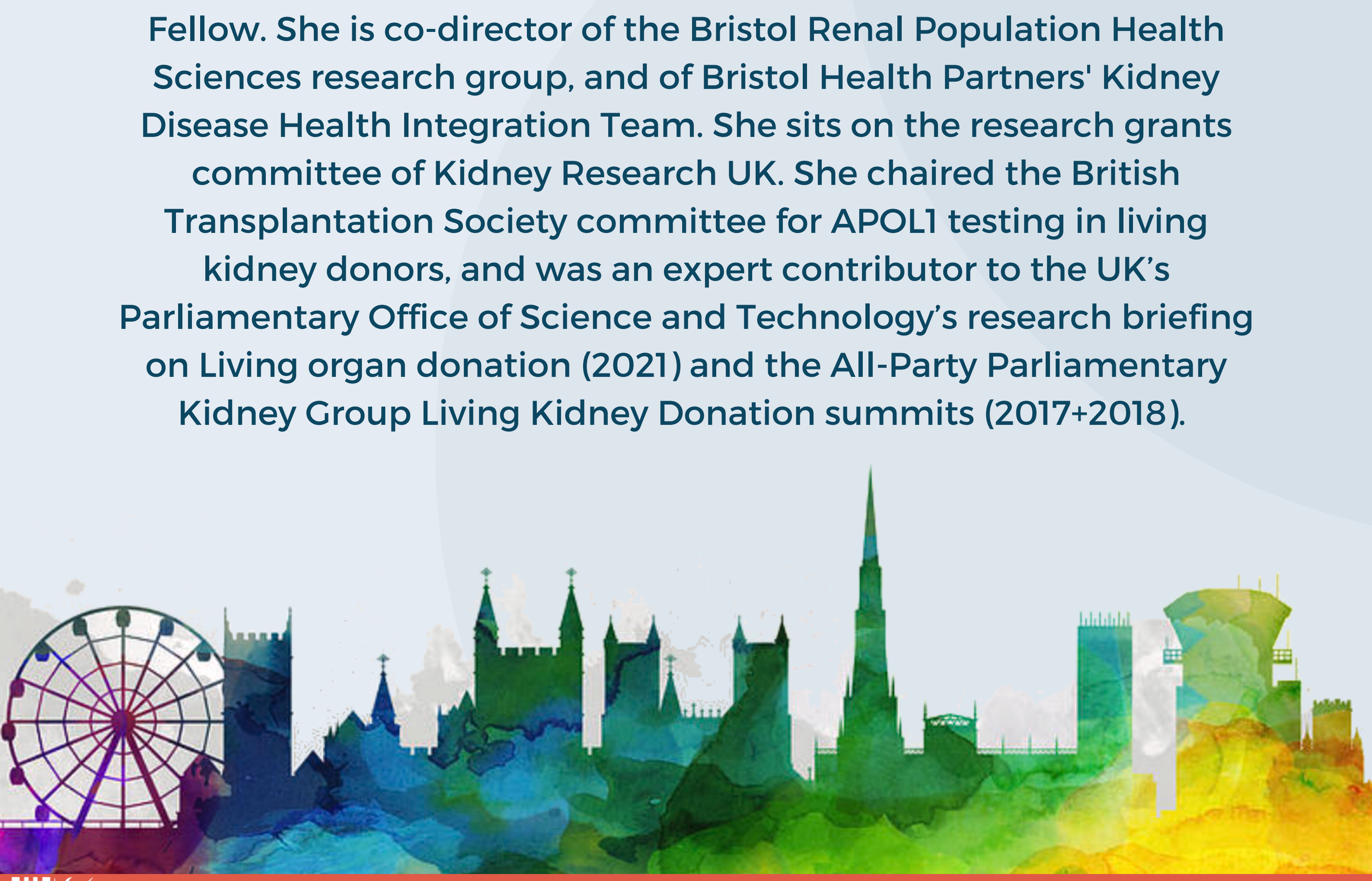
SPEAKER PROFILE

PROFESSOR PIPPA BAILEY

Pippa Bailey is an Associate Professor in Renal Medicine at the University of Bristol and Honorary Consultant Nephrologist at North Bristol NHS Trust. Her mixed-methods research focuses on improving access to and outcomes following kidney transplantation. She started as an ACF in the Severn Deanery in 2010, before completing an NIHR Doctoral Research Fellowship between 2013-2016. She was an ACL from 2016-2019, and is currently a Wellcome Trust Clinical Research Career Development Fellow. She is co-director of the Bristol Renal Population Health Sciences research group, and of Bristol Health Partners' Kidney Disease Health Integration Team. She sits on the research grants committee of Kidney Research UK. She chaired the British Transplantation Society committee for APOL1 testing in living kidney donors, and was an expert contributor to the UK's Parliamentary Office of Science and Technology's research briefing on Living organ donation (2021) and the All-Party Parliamentary Kidney Group Living Kidney Donation summits (2017+2018).



