

# GW4 BioMed2 MRC DTP: Student Application Form (Oct 2025/26)

#### Before you begin

Thank you for your interest in the GW4 BioMed2 MRC Doctoral Training Partnership.

Please ensure that you carefully read the guidance materials in the FAQ's on our website before you apply and attend one of our candidate support webinars if possible. We can only accept **ONE** application per candidate and any duplicate applications will be removed. You can read more about our DTP and our recruitment process on our <u>website</u>. You will need to keep a copy of your answers as it is not possible to save or edit your applications and the DTP will not be able to retrieve any lost information from the server. You can find a copy of the survey questions in the guidance materials on our website to help you prepare your responses and you can download a copy of your completed application once submitted.

The deadline for applications is **5.00pm GMT on Monday, 4th November 2024**. We are unable to accept applications after that deadline. We wish you luck with your application!

Data Protection For the purposes of this survey and your application, Cardiff University is the data controller. All data collected in this survey will be held securely by the survey software provider (Jisc) under contract and then used by the GW4 BioMed DTP in accordance with data protection legislation and in accordance with the university's Information Security Framework. Data from the survey, including answers to questions where personal details are requested, will only be used by the GW4 BioMed Doctoral Training Partnership to monitor standards and student progress. Cookies, personal data stored by your Web browser, are not used in this survey.

## **Contact Details**

Please note that this information will be removed from your application during the shortlisting process. This information will solely be retained in order for the GW4 BioMed2 MRC DTP to contact you regarding your application.

#### 1. Title \*

#### 2. First Name: \*

#### 3. Last Name: \*

4. Email Address: \*

5. Phone Number: \*

6. Correspondence address (including postcode): \*

## Nationality & Residency

Please note that this information is collected solely for the purpose of monitoring the eligibility of applicants to the GW4 BioMed2 MRC DTP and will be removed from your application during the shortlisting process. If English is not your first language, you will need to have achieved at least 6.5 in IELTS (and no less than 6.0 (Bath) or 6.5 (Bristol, Cardiff and Exeter) in any section) by the start of the programme. Please refer to the relevant university for further information.

#### 7. Please select the nationality classification that best describes your situation. \*

- UK National (meeting the residency requirement)
- Pre-settled status less than 3 years
- Pre-settled status more than 3 years
- O UK settled status
- Indefinite leave to remain or enter
- 🔵 International citizen
- Other
- 8. If you need to provide additional clarification to your response above, or have selected 'other' please provide further information here.

# Mode of Study

This section will be used by administrators to monitor the demand for part-time study and will be removed during the shortlisting process.

9. Do you plan to study full-time (4 years) or part-time (50% minimum attendance)?\*

- ◯ Full-time
- O Part-time

## **Project Information**

The GW4 BioMed2 MRC DTP are advertising 120 projects and will award up to 21 studentships. You are required to select either one or two of our advertised projects. We have listed\_project summaries for the available projects on our website. Please read the project information carefully to find out more about what these projects entail and select a first, or a first and second choice project to apply for. We can only accept **ONE** application per candidate. Applicants should apply for up to 2 projects that are relevant to their experience.

- 10. First Choice Project: Please indicate your first choice project that you are applying for by selecting the project from the options below. \*
- MRCIIAR25Ba Hunt Environmental and genetic determinants of transmission by a parasitic nematode
- MRCIIAR25Ba Iqbal Using AI to understand defence and counter-defence systems between bacteria and phage
- MRCIIAR25Ba Lovell Tackling Antimicrobial Resistance with Targeted Covalent Macrocycles
- MRCIIAR25Ba Preston Airborne transmission of pathogens: defining microbial and environmental factors affecting survival in aerosols.
- MRCIIAR25Br Avison Emerging co-resistance to first and second line antibiotics in urinary pathogens and implications for the control of urosepsis.
- MRCIIAR25Br Laabei- Developing new weapons to fight drug-resistant superbugs targeting lipoteichoic acid biosynthesis
- O MRCIIAR25Br Mann Decoding HIV-1: Genetic Influences on Virus Replication and Transmission
- MRCIIAR25Br Oliveria Exploring Communication Networks in Proteins to Enable Antibiotic Discovery
- MRCIIAR25Br Rivino Investigating the mechanisms underlying Professional killer cell dysfunction in dengue
- MRCIIAR25Br Shytaj Exploring the modulation of Antioxidant Metabolism to target Adult T-Cell Leukaemia Induced by HTLV-1 Infection
- MRCIIAR25Br Spencer Small-Molecule G-Quadruplex (G4) Ligands as Candidate Antibacterials for Resistant Bacteria
- $\bigcirc$  MRCIIAR25Br Van Der Kamp Overcoming  $\beta$ -lactamase-mediated antibiotic resistance by combining biomolecular simulation and experiment
- MRCIIAR25Ca Fielding Systematic Characterisation of Inhibitory Ligands Encoded by Human Cytomegalovirus
- MRCIIAR25Ca McLaren T cell immune modulation during severe bacterial infection

