### The impact of participation in wheelchair basketball on participants health and wellbeing

### Adam Dickinson

Supervised by Dr David Maidment, Dr Ed Cope and Dr Carolyn Plateau

I am investigating the impact of wheelchair basketball on physical and mental wellbeing and how best to introduce new participants to the sport.

I am extremely passionate about the sport and getting people involved as I know from personal experience how transformative it can be.

Playing wheelchair basketball completely changed my life, it was the catalyst for my journey into higher education and onto undertaking a PhD.

Working as part of the Peter Harrison Centre for Disability Sport research team, I am able to gain insights into relevant multidisciplinary research from leaders in the field.

The support of the Doctoral College, as well as opportunities to undertake teaching roles alongside my research, make Loughborough University the perfect place for me to develop as a researcher.







Scan to hear Adam talk more about their PhD



### An examination of the identities of Chinese female athletes with physical impairments

### Kaixi Zhao

Supervised by Professor Alan Bairner and Dr Emma Pullen

My research focuses on the identities of Chinese female athletes with physical impairments.

My work is qualitative, using the methods of semistructured interviews to collect data and thematic analysis to explore the relevant themes associated with their athletic, gender and disability identity. I hope that my research can give a voice to these athletes, that currently have limited media and literature coverage, to bring more attention to a neglected group of people.







Scan to hear Kaixi talk more about their PhD



## Design and implementation of a contextualised physical activity and diet intervention for the control of hypertension in adults living in rural South Africa

### Kganetso Sekome

Supervised by Dr Dale Esliger and Prof Lauren Sherar

My doctoral study aims to design and test the feasibility of culturally sensitive, community-based, lifestyle interventions to control hypertension among adults in a rural district.

Profiling and focus group discussions will allow a deeper understanding of the sociocultural aspects of diet and physical activity.

The results will provide a novel contribution to the understanding of contextual factors about physical activity, diet and implementation of interventions for a rural, South African adult population.

I hope that my study leads to recommendations that will assist in the control of high blood pressure, particularly for adults in a rural South African or similar population.







Scan to hear Kganetso talk more about their PhD



### Developing a bioinspired drug delivery system for musculoskeletal regeneration

### Malika Singh

Supervised by Dr Owen Davies and Prof Mark Lewis

My research focuses on nanoparticles called extracellular vesicles, which are small particles naturally released by all cells in our body.

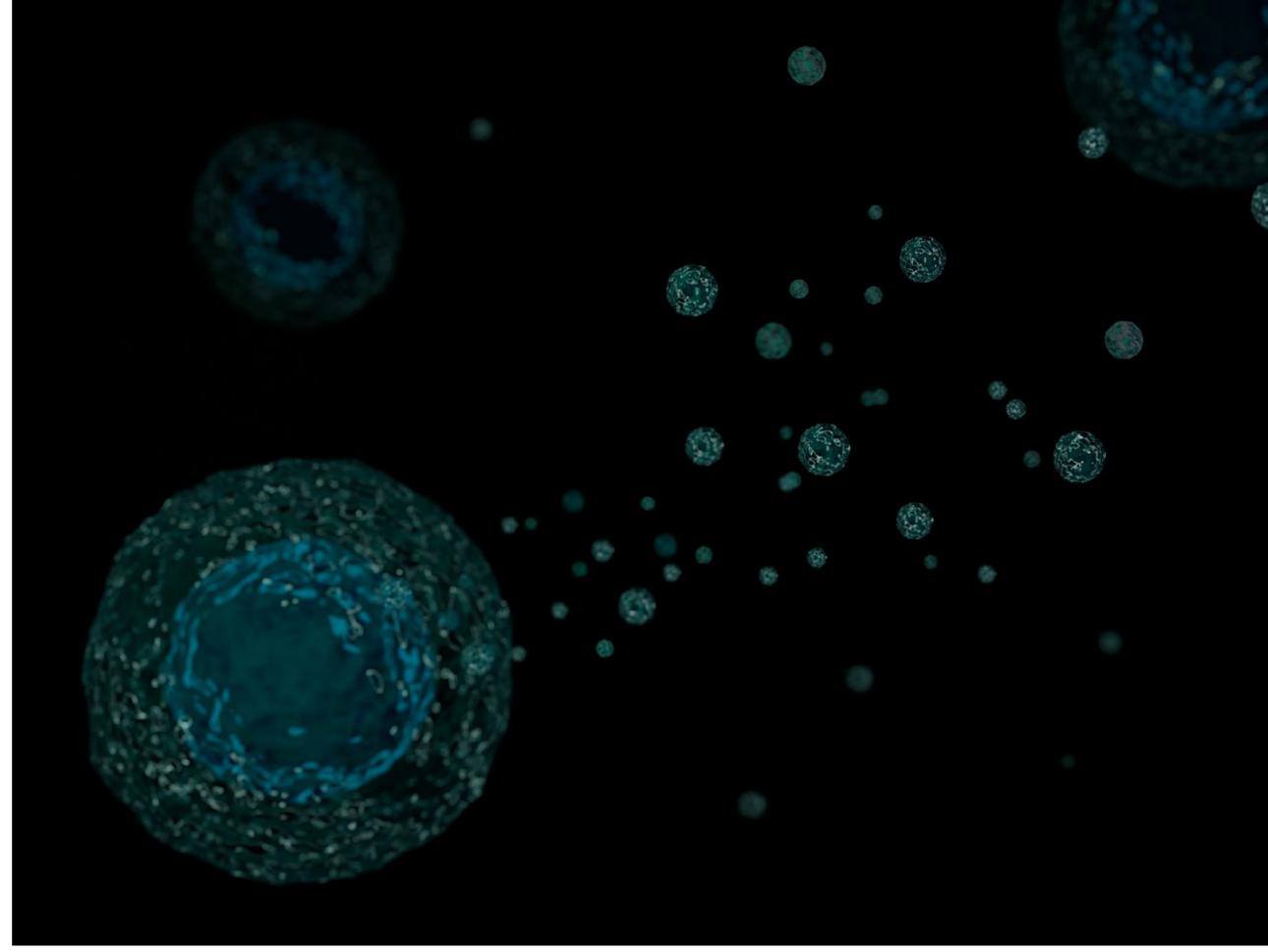
My work specifically looks at EVs derived from muscle cells and human breast cancer cells.