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SPEAKER PROFILE

PROFESSOR LIZ COULTHARD

Liz Coulthard is professor of cognitive neurology at the University of Bristol. She leads the multidisciplinary ReMemBR research group and runs a cognitive disorders clinic. Her clinical and experimental studies focus on early dementia. She investigates sleep in early Alzheimer's Disease and Lewy body diseases, with a view to developing interventions for sleep to help prevent decline and improve quality of life in prodromal and established dementia. She sits on the editorial board of the Journal of Neurology, Neurosurgery and Psychiatry, as well as the Medical Research Council and Association of British Neurologists doctoral fellowship panels.

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SPEAKER PROFILE

ANNIE NOBLE-DENNY

Annie has been a lecturer on the MSc in Teaching and Learning for Health Professionals (TLHP) for 9 years and has a strong clinical and educational background. Her previous life was as a PICU nurse/ Sister in London and Bristol. Then she moved into a teaching role as a Paediatric Resuscitation and Simulation educator. She studied the TLHP Cert and Diploma during this time working as a nurse educator and then joined the TLHP teaching team as a lecturer at Bristol University, where she then also completed her MSc in Medical Education. Annie is currently studying for her Doctorate in Education (EdD) due for submission in March 2024.

Annie is also the School Education Director of the Medical School and oversees the design and delivery of all taught programmes, ensuring we deliver a high quality learning experience to our students.

Her main interests are inter-professional education, programmatic assessment, developing and sustaining educational research in health sciences education and workplace-based learning.

SPEAKER PROFILE

ASIM ALI

Asim joined University of Bristol in 2021 as a Lecturer, Programme Co-director and is the Lead for MSc (Online Learning) within the HPE programme.

For the past 10 years he has been involved in medical education in Vanderbilt University, University of Houston, and Swansea University, as well as Faculty Development programmes in the National University-Sudan. In his previous role as Director of CPD in National University, Asim planned, delivered, and oversaw curricular, instructional, and organizational development projects.

Prior to earning his Master's in Health Professions Education from Vanderbilt University, Asim held a medical degree from the International University of Africa (Sudan). He is currently finishing a PhD in Medical Education at Swansea University investigating the effectiveness of Cognitive Load Theory in improving learning and problem-solving.

Asim's major research interests are in the areas of Problem-Solving, Instructional Design, Cognitive Load Theory, Mental Models, and Evidence Synthesis.

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SPEAKER PROFILE

COLLETTE SHEAHAN

Collette has been working in the UK Higher Education sector in a research funding role for 10 years, within the newly rebranded Division of Research, Enterprise and Innovation (DREI) (formerly RED), at the University of Bristol.

In her current role as Research Development Manager (Faculty of Health and Life Sciences), she enjoy working in partnership with a range of stakeholders from across the University and with UK Funders, to develop and implement a suite of research support services to improve our competitive funding success and to further strengthen the research income and reputation of the University of Bristol. She have gained extensive research funding experience and specialist knowledge across the UK funding landscape, including from UK Research and Innovation (UKRI), major UK charities e.g. Wellcome Trust, as well as UK government research funding, e.g. through the National Institute for Health and Care Research (NIHR).