- MRCIIAR25Ca Parmeggiani Sweet disposition: combatting bacterial infections and antimicrobial resistance with designer proteins that target biofilm matrix carbohydrates
- MRCIIAR25Ca Pertusati Design, synthesis and biological evaluation of molecules to tackle invasive fungal infections
- MRCIIAR25Ca Serpi New antibiotics to kill "Superbugs" by stopping them from dividing
- MRCIIAR25Ca Stanton Enhancing Immunological Control of SARS-CoV-2
- ) MRCIIAR25Ca Woolley Neonatal Sepsis Detection Automation for Neonatal Intensive Care Units.
- MRCIIAR25Ex Borah Slater Investigating oxygenated sterols and lipids in tuberculosis (TB) infection: human's friend and pathogen's foe?
- MRCIIAR25Ex Harmer Developing new therapies against the most dangerous antibiotic resistant bacteria
- MRCIIAR25Ex Johnson Uncovering new genetic mechanisms of beta-cell autoimmunity to better understand type 1 diabetes
- MRCIIAR25Ex Neutzmann Investigating the impact of epigenetic modifiers, a new treatment for cancer, on fungal pathogens
- MRCIIAR25Ex Padfield Will climate change worsen the problem of antibiotic resistance?
- MRCIIAR25Ex Sanders Plasmids as AMR vectors
- MRCIIAR25Ex Schlopp The controlled spreading of Wnt receptors determines signalling in the tumour microenvironment
- MRCIIAR25Ex Scotton Genetic predisposition to accelerated ageing: targeting telomeres using sex hormone supplementation in chronic lung disease
- MRCIIAR25Ex Westra Developing phage therapy solutions for Staphylococcus aureus
- MRCNMH25Ba Bailey Synthetic heroin: understanding the dangers of nitazene drugs
- MRCNMH25Ba Bultitude Brain stimulation and neurophysiological investigations of central nervous system changes in pathological pain, and their augmentation by treatment.
- MRCNMH25Ba Button Can young people's cognitive style explain associations between social media use and mental health?
- MRCNMH25Ba Fairchild Understanding the impact of childhood maltreatment on brain structure and connectivity in Conduct Disorder
- MRCNMH25Ba Lambert Man up? Examining attitudes and experiences around mental health and help-seeking
- MRCNMH25Ba Lancaster Neuroimaging brain reward systems to stratify patients across the psychosis spectrum
- MRCNMH25Ba Licchesi Targeted protein degradation in CNS disorders
- MRCNMH25Ba Nikolaou Developing in vitro and in vivo genetic models to study aberrant neuronal network activity in dementia
- MRCNMH25Ba Nogaret Identification of ion channel dysfunction in epilepsy with machine learning

MRCNMH25Ba Taylor - What are the biological mechanisms underlying the association between
 smoking, smoking cessation and mental health: a triangulation approach using machine learning, mendelian randomisation, and g-methods applied to multiple biological cohort studies.

MRCNMH25Ba Ward - Brain growth mechanisms involving axon volume and myelination linked with autism spectrum disorder.

- MRCNMH25Ba Williamson The Experience and Impact of Psychedelic Therapy as Treatment for Mental Health Disorders in Women Survivors of Sexual Assault
- MRCNMH25Br Bould Do experiences in Virtual Reality change body perception and satisfaction, in individuals with and without eating disorders
- MRCNMH25Br Carroll Understanding neuronal dysfunction in Tuberous Sclerosis
- MRCNMH25Br Chakkarapani Contactless vital signs and movement monitoring and brain development in extremely premature infants- a translational study
- MRCNMH25Br Chrobok Cannabinoids in the ticking network of the brainstem satiety centre
- ${}^{\bigcirc}$  MRCNMH25Br Corey Unlocking the secrets of fentanyl: exploring the anomalous pharmacology of fentanyl at the  $\mu$ -opioid receptor
- MRCNMH25Br Hodge Towards a better understanding and treatments for the rare genetic brain disorder called CASK
- MRCNMH25Br Holmboe The impact of parental mental health on the neural substrate of early executive function development
- MRCNMH25Br Jones Computing and translating mechanisms of neural network dysfunction associated with psychiatric risk
- MRCNMH25Br Khandaker Examining risk factors for cognitive dysfunction in serious mental illness
- MRCNMH25Br Mars Investigating the relationship between substance use and self-harm using multiple methods
- MRCNMH25Br Mastitskaya How star cells of the brain help save the heart
- MRCNMH25Br Mellor Linking neuronal function to mental health: How genetic risk factors impair cognitive flexibility and neural plasticity in schizophrenia.
- O MRCNMH25Br Mifsud Exploring the role of hyaluronan in cognition across the lifespan.
- MRCNMH25Br Purple Using machine learning to investigate the role of cell assemblies in processing traumatic experiences and the development of post-traumatic stress disorder
- MRCNMH25Br Robinson Investigating the neurobiological mechanisms underlying apathy in Parkinson's disease
- MRCNMH25Br Sallis Transmission of self-harm from parents to children: identifying mechanisms and informing intervention
- MRCNMH25Br Warburton Finding the missing link in memory networks: Deciphering corticalthalamic communication pathways critical for successful memory.
- MRCNMH25Br Whitcomb Optical micro-structures and their application in next-generation braincomputer interface systems