I hope that my research can be used to develop a better, more targeted system of delivering drugs in the body to treat breast cancer as well as improve muscle regeneration.

The quality of academic support at Loughborough University has played a significant role in my learning and development as a researcher, as well as the access to facilities contributing to my ability to produce high-quality results.

Malika is working with Dr Owen Davies whose research group is pioneering EV-based solutions to combat real world healthcare problems such as tissue repair.







Scan to hear Malika talk more about their PhD



### Investigating Exercise and Technology for Memory Improvement in Dementia

### Manisha Jain

Supervised by Prof Eef Hogervorst, Prof Sue Hignett and Dr David Maidment

Dementia is a growing healthcare problem, and with no cure, research like mine has focused on preventative strategies in the hope of reducing its risk.

My research examines the impact of an interest in technology on memory improvement and performance.

The most advantageous aspect about studying at Loughborough University is the academics I have met to help and support me with my research. Their knowledge and support have been invaluable.

I have had the opportunity to present at numerous conferences, such as the Alzheimer's Research UK Conference, and I am first author on three chapters in a book about dementia design guidelines.







Scan to hear Manisha talk more about their PhD



# How can community health and wellbeing programmes engage individuals and groups of lower socioeconomic status (SES) more effectively?: Learning from parkrun's outreach initiatives'

### Michael Bukur-Li

Supervised by Dr Gareth Wiltshire, Dr Clare Stevinson, and Dr Emily Petherick

My research aims to establish a robust theoretical and empirical base to identify effective strategies in health and wellbeing and help reduce health inequalities.

I used a multi-pronged approach, which spans qualitative methods in the form of focus groups and interviews with parkrun staff and ambassadors, in addition to local event volunteers, interest groups and non-participants in East London.

This is supplemented by primary and secondary quantitative data via a unique questionnaire and parkrun participation data.

My overarching objective is to unravel the collaborative dynamics among organisations, researchers, community groups and individuals, endeavouring to foster a more integrated approach towards achieving our collective goal of advancing community health and diminishing disparities.







Scan to hear Michael talk more about their PhD



### Clustering of Health Behaviours in Children, Adolescents and Young Adults

### Noura Alosaimi

Supervised by Dr Natalie Pearson, Prof Lauren Sherar, and Prof Paula Griffiths

My research explores how health behaviours, like physical activity, sedentary behaviours, diet, and sleep, cluster together among young people in the UK and examines both the determinants and health outcomes of these clusters.

My research identified a wide range of clusters representing healthy, unhealthy, and mixed behavioural patterns that differ across sociodemographic characteristics. These findings are vital for health promotion, disease prevention, tailored interventions and overall wellbeing improvement.

Studying at Loughborough University offers significant advantages for my research. The university's strong research reputation and academic excellence foster a vibrant intellectual community. Access to world-class facilities and resources enables advanced research.

Collaborative opportunities with experienced faculty enhance interdisciplinary research and practical relevance. Loughborough University provides a conducive and thriving research ecosystem that enhances the quality and impact of my research endeavours.







Scan to hear Noura talk more about their PhD



### Hydration and Nutrition Interventions to Improve Endurance Performance in the Heat

### Tom Cable

Supervised by Lewis James, Mark Funnell, Steve Mears, Lee Taylor and Steve Bailey

My research focuses on the impact of dehydration on endurance performance in hot environments. Specifically, I am looking to optimise strategies to mitigate the negative impact of dehydration on such performance.

These strategies include supplementation regimens, fluid consumption optimisation and assessment of potential population differences in response to dehydration.

This research is applicable to contemporary sporting events, as international events often take place in hot and humid environments, where heat and dehydration are likely to impede the ability to perform exercise (Tokyo Olympics, Paris Olympics, Qatar World Cup).

Loughborough offers a great research environment for doctoral researchers to learn, collaborate and conduct their work. We also have excellent access to athlete participants who are willing to get involved in research projects.







### Effects of stroboscopic proprioception training on peroneal insufficiency and proprioception deficits in people with ankle instability

### Zongchen Hou

Supervised by Dr Samantha Winter and Dr Daniel Fong

Did you know that 70% of individuals who initially sprained their ankles during sports experiences recurrent sprains? However, the causes of these recurring sprains and effective treatment methods remain unclear.

My research aims to investigate whether unexpected jump landings increase the risk of ankle sprains; developing a new training method called stroboscopic balance training.

Training with stroboscopic glasses created a repeated "disco" effect during balance exercises, which helped participants react more quickly and effectively to

unexpected tasks, reducing the likelihood of recurrent ankle sprains during jump landings.

This innovative approach offers a promising solution for preventing future ankle injuries and improving sports performance.

PhD study at Loughborough has allowed me to access cutting-edge research equipment, helping me to obtain the best data for my research. I really enjoy working with so many talented and world-famous academia and professors, whose guiding advice really is invaluable.







Scan to hear Zongchen talk more about their PhD