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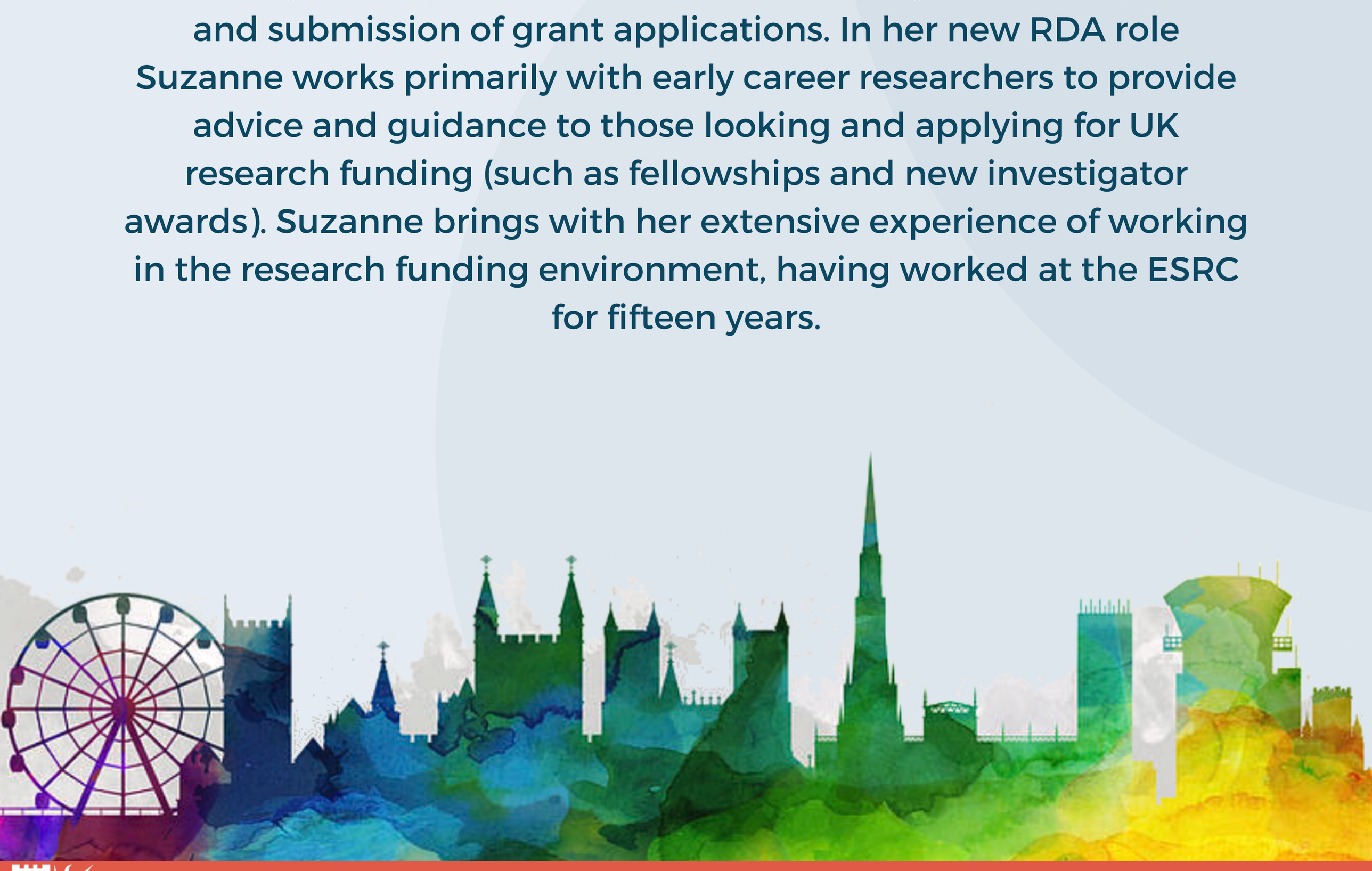
SPEAKER PROFILE

SUZANNE MILLS

Suzanne has been working for the University for eight years and has recently moved into the Research Development Associate role (Life & Health Sciences) from the Law School, where she worked as the School Research Manager. Her work included overseeing the Schools grant capture pipeline and facilitating the development and submission of grant applications. In her new RDA role Suzanne works primarily with early career researchers to provide advice and guidance to those looking and applying for UK research funding (such as fellowships and new investigator awards). Suzanne brings with her extensive experience of working in the research funding environment, having worked at the ESRC for fifteen years.



SPEAKER PROFILE

DR KUSH ABEYSEKERA

Kush Abeysekera is a NIHR Academic Clinical Lecturer ST7 in Liver Epidemiology and Public Health. He works between Population Health Sciences and the Hepatology department at Bristol Royal Infirmary. His PhD, completed in 2022, was exploring the burden and risk factors for nonalcoholic fatty liver disease in young adults in collaboration with the ALSPAC birth cohort. He is heavily involved in early detection of liver disease research and community strategies nationally. Related to this he was awarded the Sheila Sherlock Prize for Best Young Investigator by the British Association for the Study of the Liver in 2023.

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SPEAKER PROFILE

PROFESSOR CHRISSIE THIRLWELL

Chrissie Thirlwell was appointed as Head of the Bristol Medical School in 2023, prior to this she was the Associate Dean of the University of Exeter Medical School and Clinical Director of the South West Genomic Medicine Service Alliance. Prof Thirlwell is Professor of Cancer Genomics and Clinical Academic Oncologist at the University of Bristol Medical School.

Chrissie is an established national and international leader in clinical and research roles across the Higher Education, National Health Service and charity sectors.