- MRCNMH25Br Wootton The MEME project: Making Exercise interventions More Effective for depression and anxiety.
- MRCNMH25Ca Chawner Unlocking the causes of eating disorders: investigating risk factors across development
- MRCNMH25Ca Davies Using a new translational in vivo model to understand the neurobiology underlying ADHD subtypes
- MRCNMH25Ca John Maternal anxiety and language delays in children both outcomes of the same epigenetic alteration?
- MRCNMH25Ca McNabb Using MRI, MEG, and machine learning to better classify severe mental illness
- MRCNMH25Ca Mehellou Unravelling the Pharmacological Activation of PINK1, a Protein Kinase Mutated in Parkinson's Disease
- MRCNMH25Ca Newland Developing a new therapeutic strategy for brain cancers: getting therapeutics directly to the tumour
- MRCNMH25Ca Pham Enabling continuous, personalised stress quantification and management with a wearable system
- MRCNMH25Ca Slator Al-enhanced Quantitative MRI for Multi-Scale Multi-Modal Neuroscience
- MRCNMH25Ca Smith How does DNA damage and mitochondrial dysfunction contribute to Huntington's disease?
- MRCNMH25Ca Szomolay Biomarker discovery of inflammatory pathways linked to mood and autoimmune disorders
- MRCNMH25Ca von dem Hagen Recognising uniquely human emotions
- MRCNMH25Ex Basson Understanding the social brain circuits affected in neurodevelopmental disorders.
- MRCNMH25Ex Brown Enhancing stem cell-derived motor neuron function as a therapeutic approach in Amyotrophic Lateral Sclerosis
- MRCNMH25Ex Dempster Cell-type-specific epigenetic regulation of gene expression in Motor Neuron Disease
- MRCNMH25Ex Flynn Epigenetic mechanisms in stem cell models of Rett syndrome
- MRCNMH25Ex Fox Artificial Intelligence-enhanced mobile Behavioural Activation therapy for
   DEmentia and Mild ognitive impairment (AI-BADeM)
- O MRCNMH25Ex Gold The consequence of mitochondrial import failure in neurogenerative disease
- MRCNMH25Ex Housden Understanding motor neuron disease using a powerful combination of model systems
- MRCNMH25Ex Huntley What is it like to have advanced dementia? Using remote measurement of EEG and physiological markers of sleep, arousal and awareness in people with advanced Alzheimer's disease.
  - MRCNMH25Ex Mansoubi AI-Powered Fatigue Solutions: Transforming Care for Neurological Conditions

- MRCNMH25Ex Piers Development and characterisation of reproducible complex human brain organoids Bio-engineering and neuronal networks
- MRCNMH25Ex Poorun Mapping Preterm Sleep Microstructure and EEG Biomarkers for Early Neurodevelopmental Risk Assessment
- MRCNMH25Ex Richards Using machine learning to classify microglia
- $\bigcirc$  MRCNMH25Ex Russell Assuming associations from old data- the case of ADHD and drug use
- ) MRCNMH25Ex Schrader Exploiting lipid binding proteins to tackle neurological disorders
- MRCNMH25Ex Tyrrell Metabolic psychiatry Understanding ethnic and global differences in the inter-relationships between obesity and mental health
- ) MRCNMH25Ex Witton Characterising a new neuroimmune pathway to treat Alzheimer's disease
- MRCPHS25Ba Halligan An investigation of the factors that influence post-disaster mental health in a Brazilian birth cohort study
- MRCPHS25Ba Hines Parental transmission of substance use: exploring mechanisms and informing intervention
- MRCPHS25Ba McDonald Causal inference tools to study vaccines using real-world data: how can we make better use of negative control outcomes?
- MRCPHS25Ba McGrogan How safe are antiseizure medications in pregnancy for conditions other than epilepsy?
- MRCPHS25Br Biglino Novel morphological markers of congenital heart disease: from computational modelling to population data
- MRCPHS25Br Corbin Use of network analysis to understand the molecular footprint of body mass index
- MRCPHS25Br Garnett Optimising uptake and personalisation of digital health interventions for under-served groups: a case study with the Drink Less app
- MRCPHS25Br Goudswaard Characterising the role of inflammation in the development of multiple myeloma
- MRCPHS25Br Howe Measurement of mental health in ethnically and geographically diverse populations
- MRCPHS25Br JonesH Developing and testing novel methods to estimate prevalence of methamphetamine and cocaine dependence
- MRCPHS25Br Liu Automating knowledge synthesis in biomedical literature using AI and Large Language Models
- MRCPHS25Br Lloyd-Lewis Under pressure: Investigating the role of tissue density and mechanics in breast cancer development
- MRCPHS25Br Min Uncovering the role of epigenetics in modifying disease risk.
- MRCPHS25Br Munafò Using diverse cohorts, methods and novel measures to understand the relationship between diet, physical activity and health outcomes
- O MRCPHS25Br Nivard Shining a light on the un-common to identify novel health risk-factors

