

REVOLUTIONS

OFFICIAL PUBLICATION OF THE PETER HARRISON CENTRE FOR DISABILITY SPORT



ISSUE HIGHLIGHTS:

Peter Harrison Foundation celebrates 20 years
MoU with Korean Paralympic Committee
Loughborough university launch Para-sport Strategy
Spotlight with Pasan Kularatne



**Loughborough
University**

Peter Harrison Centre
for Disability Sport

WELCOME

DIRECTOR'S FOREWORD

by Vicky Tolfrey, Director of the PHC

The Peter Harrison Centre for Disability Sport (PHC) in our 15th year, is proud share its 26th newsletter.

We had another successful and productive year in 2019, continuing our commitment to improve knowledge about Paralympic sport and to promote the substantial health and quality of life benefits that can be gained through participation in disability sports in the UK and around the world. In 2019 we said goodbye to Ben Stone as he moved on to NURVV Consumer Electronics as a Biomechanical Engineer.

We welcomed several Loughborough University staff members to compliment new lines of enquiry as you will see in this newsletter and as regular news items on our newly designed website over the course of 2020.

We welcome Jordan Fenton to our research team as a new graduate student. Jordan was recently the recipient of the MASCIP 2019 Poster Award for his master's dissertation on the topic of appetite regulation and spinal cord injury (see page 6), a topic he will continue for his first study of his PhD.

We also welcome Han Newman who will be working under the leadership of Anthony Papatomas and support of Christof Leicht on a project promoting physical activity and exercise in Thalidomide survivors.

We are also excited, as we move into 2020 to be supporting Loughborough Universities Para Sport strategy which was launched at the end of last year by Nik Diaper (see page 4). We look forward to sharing progress of these projects via the website and twitter feeds.



In 2019, Loughborough University signed a Memoranda of Understanding with the Korean Paralympic Committee (story on page 16), and hosted visiting scholars and students from Brazil, Belgium, Japan, and the Netherlands. In addition to Mike Hutchinson's wedding in 2019, PHC alumni welcomed several babies to the extended PHC family.

We had four graduate students complete their degrees and formally graduate at the Summer and Winter 2019 ceremonies (Sven Hoekstra, Ben Stephenson and Mike Hutchinson, Ben Stone respectively) furthering the reach and impact of the PHC. We also welcome Dr Jan van der Scheer (Visiting Fellow), back to the UK as he started a new post at Cambridge University.

Through research, leadership, knowledge translation, and partnerships, members of the PHC continue to work diligently to promote healthy active lifestyles within persons with a disability and supporting sporting excellence as we move into an exciting Paralympic year. PHC remains indebted

to our collaborators and partners, who fund, facilitate, support and synergize our efforts. To the Peter Harrison Foundation for which our core funds are provided, please accept our most sincere thanks and our pledge to continue to work positively together.

Best wishes for a healthy, active 2020!

We hope you enjoy learning about the Centre and find the links to the website and other resources useful.

If you have any feedback on this issue or would like to contact the Centre please email: phc@lboro.ac.uk or contact the PHC Director at V.L.Tolfrey@lboro.ac.uk

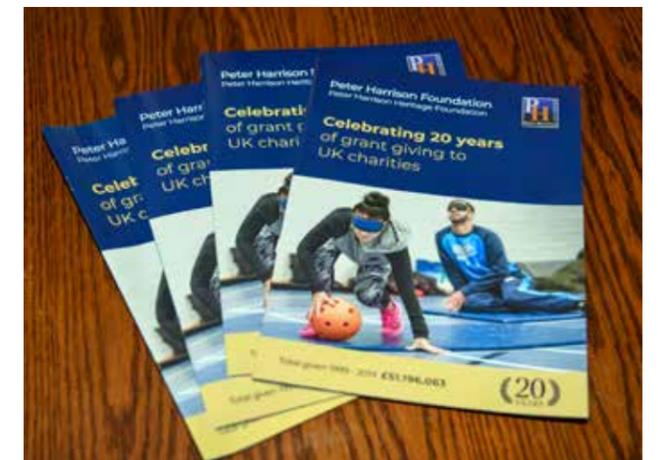
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Thanks to all the contributors.

HIGHLIGHT

PETER HARRISON FOUNDATION CELEBRATES 20TH ANNIVERSARY

On Thursday 21st November the Trustees of the Foundation held a reception at the Old Reigatian RFC clubhouse in Reigate to celebrate 20 years of charitable grant giving. Charities represented at the event had benefited from over £51m of giving over the 20 years.



NEW PHC MEMBERS



JORDAN FENTON

Jordan's interest for working with people with spinal cord injury began by wanting to understand more about why weight gain was particularly prevalent in this population.