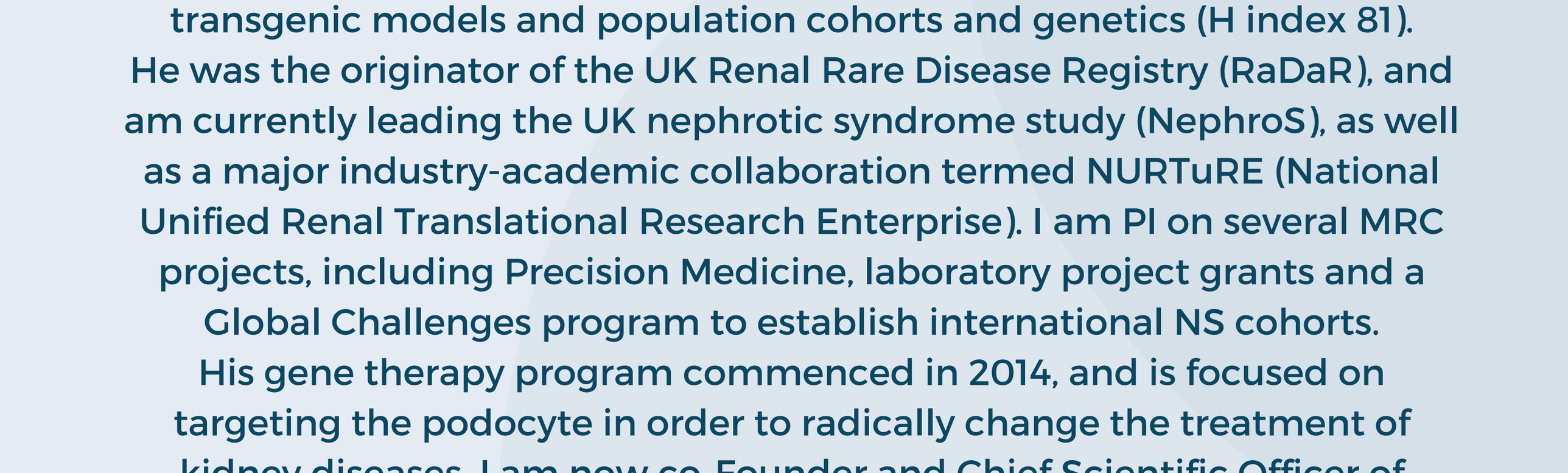
She has an international reputation for research into and on the management of neuroendocrine tumours and integrated genomic analyses of cancer. She has gained significant experience throughout her career in Undergraduate, Postgraduate and Clinical Academic training and is a Senior Fellow of the Higher Education Academy.

She was the NIHR Clinical Academic Training Lead for Oncology at UCL and was the Training and Development lead for the NIHR Exeter Biomedical Research Centre prior to moving to Bristol.

SPEAKER PROFILE

PROFESSOR MOIN SALEEM

Moin Saleem trained as an undergraduate at University College, London. He is a Fellow of the Royal College of Physicians. His PhD was in transplantation immunology at Institute of Child Health, London. Paediatric nephrology training at Great Ormond Street Hospital, London. He set up my independent laboratory programme in glomerular cell biology in Bristol, as well as holding a post as a consultant paediatric nephrologist since 1999, with an international reputation in management of nephrotic syndromes, and a pioneer of the field of podocyte biology. He now heads Bristol Renal, a glomerular research group of approximately 45 researchers, covering all areas from cell biology, transgenic models and population cohorts and genetics (H index 81). He was the originator of the UK Renal Rare Disease Registry (RaDaR), and am currently leading the UK nephrotic syndrome study (NephroS), as well as a major industry-academic collaboration termed NURTuRE (National Unified Renal Translational Research Enterprise). I am PI on several MRC projects, including Precision Medicine, laboratory project grants and a Global Challenges program to establish international NS cohorts. His gene therapy program commenced in 2014, and is focused on targeting the podocyte in order to radically change the treatment of kidney diseases. I am now co-Founder and Chief Scientific Officer of Purespring Therapeutics.



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ABSTRACT

LONGITUDINAL ANALYSIS OF MEDICATION PRESCRIBING PATTERNS IN OLDER PEOPLE WITH ADVANCED CHRONIC KIDNEY DISEASE AS THEY APPROACH THE END OF LIFE

MATTHEW LETTS, SAMANTHA HAYWARD, NICHOLAS CHESNAYE, BARNABY HOLE, MARIA PIPPIAS, FERGUS CASKEY, AND THE EQUAL STUDY INVESTIGATORS

Background
Over 90% of people with advanced chronic kidney disease (CKD), over the age of 65 are prescribed ≥5 medications (polypharmacy). Polypharmacy is associated with multiple negative healthcare outcomes. Deprescribing is a potential way to address polypharmacy, and may be particularly appropriate as people enter their final years of life. Trends in medication prescribing practices in the elderly with advanced CKD, over their last years of life, is unknown.

Aims
To explore longitudinal prescribing practices in a population of older people with advanced CKD in their last years of life.

Methods
The EQUAL study is an international, prospective cohort study of people ≥65 years with an incident eGFR ≤20ml/min/1.73m2; a decedent sub-cohort (those who died during study follow up) was analysed. Names of participants' prescribed medications were collected at 3-6 month intervals. Trends over the years pre-death in i) total number of prescribed medications, and ii) proportions of the population taking certain medications, were explored using generalized additive models.

Results
There were 563 patients (2793 study visits, 22,200 individual medication prescriptions), with a median follow-up time of 2.2 years (IQR 1.1-3.8) pre-death. The number of prescribed medications was 6.9 (95% CI 6.4-7.4) six years pre-death, and steadily increased until death (8.7 medications [95% CI 8.4-9.1]). In the years pre-death, the proportion of people taking: i) statins, renin-angiotensin system blockers, and calcium channel blockers decreased; ii) opiates, vitamin D, diuretics and proton pump inhibitors increased; and iii) sodium bicarbonate, anti-gout medications, beta-blockers and antiplatelet agents remained the same.