- MRCPHS25Br Richmond Exploring the interplay and mechanisms between sleep, circadian rhythms and physical activity in relation to physical and mental health
- MRCPHS25Br Siviter Quantifying the impact of chronic pesticide exposure on disease susceptibility
- MRCPHS25Br Stergiakouli Using genetics to understand mental health outcomes in children from a clinical birth cohort
- MRCPHS25Br Timpson Metabolomic characterisation of adiposity across the life course
- MRCPHS25Br Wade Investigating the role of the microbiome in obesity-driven colorectal cancer development
- MRCPHS25Ca Farnell Improving Bruise Evidence Across Variations in Skin Tone Using Artificial Intelligence
- MRCPHS25Ca Jurkowska Targeted reprogramming of epigenetic signals for lung regeneration.
- MRCPHS25Ca Kaouri Calcium signalling in In-Vitro Fertilization: developing a non-invasive diagnostic tool
- MRCPHS25Ex Akrami Unveiling the Biomechanics of Diabetic Foot Ulcers: Identifying Critical Foot Load Profiles for Prevention and Treatment
- MRCPHS25Ex Frontini Integrative analysis of whole genomes and transcriptomes from multiple cell types in rare disease patients.
- MRCPHS25Ex Hannon Combining technologies to elucidate the epigenome's impact on health and disease
- O MRCPHS25Ex Hawkes Understanding genetic modifiers of obesity and metabolic disease
- MRCPHS25Ex Lowe Exploring the feasibility and efficacy of an aerobic exercise intervention in improving dietary self-regulation in adolescents and young adults
- MRCPHS25Ex Murray Using big data to explore how hot flushes and poor sleep contribute to women's health after menopause
- MRCPHS25Ex Panici An integrated hydro-epidemiological approach to prevent and mitigate water-related zoonotic diseases leveraging nature-based solutions
- MRCPHS25Ex Pulsford Development of guidelines and resources to encourage and support exercise in pregnant women with pre-existing Type 2 Diabetes
- MRCPHS25Ex Revuelta Iniesta Understanding Muscle Growth Responses to Nutrition in Adult Survivors of Childhood Acute lymphoblastic Leukaemia
- MRCPHS25Ex Sharp "You must be on your period": using smartphones and wearables to study changes in mental wellbeing throughout the menstrual cycle
- MRCPHS25Ex Torquati Greening Minds and Bodies: Assessing the physical, psychological and environmental impacts of a plant-based diet intervention
- MRCPHS25Ex Wheeler Building the evidence around risks and actions on thunderstorm asthma

- 11. Second Choice Project (optional): Please indicate your second choice project by selecting the project from the options below. \*
- No second choice
- MRCIIAR25Ba Hunt Environmental and genetic determinants of transmission by a parasitic nematode
- MRCIIAR25Ba Iqbal Using AI to understand defence and counter-defence systems between bacteria and phage
- MRCIIAR25Ba Lovell Tackling Antimicrobial Resistance with Targeted Covalent Macrocycles
- MRCIIAR25Ba Preston Airborne transmission of pathogens: defining microbial and environmental factors affecting survival in aerosols.
- MRCIIAR25Br Avison Emerging co-resistance to first and second line antibiotics in urinary pathogens and implications for the control of urosepsis.
- MRCIIAR25Br Laabei Developing new weapons to fight drug-resistant superbugs targeting lipoteichoic acid biosynthesis
- MRCIIAR25Br Mann Decoding HIV-1: Genetic Influences on Virus Replication and Transmission
- MRCIIAR25Br Oliveria Exploring Communication Networks in Proteins to Enable Antibiotic Discovery
- MRCIIAR25Br Rivino Investigating the mechanisms underlying Professional killer cell dysfunction in dengue
- MRCIIAR25Br Shytaj Exploring the modulation of Antioxidant Metabolism to target Adult T-Cell Leukaemia Induced by HTLV-1 Infection
- MRCIIAR25Br Spencer Small-Molecule G-Quadruplex (G4) Ligands as Candidate Antibacterials for Resistant Bacteria
- $\bigcirc$  MRCIIAR25Br Van Der Kamp Overcoming  $\beta$ -lactamase-mediated antibiotic resistance by combining biomolecular simulation and experiment
- MRCIIAR25Ca Fielding Systematic Characterisation of Inhibitory Ligands Encoded by Human Cytomegalovirus
- MRCIIAR25Ca McLaren T cell immune modulation during severe bacterial infection
- MRCIIAR25Ca Parmeggiani Sweet disposition: combatting bacterial infections and antimicrobial resistance with designer proteins that target biofilm matrix carbohydrates
- MRCIIAR25Ca Pertusati Design, synthesis and biological evaluation of molecules to tackle invasive fungal infections
- O MRCIIAR25Ca Serpi New antibiotics to kill "Superbugs" by stopping them from dividing
- MRCIIAR25Ca Stanton Enhancing Immunological Control of SARS-CoV-2
- MRCIIAR25Ca Woolley Neonatal Sepsis Detection Automation for Neonatal Intensive Care Units.
- MRCIIAR25Ex Borah Slater Investigating oxygenated sterols and lipids in tuberculosis (TB) infection: human's friend and pathogen's foe?

- MRCIIAR25Ex Harmer Developing new therapies against the most dangerous antibiotic resistant bacteria
- MRCIIAR25Ex Johnson Uncovering new genetic mechanisms of beta-cell autoimmunity to better understand type 1 diabetes
- MRCIIAR25Ex Neutzmann Investigating the impact of epigenetic modifiers, a new treatment for cancer, on fungal pathogens
- MRCIIAR25Ex Padfield Will climate change worsen the problem of antibiotic resistance?
- ) MRCIIAR25Ex Sanders Plasmids as AMR vectors
- MRCIIAR25Ex Schlopp The controlled spreading of Wnt receptors determines signalling in the tumour microenvironment
- MRCIIAR25Ex Scotton Genetic predisposition to accelerated ageing: targeting telomeres using sex hormone supplementation in chronic lung disease
- MRCIIAR25Ex Westra Developing phage therapy solutions for Staphylococcus aureus
- MRCNMH25Ba Bailey Synthetic heroin: understanding the dangers of nitazene drugs
- MRCNMH25Ba Bultitude Brain stimulation and neurophysiological investigations of central nervous system changes in pathological pain, and their augmentation by treatment.
- MRCNMH25Ba Button Can young people's cognitive style explain associations between social media use and mental health?
- MRCNMH25Ba Fairchild Understanding the impact of childhood maltreatment on brain structure and connectivity in Conduct Disorder
- MRCNMH25Ba Lambert Man up? Examining attitudes and experiences around mental health and help-seeking
- MRCNMH25Ba Lancaster Neuroimaging brain reward systems to stratify patients across the psychosis spectrum
- MRCNMH25Ba Licchesi Targeted protein degradation in CNS disorders
- MRCNMH25Ba Nikolaou Developing in vitro and in vivo genetic models to study aberrant neuronal network activity in dementia
- MRCNMH25Ba Nogaret Identification of ion channel dysfunction in epilepsy with machine learning
- MRCNMH25Ba Taylor What are the biological mechanisms underlying the association between smoking, smoking cessation and mental health: a triangulation approach using machine learning, mendelian randomisation, and g-methods applied to multiple biological cohort studies.
- MRCNMH25Ba Ward Brain growth mechanisms involving axon volume and myelination linked with autism spectrum disorder.
- MRCNMH25Ba Williamson The Experience and Impact of Psychedelic Therapy as Treatment for Mental Health Disorders in Women Survivors of Sexual Assault
- MRCNMH25Br Bould Do experiences in Virtual Reality change body perception and satisfaction, in individuals with and without eating disorders
- MRCNMH25Br Carroll Understanding neuronal dysfunction in Tuberous Sclerosis