This led to him completing a research project for his MSc in Sport and Exercise Nutrition, looking at appetite regulation in individuals with tetraplegia. Following this, Jordan continued data collection for this study which led to him starting his PhD.

Over the course of the PhD, Jordan aims to look at other dietary components including energy balance and protein interventions in hopes of creating and elucidating the nutritional guidelines for spinal cord injury populations. This PhD is possible with the financial support of the Matt Hampson Foundation and KC Suri.



CAROLYN PLATEAU

Carolyn completed her PhD at Loughborough University in 2015 and was appointed as a Lecturer in Psychology in the same year.

Broadly, Carolyn's research interests are in understanding the occurrence of mental health problems among athletes, with a specific interest in disordered eating and exercise. Carolyn's research has focused on the role of key stakeholders (e.g., coaches, teammates, parents and teammates) in preventing and supporting early intervention for mental health issues among athletes.

Carolyn's current research aims to understand the psychological and social factors that can affect mental health and wellbeing among para-sport athletes.

The PHC are delighted to announce that Han Newman will be joining the team as a Research Associate, working under the supervision of Anthony Papatomas on a project promoting physical activity and exercise in Thalidomide survivors.

From all at the PHC we would also like to wish Ben Stone the best in his new role at NURVV as a biomechanical engineer following graduating his PhD in December.

STOP PRESS

PHC Visiting Fellow Jan van der Scheer has made his way back from Canada, where he had a fantastic experience working with Prof Martin Ginis and her lab members. He just started a new role at the University of Cambridge.

More to follow in the next newsletter!



STOP PRESS

Congratulations to Ben Stephenson and Vicky Tolfrey who have been awarded a grant through Innovate UK to help support the project 'Developing new <1mm microneedle sensors to actively and painlessly monitor the key indicators of energy levels, metabolism and fatigue in biomarkers under the skin in real-time.'

LBORO PARA SPORT LAUNCH

LOUGHBOROUGH UNIVERSITY PARA SPORT STRATEGY LAUNCH EVENT

by Nik Diaper

As the new Head of Para Sport for Loughborough University, it was a pleasure to welcome over 100 guests to the launch of our new Para sport strategy which took place on the 3rd December 2019.

The event coincided with International Day for Persons with a Disability and I was delighted to see so many individuals attending from such a broad spectrum of Para sport including athletes, coaches, academics, practitioners and administrators.

The vision for our Para sport strategy is to create life-shaping opportunities through the development of an inspirational and inclusive Para sport offer.



LOUGHBOROUGH
PARA SPORT

The strategy has six key strategic themes which are briefly outlined below:

Get Involved

- A comprehensive, inclusive and integrated sport offer that provides sport and physical activity opportunities for all.
- Opportunities to get involved in all aspects of Para sport including coaching, volunteering, officiating and placements.

Performance

- Unrivalled and integrated University Para sport performance programmes that underpin and support the ambitions of National Governing Bodies.
- A world class performance environment that supports the development of future Paralympians.
- Bespoke support for student Para athletes including coaching, support services and scholarships.

Research and Innovation

- Innovative and pioneering projects to enhance and inform understanding in all aspects of Para sport from physical activity through to performance sport.
- Unique opportunities for research in Para sport.

Events

- World class facilities capable of hosting Para sport competitions, training camps, workshops and conferences

Knowledge and Expertise

- World leading expertise including coaching, research and performance support.
- Facilitate the development and transfer of Para sport knowledge

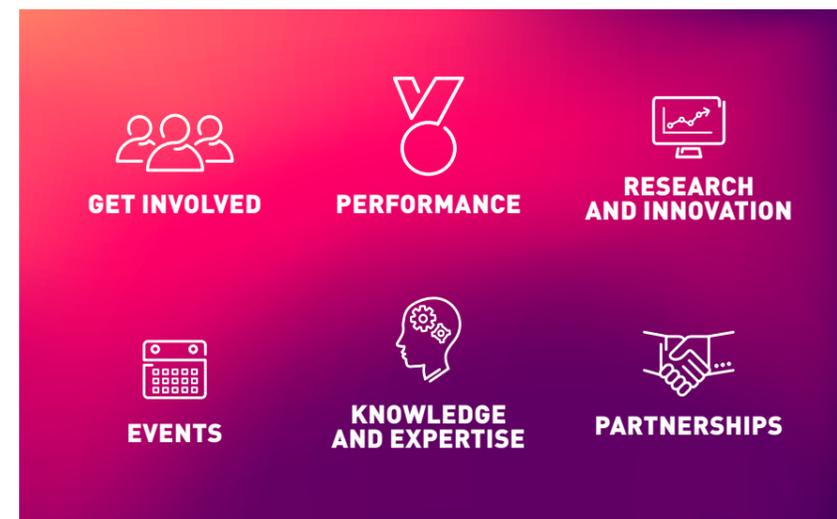
Partnerships

- Develop strong, lasting and impactful partnerships that add value at an individual and system level