Significance for practice
Elderly people with advanced CKD accumulate medications in the years leading up to death, with the proportion of people prescribed many types of medications increasing. This work aims to i) raise awareness of the prevalence of polypharmacy, and ii) stimulate further research looking into deprescribing for this vulnerable cohort.

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ABSTRACT

THE MOTHER NATURE PROJECT: PLANNING AND CO-DESIGNING A NATURE-BASED INTERVENTION FOR MOTHERS EXPERIENCING POSTNATAL MENTAL HEALTH DIFFICULTIES AND THEIR INFANTS

KATIE HALL, ROSA ROBERTS, RICHARD BROWN, LUCY DUGGAN, MEL WILLIAMSON, RISSA MOHABIR, RUTH NORTEY, CHRISTOPHER BARNES, KATRINA TURNER, JONATHAN EVANS

Background
Nature-based interventions involve guiding people to connect with natural world. They have the potential to be inclusive, sustainable, cost-effective, and to reduce health inequalities.

Aims
To use an interdisciplinary approach to co-design a group nature-based intervention for mothers with postnatal mental health difficulties and their infants.

Methods
In Stage 1, we explored mothers' perceptions, barriers, facilitators, and contextual issues relevant to planning the programme. We held six qualitative focus groups: 1) Mothers with lived experience of postnatal mental health difficulties (n=6); 2) Refugee mothers (n=12); 3) Migrant mothers (n=6); 4) Disabled mothers (n=5); 5) Nature-based practitioners (n=6); 6) NHS healthcare professionals working with mothers and infants (n=9).
We analysed data thematically; the result informed Stage 2. In Stage 2, we used a co-design approach to develop 'guiding principles' for the programme, incorporate theory, and develop a logic model. We held regular interdisciplinary team meetings and an outdoor taster session with our PPI group (n=12). A Stakeholder Consensus Meeting (n=40), held at a local city farm, helped to refine the programme's content and delivery, ready for piloting.

Results
Mothers and professionals expressed significant enthusiasm for a nature-based programme. Potential benefits included improved mental health and wellbeing, social connectedness, confidence, positive perspective shifts, and enhanced child development. The knowledge gained allowed the intervention to address the specific physical, psychological, and contextual barriers faced by mothers in accessing a nature-based programme.

Conclusions
Our creative and systematic approach highlights the value of incorporating in-depth qualitative research and PPI within the complex intervention development process.

Ethics and funding
This study was approved by the University of Bristol Faculty of Health Sciences Ethics Committee. The work is supported by an NIHR Academic Clinical Fellowship for Dr Katie Hall (award reference ACF-2020-25-015) and AWP NIHR Research Capability Funding (award reference RCF 21-22-015).

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ABSTRACT

UNDERSTANDING THE TREATMENT PREFERENCES OF OLDER PATIENTS DECIDING BETWEEN DIALYSIS AND CONSERVATIVE KIDNEY MANAGEMENT

DR BARNABY HOLE, PROF FERGUS CASKEY, A/PROF LUCY SELMAN, A/PROF LEILA ROOSHENAS, PROF RACHAEL MORTON, PROF JOANNA COAST

The survival benefits of dialysis in older people remain uncertain and are likely to come at considerable burden for many. This study aimed to understand and quantify the preferences of UK older comorbid people deciding between dialysis and non-dialysis conservative kidney management. Over-65-year-olds preparing for kidney failure participated in a mixed-methods study comprising qualitative work and a discrete choice experiment.

Patients appeared to understand treatment options incompletely and lacked support to make preference-sensitive decisions. Survival benefit appeared to be presumed with dialysis, driving a ‘do or die’ construct. Dialysis was expected to be burdensome. Those planning conservative kidney management anticipated a life on dialysis to be worse than death. Four experimental attributes were developed: survival; ‘ability to do’; care location; and treatment frequency.

Choice experiment participants were willing to relinquish 10-months’ life expectancy to prevent their ‘ability to do’ halving. They needed to believe they would gain one year’s survival benefit to accept conventional dialysis approaches; increasing to almost three years in unpartnered individuals who expected to become dependent. Three latent classes emerged with marked differences in preferred care location and willingness to trade survival to preserve the ‘ability to do’. All were prone to a ‘treatment is best’ philosophy yet were willing to decline dialysis if the survival benefits were outweighed by treatment burdens.

Older people favour longer lives only if their ‘ability to do’ is preserved and treatment burden is acceptable. This suggests that conservative management would be more acceptable to patients if it were more familiar and better understood, and the relative benefits of dialysis communicated. Clinicians must establish what is important to patients when supporting them to decide how to prepare for kidney failure. Investment in services that offer greater choice, prioritise independence, and minimise travel for and intrusion from treatment would align with patients’ preferences.

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ABSTRACT

ACCURACY OF IQCODE, AD8 AND GPCOGI FOR DIAGNOSIS OF DEMENTIA: DOES YOUR FRIEND KNOW BEST?