- MRCNMH25Br Chakkarapani Contactless vital signs and movement monitoring and brain development in extremely premature infants- a translational study
- MRCNMH25Br Chrobok Cannabinoids in the ticking network of the brainstem satiety centre
- $\supset$  MRCNMH25Br Corey Unlocking the secrets of fentanyl: exploring the anomalous pharmacology of fentanyl at the  $\mu$ -opioid receptor
- MRCNMH25Br Hodge Towards a better understanding and treatments for the rare genetic brain disorder called CASK
- MRCNMH25Br Holmboe The impact of parental mental health on the neural substrate of early executive function development
- MRCNMH25Br Jones Computing and translating mechanisms of neural network dysfunction associated with psychiatric risk
- MRCNMH25Br Khandaker Examining risk factors for cognitive dysfunction in serious mental illness
- MRCNMH25Br Mars Investigating the relationship between substance use and self-harm using multiple methods
- MRCNMH25Br Mastitskaya How star cells of the brain help save the heart
- MRCNMH25Br Mellor Linking neuronal function to mental health: How genetic risk factors impair cognitive flexibility and neural plasticity in schizophrenia.
- MRCNMH25Br Mifsud Exploring the role of hyaluronan in cognition across the lifespan.
- MRCNMH25Br Purple Using machine learning to investigate the role of cell assemblies in processing traumatic experiences and the development of post-traumatic stress disorder
- MRCNMH25Br Robinson Investigating the neurobiological mechanisms underlying apathy in Parkinson's disease
- MRCNMH25Br Sallis Transmission of self-harm from parents to children: identifying mechanisms and informing intervention
- MRCNMH25Br Warburton Finding the missing link in memory networks: Deciphering corticalthalamic communication pathways critical for successful memory.
- MRCNMH25Br Whitcomb Optical micro-structures and their application in next-generation braincomputer interface systems
- MRCNMH25Br Wootton The MEME project: Making Exercise interventions More Effective for depression and anxiety.
- MRCNMH25Ca Chawner Unlocking the causes of eating disorders: investigating risk factors across development
- MRCNMH25Ca Davies Using a new translational in vivo model to understand the neurobiology underlying ADHD subtypes
- MRCNMH25Ca John Maternal anxiety and language delays in children both outcomes of the same epigenetic alteration?
- MRCNMH25Ca McNabb Using MRI, MEG, and machine learning to better classify severe mental illness

- MRCNMH25Ca Mehellou Unravelling the Pharmacological Activation of PINK1, a Protein Kinase Mutated in Parkinson's Disease
- MRCNMH25Ca Newland Developing a new therapeutic strategy for brain cancers: getting therapeutics directly to the tumour
- MRCNMH25Ca Pham Enabling continuous, personalised stress quantification and management with a wearable system
- MRCNMH25Ca Slator Al-enhanced Quantitative MRI for Multi-Scale Multi-Modal Neuroscience
- MRCNMH25Ca Smith How does DNA damage and mitochondrial dysfunction contribute to Huntington's disease?
- MRCNMH25Ca Szomolay Biomarker discovery of inflammatory pathways linked to mood and autoimmune disorders
- MRCNMH25Ca von dem Hagen Recognising uniquely human emotions
- MRCNMH25Ex Basson Understanding the social brain circuits affected in neurodevelopmental disorders.
- MRCNMH25Ex Brown Enhancing stem cell-derived motor neuron function as a therapeutic approach in Amyotrophic Lateral Sclerosis
- MRCNMH25Ex Dempster Cell-type-specific epigenetic regulation of gene expression in Motor Neuron Disease
- MRCNMH25Ex Flynn Epigenetic mechanisms in stem cell models of Rett syndrome
- MRCNMH25Ex Fox Artificial Intelligence-enhanced mobile Behavioural Activation therapy for
   Dementia and Mild cognitive impairment (AI-BADeM)
- MRCNMH25Ex Gold The consequence of mitochondrial import failure in neurogenerative disease
- MRCNMH25Ex Housden Understanding motor neuron disease using a powerful combination of model systems
- MRCNMH25Ex Huntley What is it like to have advanced dementia? Using remote measurement of EEG and physiological markers of sleep, arousal and awareness in people with advanced
- Alzheimer's disease.
  - MRCNMH25Ex Mansoubi AI-Powered Fatigue Solutions: Transforming Care for Neurological Conditions
  - MRCNMH25Ex Piers Development and characterisation of reproducible complex human brain organoids Bio-engineering and neuronal networks
  - MRCNMH25Ex Poorun Mapping Preterm Sleep Microstructure and EEG Biomarkers for Early Neurodevelopmental Risk Assessment
  - MRCNMH25Ex Richards Using machine learning to classify microglia
  - $\bigcirc$  MRCNMH25Ex Russell Assuming associations from old data- the case of ADHD and drug use
  - MRCNMH25Ex Schrader Exploiting lipid binding proteins to tackle neurological disorders
  - MRCNMH25Ex Tyrrell Metabolic psychiatry Understanding ethnic and global differences in the inter-relationships between obesity and mental health
  - O MRCNMH25Ex Witton Characterising a new neuroimmune pathway to treat Alzheimer's disease