JASMINE CHINGONO, SAMUEL THOMAS CREAVIN, MARK FISH, SARAH CULLUM, ANTONY BAYER, SARAH PURDY AND YOAV BEN-SHLOMO

Background
The number of people living with dementia is expected to increase, adding further pressure to diagnostic services. Informant questionnaires are used to aid diagnosis. However, there has been limited research exploring the accuracy of informant questionnaires in primary care settings.

Methods
This prospective diagnostic accuracy study aimed to explore the influence of informant relationship type on the accuracy of IQCODE, AD8 and GPCOG informant (GPCOGi) in a primary care setting.
240 participants were recruited from 21 GP surgeries in the Bristol, North Somerset and South Gloucestershire, United Kingdom.
The reference standard for a diagnosis of dementia was made against ICD-10 criteria based on specialist clinician assessment. A threshold of greater than 3.3 on IQCODE, greater or equal to 2 on AD8 and less than 5 on GPCOGi was used to indicate an abnormal test.

Results
Of 238 participants with informant data, 131 had dementia, 60 CIND, and 47 had normal cognition. Median informant age was 70 years (IQR 60 years to 78 years). 71% of informants were female and 56% of informants were spouses.
Informants scores exceeded thresholds for cognitive impairment in 81% using IQCODE, 81% using AD8, and 91% using GPCOGi. Compared to spouses, adult descendants were likely to score participants more cognitively impaired on all three tests, whereas friends scored participants less cognitively impaired on IQCODE and AD8.
Sensitivity was high for all informant relationship types (91%-100% for IQCODE, 94-100% for AD8 and 99-100% for GPCOGi). False negatives were most common for spouses. Specificity was lower for all informant relationships (25-79% for IQCODE, 13-75% for AD8 and 17-38% for GPCOGi). False positives were highest for adult descendants and lowest for friends.
IQCODE had the highest overall diagnostic accuracy when considering all informant types with an AUROC of 0.83 (95% CI 0.78 – 0.88) compared to an AUROC of 0.64 (95% CI 0.60 to 0.69) for AD8 and 0.60 (95% CI 0.56-0.64) for GPCOGi.

Conclusions
Informants of any relationship type, using IQCODE, AD8 or GPCOGi may be useful at ruling out dementia but not for ruling in; all three tests perform well, and friends have lowest false positive rate.

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ABSTRACT

DEVELOPMENT OF A CORE DATA SET FOR DESCRIBING, MEASURING AND REPORTING THE LEARNING CURVE IN STUDIES OF NOVEL INVASIVE PROCEDURES: STUDY PROTOCOL

JOZEL RAMIREZ, CHRISTIN HOFFMAN, NEIL CORRIGAN, MATTHEW KOBETIC, RHIANNON MACEFIELD, DAISY ELLIOT, JANE BLAZEBY, SHELLEY POTTER, DEBORAH STOCKEN, KERRY AVERY, NATALIE BLENCOWE

Introduction
The introduction of novel surgical techniques and procedures remains poorly regulated and standardised. A key part of evaluating novel procedures, as outlined in the IDEAL framework, is acknowledgement of the 'learning curve', where an improvement in surgical performance and outcomes is observed over time. Although the surgical learning curve is a critical part of innovation, it is inconsistently defined, measured and reported. This study aims to develop a core data set that can be applied in all studies describing the learning curve in novel invasive procedures.

Methods
A core data set will be developed using methods adapted from the Core Outcome Measures in Effectiveness Trials (COMET) initiative. The study will involve three phases:
Phase 1: A 'long list' of items will be identified by extracting all relevant information from: a) an umbrella review of existing systematic reviews describing the learning curve in surgery, and b) qualitative interviews with key stakeholders. The 'long list' will be arranged into themes and operationalised into a Delphi questionnaire.
Phase 2: Key stakeholders (e.g. patients, surgeons, methodologists, statisticians, journal editors) will be invited to complete the Delphi survey and score the importance of including each item in sequential rounds.
Phase 3: Items remaining after the conclusion of the Delphi survey rounds will be discussed in stakeholder consensus meeting(s), to agree on the final core data set.

Timing of potential results
Initial findings from the review and qualitative work will be presented, and the overall project will be completed in the next year.

Significance for practice
The development of a core data set for the learning curve in studies of novel invasive procedures will facilitate standardised and efficient reporting in studies of surgical innovation. This can ultimately achieve consistency in describing and measuring the learning curve and facilitate progression to the next stage of evaluation.

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ABSTRACT

ACCEPTABILITY AND FEASIBILITY OF A MULTIMODAL EARLY DETECTION PILOT STUDY FOR LIVER DISEASE IN HIGH RISK GROUPS: “ALRIGHT MY LIVER?”