- MRCPHS25Ba Halligan An investigation of the factors that influence post-disaster mental health in a Brazilian birth cohort study
- MRCPHS25Ba Hines Parental transmission of substance use: exploring mechanisms and informing intervention
- MRCPHS25Ba McDonald Causal inference tools to study vaccines using real-world data: how can we make better use of negative control outcomes?
- MRCPHS25Ba McGrogan How safe are antiseizure medications in pregnancy for conditions other than epilepsy?
- MRCPHS25Br Biglino Novel morphological markers of congenital heart disease: from computational modelling to population data
- MRCPHS25Br Corbin Use of network analysis to understand the molecular footprint of body mass index
- MRCPHS25Br Garnett Optimising uptake and personalisation of digital health interventions for under-served groups: a case study with the Drink Less app
- MRCPHS25Br Goudswaard Characterising the role of inflammation in the development of multiple myeloma
- MRCPHS25Br Howe Measurement of mental health in ethnically and geographically diverse populations
- MRCPHS25Br JonesH Developing and testing novel methods to estimate prevalence of methamphetamine and cocaine dependence
- MRCPHS25Br Liu Automating knowledge synthesis in biomedical literature using AI and Large Language Models
- MRCPHS25Br Lloyd-Lewis Under pressure: Investigating the role of tissue density and mechanics in breast cancer development
- MRCPHS25Br Min Uncovering the role of epigenetics in modifying disease risk.
- MRCPHS25Br Munafò Using diverse cohorts, methods and novel measures to understand the relationship between diet, physical activity and health outcomes
- MRCPHS25Br Nivard Shining a light on the un-common to identify novel health risk-factors
- MRCPHS25Br Richmond Exploring the interplay and mechanisms between sleep, circadian rhythms and physical activity in relation to physical and mental health
- MRCPHS25Br Siviter Quantifying the impact of chronic pesticide exposure on disease susceptibility
- MRCPHS25Br Stergiakouli Using genetics to understand mental health outcomes in children from a clinical birth cohort
- $\bigcirc$  MRCPHS25Br Timpson Metabolomic characterisation of adiposity across the life course
- MRCPHS25Br Wade Investigating the role of the microbiome in obesity-driven colorectal cancer development
- MRCPHS25Ca Farnell Improving Bruise Evidence Across Variations in Skin Tone Using Artificial Intelligence

- MRCPHS25Ca Jurkowska Targeted reprogramming of epigenetic signals for lung regeneration.
- MRCPHS25Ca Kaouri Calcium signalling in In-Vitro Fertilization: developing a non-invasive diagnostic tool
- MRCPHS25Ex Akrami Unveiling the Biomechanics of Diabetic Foot Ulcers: Identifying Critical Foot Load Profiles for Prevention and Treatment
- MRCPHS25Ex Frontini Integrative analysis of whole genomes and transcriptomes from multiple cell types in rare disease patients.
- MRCPHS25Ex Hannon Combining technologies to elucidate the epigenome's impact on health and disease
- O MRCPHS25Ex Hawkes Understanding genetic modifiers of obesity and metabolic disease
- MRCPHS25Ex Lowe Exploring the feasibility and efficacy of an aerobic exercise intervention in improving dietary self-regulation in adolescents and young adults
- MRCPHS25Ex Murray Using big data to explore how hot flushes and poor sleep contribute to women's health after menopause
- MRCPHS25Ex Panici An integrated hydro-epidemiological approach to prevent and mitigate water-related zoonotic diseases leveraging nature-based solutions
- MRCPHS25Ex Pulsford Development of guidelines and resources to encourage and support exercise in pregnant women with pre-existing Type 2 Diabetes
- MRCPHS25Ex Revuelta Iniesta Understanding Muscle Growth Responses to Nutrition in Adult Survivors of Childhood Acute lymphoblastic Leukaemia
- MRCPHS25Ex Sharp "You must be on your period": using smartphones and wearables to study changes in mental wellbeing throughout the menstrual cycle
- MRCPHS25Ex Torquati Greening Minds and Bodies: Assessing the physical, psychological and environmental impacts of a plant-based diet intervention
- O MRCPHS25Ex Wheeler Building the evidence around risks and actions on thunderstorm asthma

## Proven academic quality

12. Select the description for your first, **undergraduate** degree. Note: If you hold a non-UK degree please indicate its equivalent UK degree classification. For a <u>conversion table</u> please refer to our website. \*

| $\bigcirc$ | ВА                 |
|------------|--------------------|
| $\bigcirc$ | BSc                |
| $\bigcirc$ | BEd                |
| $\bigcirc$ | BEng               |
| $\bigcirc$ | LLB                |
| $\bigcirc$ | MEd (4 years)      |
| $\bigcirc$ | MEng (4 years)     |
| $\bigcirc$ | MBA                |
| $\bigcirc$ | MSci (intergrated) |
| $\bigcirc$ | MBBS/MBChB         |
| $\bigcirc$ | Other              |