NN J ARCHER, SALLY TILDEN,TOM MAY, JO KESTEN, JANE GITAHI, LUCY YARDLEY, MATTHEW HICKMAN, KUSHALA WM ABEYSEKERA, FIONA H GORDON

IBackground and aims
75% of people with cirrhosis are diagnosed during an emergency admission to hospital, at which point mortality is 1 in 6. Cirrhosis prevalence is <1% in the general population, making a targeted approach to case finding desirable. In 2022, NHS England funded the Bristol and Severn hepatitis C operational delivery network to broaden its existing outreach work as part of the “Piloting Community Liver Health Checks” scheme. The aim of this study is to report disease detection and acceptability outcomes of the “Alright My Liver?” service, developed in collaboration with service users, to screen and detect advanced liver fibrosis from alcohol, viral hepatitis and metabolic syndrome in those deemed high risk.

Methods
Liver health screening events were co-located with existing services that serve vulnerable and high risk groups. These included drug and alcohol services, primary care services in areas with a high index of deprivation and with Caafi Health, an organization providing health outreach to black and ethnic minority communities in the region. A health history, transient elastography (TE) using FibroScan® and capillary blood borne virus testing if indicated were collected. All patients received personalized advice including brief alcohol reduction interventions and cessation service signposting if indicated. To encompass multiple aetiologies of liver disease, commissioners advocated a liver stiffness measurement (LSM) by TE of ≥11.5 kPa for advanced fibrosis, 8.5 -11.4kPa for moderate fibrosis and <8kPa normal. Clients identified with advanced fibrosis were booked directly into hepatology clinic with an offer of funded transport and telephone reminders. Semi-structured interviews were conducted with service users and providers to which the agile co-production and evaluation (ACE) framework is being applied to optimize the service.

Results
We report on the first 1282 people screened by the service. Median age 50 years (IQR 20), median BMI 27kg/m2 (IQR 7.9kg/m2), 44.7% female.12.29% had experienced homelessness. The population screened had an ethnicity case of mix of 46.8% white /14.1% Black/4.3% Asian/20.8% ethnicity not recorded. Inreach by alcohol specialist nurses into acute care assessing people with alcohol use disorder for fibrosis was the highest yield setting for cirrhosis casefinding, with 24.4% (n=35/143) found to have LSM ≥11.5 (n=35/143). Inpatient and outpatient addiction settings were also high yield for cirrhosis casefinding, with 16.9% (n=12/71) and 11.1% (n=24/217) respectively of clients identified as having have LSM ≥11.5. The most common aetiology for identified cirrhosis was alcohol related liver disease with 68% (n=82/121) of cases, which reflects the screening strategy. Five patients were identified as having active hepatitis C infection, of whom four have now started treatment. One case of chronic hepatitis B infection was identified. Attendance rate at hepatology clinic appointment was 81% (n=51/58). Semi-structured interviews with service users returned overwhelmingly positive feedback, suggesting that the service is acceptable to its target group.

Conclusions
Earlier detection of cirrhosis in high risk groups within the community setting is achievable and acceptable to patients. The acute care and drug and alcohol services provide the highest yield settings for identifying clinically significant liver disease. Longer term follow up will clarify how well patients engage with liver services and treatment to impact clinical outcomes.

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ABSTRACT

OPPORTUNISTIC CIRRHOSIS CASEFINDING IN ALCOHOL DEPENDENT INPATIENTS THROUGH ALCOHOL SPECIALIST NURSE ASSESSMENT AND TRANSIENT ELASTOGRAPHY: EARLY DETECTION IN A HIGH RISK GROUP

ANN J ARCHER, MOLLY THORPE, SASWATA ROY, CHARLOTTE E DAVIES1, ROSIE PARNHAM, GRACE CAMERON, LUCY KROUMA, FIONA H GORDON, KUSHALA WM ABEYSEKERA

Background and aims
Europe has the highest per capita alcohol consumption and alcohol-related loss of disability adjusted life years compared with other WHO regions, with many countries seeing a rapid rise in alcohol related harms. Despite this, there is still widespread failure to recognise alcohol-related liver disease early before patients present with decompensation. Many patients with alcohol use disorder present frequently with unscheduled admissions to hospital, providing an opportunity for engagement with addiction and hepatology services. We sought to evaluate opportunistic testing for cirrhosis in this vulnerable patient group who often experience barriers to accessing healthcare.

Methods
Our transient elastography (TE)-trained alcohol specialist nurses (ASNs) offered TE to patients with alcohol dependence and no previous diagnosis of cirrhosis. Those with elevated liver stiffness measurements (LSM) of ≥ 12 kPa were offered follow up in hepatology clinic or assessed during their admission by a hepatologist. Paired t-test was used to assess mean differences between groups pre- and post- intervention.