13. If you selected 'Other', please specify.

14. Select the classification of this qualification or expected classification based on current average grades. \*

1st
 2:1
 2:2
 3rd
 Pass
 Merit

15. Provide the name of the institution that awarded this degree, e.g., University of Sheffield \*

16. Provide the subject of this degree (e.g., Animal Behaviour, Psychology, Mathematics) \*

17. In what year was this degree awarded (YYYY)? If yet to be awarded please state 'pending'. \*

18. Select the description for your postgraduate degree. If you do not hold a postgraduate degree please answer 'not applicable'. Note: If you hold a non-UK degree please indicate its equivalent UK degree classification. For a <u>conversion table</u> please refer to our website. \*

LLM
MA
MSc
MEd
MEng
MBA
MRes
MPhil
MSci (intergrated)
PhD

- Not applicable

19. If you selected 'Other', please specify.

20. Select the classification of this qualification or expected classification based on current average grades.

1st
2:1
2:2
3rd
Pass
Merit
Distinction

21. Provide the name of the institution that awarded this degree, e.g., University of Sheffield

22. Provide the subject of this degree (e.g., Animal Behaviour, Psychology, Mathematics)

23. In what year was this degree awarded (YYYY)? If yet to be awarded please state 'pending'.

24. If you hold an additional degree not listed above please select the description for this qualification. If you do not hold an additional degree please answer 'not applicable'. Note: If you hold a non-UK degree please indicate its equivalent UK degree classification. For a <u>conversion table</u> please refer to our website. \*

| $\bigcirc$ | BA                 |
|------------|--------------------|
| $\bigcirc$ | BSc                |
| $\bigcirc$ | BEd                |
| $\bigcirc$ | BEng               |
| $\bigcirc$ | LLB                |
| $\bigcirc$ | LLM                |
| $\bigcirc$ | MA                 |
| $\bigcirc$ | MSc                |
| $\bigcirc$ | MEd                |
| $\bigcirc$ | MEng               |
| $\bigcirc$ | MBA                |
| $\bigcirc$ | MRes               |
| $\bigcirc$ | MPhil              |
| $\bigcirc$ | MSci (intergrated) |
| $\bigcirc$ | PhD                |
| $\bigcirc$ | MBBS/MBChB         |
| $\bigcirc$ | Not applicable     |
| $\bigcirc$ | Other              |
|            |                    |

## 25. If you selected 'Other', please specify.

**26**. Select the classification of this qualification or expected classification based on current average grades.

- 2:1
- 2:2
- ◯ 3rd
- O Pass
- O Merit
- 27. Provide the name of the institution that awarded this degree, e.g., University of Sheffield

28. Provide the subject of this degree (eg, Animal Behaviour, Psychology, Mathematics)

29. In what year was this degree awarded (YYYY)? If yet to be awarded please state 'pending'.

- 30. The Doctoral Training Partnership aims to bring together different academic disciplines. Please select the most appropriate discipline(s) for yourself based on your recent study/experience. \*
- Medicine and dentistry (clinical)
- Subjects allied to medicine
- Biological sciences
- Veterinary science
- Agriculture and related subjects
- Physical sciences
- Mathematical sciences
- Computer science
- Engineering and technology
- Architecture and related subjects
- Social sciences
- 📃 Law
- Business and administration studies
- Mass communications and documentation

#### **Research Potential**

- 31. Please outline 2 examples of your achievements in research related activities (e.g. undergraduate, masters or postgraduate work experience). (Maximum of 200 words). \*
- 32. Please outline 2 examples of your achievements in non-research related activities (e.g. outside of academic study). (Maximum of 200 words). \*

## Personal motivation and commitment

- 33. Please describe why you have chosen this project (e.g. your interest/understanding of the research question, your skills/experience that fit with this project). (Maximum of 200 words). \*
- 34. What do you hope to gain from doing a PhD with the GW4 BioMed2 MRC DTP? (Maximum of 150 words). \*

# Any further information

35. Please provide any additional relevant information to support your application (maximum of 150 words). Please note that completion of this section is not compulsory.

## **Equality and Diversity Monitoring**

We want to make sure that everyone is treated equally and fairly, which is why we're asking the following questions. This information is reported anonymously and will be shared with the MRC in order to monitor the GW4 BioMed2 MRC DTP's recruitment process. This information will not be shared with anyone else and will solely be used to improve our services.

#### 36. What is your age? \*

#### 37. Do you have any disabilities? \*

- 🔘 None
- $\bigcirc$  A specific learning difficulty, such as dyslexia, dyspraxia or AD(H)D
- A social/communication impairment such as Asperger's syndrome/other autistic spectrum disorder
- A longstanding illness or health condition, such as cancer, HIV, diabetes, chronic heart disease, or epilepsy
- $\bigcirc$  A mental health condition, such as depression, schizophrenia or anxiety disorder
- A physical impairment or mobility issues, such as difficulty using arms or using a wheelchair or crutches
- O Deaf or a serious hearing impairment
- O Blind or a serious visual impairment uncorrected by glasses
- A disability, impairment or medical condition that is not listed above
- Prefer not to say