Results
Between April and December 2022, 94 patients at the Bristol Royal Infirmary, UK were offered TE during emergency admissions by ASNs (23 % F; median age 55 (IQR 18.5)). 27 people (30.8 %) with LSM of ≥ 12 kPa (median IQR/M 11.5 %) were identified as having probable alcohol related cirrhosis. Of these, 9 had LSM ≥ 25 kPa suggestive of clinically significant portal hypertension (CSPH). 27 % (n = 25/94) of patients post-TE subsequently engaged with outpatient addiction services. Of those who had recorded alcohol consumption (n=38/94), a trend towards lower units consumed post ASN review and TE assessment was observed; pre admission mean alcohol consumption was 31 units/day (SD: 25.8) falling to 20.5 units/day (SD:25; t(37) = 3.2; p = 0.003) post admission. Of the 94 patients screened, 4 patients died within the nine month period, 2 of whom had been identified with cirrhosis.
Conclusions
Opportunistic testing for liver disease in people with alcohol use disorder is important and high yield to identify patients with cirrhosis and clinically significant portal hypertension. Crucially this is a socially disadvantaged patient cohort who experience barriers to accessing traditional healthcare. Prospective work is needed to establish whether diagnosis has a lasting impact on drinking behavior, engagement with addiction services, liver related morbidity and mortality.

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ABSTRACT

A PATIENT INFORMATION BUNDLE OUTLINING DIETARY ADVICE IN LIVER DISEASE SPECIFIC TO THE COST OF LIVING CRISIS IMPROVES PATIENT CARE: 'LOOKING AFTER YOUR LIVER FOR LESS'

ALICE LAGNADO, OLIVIA TAYLOR, BENJAMIN HAYES, SALLY TILDEN, JENNIFER PHILLIPS, ALICE LAGNADO, KUSHALA ABEYSEKERA

Background

Dietary advice is fundamental to cirrhosis management. However, in the current economic climate some patients are having to make difficult decisions on food purchasing and preparation. The Trussell Trust has demonstrated that people with chronic illness are twice as likely to experience food insecurity as those without, and are three times as likely to access a food bank. Deprivation is linked to a four-fold increase in mortality from liver disease, which malnutrition compounds. A recent cross-sectional study has linked food insecurity to a higher mean liver stiffness measurement in over 50s. There are no published liver-specific patient resources for dietary advice in the context of the cost-of-living crisis. We report a quality improvement project, based at a Level 2 liver unit, aiming to address this locally by implementing an information leaflet for people with liver disease.

Intervention

The aim of the leaflet was to provide education on cost-effective food choices specific to liver disease with linkage to local resources including food banks, citizen's advice and recipes, and takes the form of a printed leaflet and planned website.

In collaboration with the trust Patient Experience team, hepatology clinic patients were surveyed for one week, with 17 responses. Almost half of patients were in the 45–54 years age group (n=8). 41% (n=7) wanted dietary advice adapted to acknowledge rising food costs in the UK. 76% (n=13) of respondents stated they wanted more written information on how to manage their diet with liver disease. Respondents most frequently stated access to online resources on dietary information would be the most helpful (47%; n=8).

A multidisciplinary hepatology team comprising of a hepatology specialist nurse, dietician and doctors produced an initial draft of a leaflet. This was then reviewed by patients and carers through the Bristol Liver Unit Support Group and feedback incorporated to make a final co-produced document. The feedback thus far has been largely positive with respondents commenting on the leaflet being "easy to read and understand" and containing a "great amount of resources".

Implementation

Based on survey responses, the three main ways we will disseminate the collated information are web-links and QR code at the end of clinic letters, and hard copy leaflets in clinic reception.

Conclusion

The cost of living crisis in the UK has disproportionately affected patients with liver disease. This quality improvement project may ameliorate the impact and facilitate constructive dialogues between care providers and our patients.

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ABSTRACT

IMMUNOMETABOLIC SIGNATURES AND PREDICTORS OF DEPRESSION IN YOUNG ADULTS

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Depression is associated with immunometabolic alterations, but it remains unclear whether these alterations represent mean change in few biomarkers or broader system-wide heterogeneity across multiple, distinct biomarker clusters linked to specific symptom profiles. It also remains unclear how well immunometabolic biomarkers predict depression diagnosis/symptoms, which is necessary for developing accessible, blood-based diagnostic/prognostic markers for depression.

Using data on 93 immunometabolic markers from a large, well-characterised cohort (ALSPAC) of N=2990 individuals (309 ICD-10 diagnosis of depression) aged 24 years, we conducted cross-sectional multivariate inferential and machine learning analyses to: i) examine the pattern of immunometabolic changes associated with depression outcomes spanning diagnosis, specific symptom dimensions, and individual symptoms; ii) identify distinct immunometabolic biomarker clusters associated with specific symptom profiles; and iii) assess the predictive performance of immunometabolic biomarkers for depression relative to models using clinical or social factors.

Depression is associated with mean difference in specific immunometabolic biomarkers (interleukin 6, neutrophil count, insulin, and alanine transaminase), and increased number of extreme-valued changes reflecting a broader system-wide heterogeneity across immunometabolic biomarkers.

We identified three distinct biomarker clusters, one comprising immune markers which is associated with greater somatic/mood symptoms and another comprising liver enzymes which is associated with anxiety symptoms. The predictive performance for immunometabolic biomarker-based machine learning models is better than chance (58.7% Balanced Accuracy) and is similar to that brain imaging, although with poor performance in absolute terms. The immune mediator clusters we identify are candidates for further study and may be targets for future investigations or interventions.

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