#### 38. What is your ethnic group? \*

- O White
- Gypsy or Traveller
- Other White background
- Black or Black British Caribbean
- Black or Black British African

- Other Black background
- 🔿 Asian or Asian British Indian
- 🔵 Asian or Asian British Pakistani
- 🔵 Asian or Asian British Bangladeshi
- Chinese
- 🔘 Other Asian background
- O Mixed White and Black Caribbean
- 🔵 Mixed White and Black African
- 🔵 Mixed White and Asian
- Other mixed background
- 🔘 Arab
- $\bigcirc$  Other ethnic background
- 🔘 Unknown
- Prefer not to say

39. How would you describe your national identity? \*

## 40. What is your gender? \*

- 🔵 Male
- Female
- Other
- Prefer not to say
- 41. Which of the following best describes your sexual orientation? If you prefer to selfdescribe, then please select other and list your reply in the next question. \*
- Bisexual
- 🔵 Gay/Lesbian
- O Heterosexual/Straight
- Other sexual orientation

#### 42. If you selected 'Other sexual orientation' and would like to specify, please do so here.

# 43. What was the occupation of your main household earner when you were about age 14? \*

Modern professional and traditional profession occupations such as: teacher, nurse, musician, social worker, police officer (sergeant or above), software designer, accountant, solicitor, medical practitioner, scientist, engineer

Senior, middle or junior managers or administrators such as: finance manager, chief, executive,
 large business owner, office manager, retail manager, bank manager, restaurant manager, warehouse manager

- Clerical and intermediate occupations such as: secretary, personal assistant, call centre agent, clerical worker, nursery nurse
- C Technical and craft occupations such as: motor mechanic, plumber, printer, electrician, gardener, train driver
- Routine, semi-routine, manual and service occupations such as: postal worker, machine operative, security guard, caretaker, farm worker, catering assistant, sales assistant, cleaner, porter, labourer, waiter/waitress, bar staff
- Long term unemployed: (claimed unemployment benefit for more than 1 year)
- Small business owner who employs less than 25 people such as: corner shop owner, small plumbing company, single cafe owner, taxi owner, garage owner
- $\bigcirc$  Other: such as retired, this question does not apply to me, I don't know
- I prefer not to say
- 44. If you finished school after 1980, were you eligible for free school meals at any point during your school years? \*
- O Yes
- 🔘 No
- $\bigcirc$  Not applicable (finished school before 1980 or went to school overseas)
- 🔵 l don't know

- 45. Did either of your parents attend university or gain a degree (e.g. BA/BSc or equivalent) by the time you were 18? \*
- No, neither of my parents attended university
- Yes, one or both of my parents attended university
- 🔘 Do not know/ not sure
- I prefer not to say

## Advertising

46. How did you find out about this PhD opportunity? \*

- Email from GW4 BioMed forwarded by my university
- Email from the project supervisor
- GW4 BioMed DTP Website
- Via link from another website
- Personal recommendation ie from friend or colleague
- FindaPhD.com
- General Postgrad event
- Social Media Twitter/Facebook
- University Careers Service
- Other

#### **Data Protection**

Data Protection: If you are applying for a place on a collaborative programme of doctoral training provided by Cardiff University and other universities, research organisations and/or partners, please be aware that your personal data will be used and disclosed for the purposes set out below. Your personal data will always be processed in accordance with data protection legislation. Our legal basis for processing your personal data is that it is necessary for the performance of a contract (Art.6(1)(b) and necessary for the fulfilment of legitimate business interests (Art.6(1)f). Where appropriate we will share personal data provided in your application with the University of Bath, the University of Bristol and the University of Exeter ("HEIs") and when they process relevant personal data for their own purposes each will be data controllers. Application Process During the application process, the University may need to share some of your personal data with third parties to be able to administer your application, carry out interviews and select candidates. These are not limited to, but may include disclosures to: the selection panel and/or management board or equivalent of the relevant Programme, which is likely to include staff from one or more other HEIs; administrative staff at one or more other HEIs participating in the relevant Programme. Such disclosures will always be kept to the minimum amount of personal data required for the specific purpose. If you become a student on one of our Programmes If your application is successful and you register on a Programme, the University may need to make further disclosures of your personal data throughout your time on the programme to ensure the effective management of your studies and comply with its obligations to funders. These disclosures may include, but are not limited to: within the group of HEIs to the Programme; to other collaborative parties to the relevant Programme, e.g. industrial sponsors and/or collaborators, supervisors from other HEIs, Research Councils (as funders of the Programme); to external examiners. Other disclosures may be made where it is necessary for the administration of your studies. The information you provide as part of your application will be stored securely and retained. Your Data Protection Rights You can find out more about your data protection rights, including how your personal data is held by the University on our public website Your data protection rights - Public information -Cardiff University. Contact If you have any queries or concerns about the use of your personal data during the application process or your time as a student, please contact PGR Quality and Operations (Registry) by emailing pgr@cardiff.ac.uk. If you remain unsatisfied you may raise this matter with the University's Data Protection Officer or the Information Commissioner's Office and you can find their contact details on our website: Our data protection policy - Public Information - Cardiff University.

47. Please confirm that you have read the data protection statement and understand how your information will be collected and shared as specified in the application form. If you do not agree with the terms, please exit the survey without submitting. \*

## **Nearly Finished**

At the bottom of this page, you are able to select a 'Finish Later' option and return to the survey. Once you click 'Submit' on this page, your application will be submitted and cannot be edited by yourself or the DTP hub. Therefore, please ensure you have completed all sections accurately before finishing.