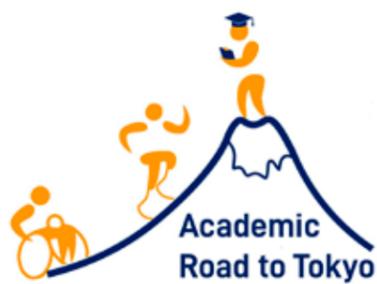
Now that the strategy has been shared, the hard work begins! But what drew me to this new role at Loughborough is the staggering amount of opportunity and potential that I see for Para sport across all facets of the University and each of the themes outlined above. I cannot think of any other single site in the UK that affords such opportunities. You literally cannot walk more than a few metres on the campus without bumping into a para athlete, coach, practitioner, researcher, National Governing Body employee or other individuals with an interest in Para sport. That is what makes the Loughborough ecosystem unique.

It is hard to believe that we are now already in a Paralympic year again and I expect the Tokyo Paralympic Games to be another phenomenal milestone in the evolution of Paralympic sport and the movement. From a British perspective I am hopeful and optimistic that Loughborough University will again play a significant role in a successful campaign and on a personal level I am delighted to take on the role of Deputy Chef de Mission for ParalympicsGB. What an exciting year for Para sport globally, and what an exciting time for Para sport at Loughborough!

For further information, please visit: lboro.ac.uk/sport/para-sport



CONFERENCES



SYMPOSIUM 'ACADEMIC ROAD TO TOKYO PARALYMPICS' 22-23 AUGUST 2020 IN TOKYO

By Vicky Tolfrey and Riemer Vegter

A few days before the opening of the Paralympic Games we are proposing to host a symposium focusing on disability sports. This international educational event will bring together researchers, professionals and students from different countries.

The first day will be filled with a keynote and inspiring talks by academic leaders in the field of disability sports.

This will be followed by the student team presentations of their prepared assignment. Their assignment will be on evidence-based classification and the development of a new all-inclusive sport, where everybody should be able to participate together in a team sport. All participating teams will be extensively briefed beforehand so that they know how to prepare.



The following day these sports will be tried by the participating student teams. During these games they will also try to mimic different impairments so they can experience these themselves (for instance, blindness, or deafness, but also limited range of motion in upper or lower limbs).

The feasibility of this project has come about because of international collaboration with several different parties.

First a longstanding collaboration between Loughborough University and Wakayama Medical University laid the groundwork for the connections. Dutch researchers (University of Groningen and the Hague University of Applied Science) add to this network through the connections made in a line of conferences (International Symposium of Sports Medical Science for Persons with Impairments (Wakayama, Sept 2018), RehabMove (Groningen, Dec 2018) and IPC Vista (Amsterdam Sept 2019).

Tokyo University has shown interest to host this event in collaboration with Wakayama University [more information will follow on the PHC website in due course].

We think this event will greatly add to the value of coming to Japan and the Paralympic Games and will be an excellent educational experience and international exchange between everybody involved.

The organizing team:

Japan: Prof dr. Fumihito Tajima, dr. Kungsu Jung, dr. Ryuji Hiramatsu

United Kingdom: Prof. dr. Vicky Goosey-Tolfrey

Netherlands: dr. Helco van Keeken, dr. Riemer Vegter, dr. Monique Berger

For more information please contact Vicky or Riemer on v.l.tolfrey@lboro.ac.uk or rvegter@gmail.com

MASCIP CONFERENCE

By Simon Briley and Jordan Fenton

In November, Prof. Vicky Tolfrey and PhD students Simon Briley and Jordan Fenton attended the Multidisciplinary Association of Spinal Cord Injury Professionals (MASCIP) conference in Loughborough. The conference focused on individuals with tetraplegia and was entitled 'UP TO YOUR NECK IN IT': LIFE WITH TETRAPLEGIA.

The conference provided unique insights into important issues such as: respiratory management, upper limb function and rehabilitation and assistive technology. Presentations were given by researchers and clinicians working closely with individuals with spinal cord injury (SCI) including those within SCI centres around the country.

The variety of speakers included surgeons, physiotherapists and occupational therapists allowing a broad and comprehensive discussion of issues faced by those with tetraplegia. A range of research projects by the PHC are focusing on addressing these issues and the talks and discussions with other delegates throughout the day was a fantastic opportunity to enhance this ongoing research.

Alongside research and clinician perspectives a highlight of the conference was the inclusion of speakers with tetraplegia. For example, Matt Hampson the former Leicester Tigers RFC player spoke about the great work the Matt Hampson foundation is currently doing in Leicestershire to support many people with SCI and those seriously injured through sport.

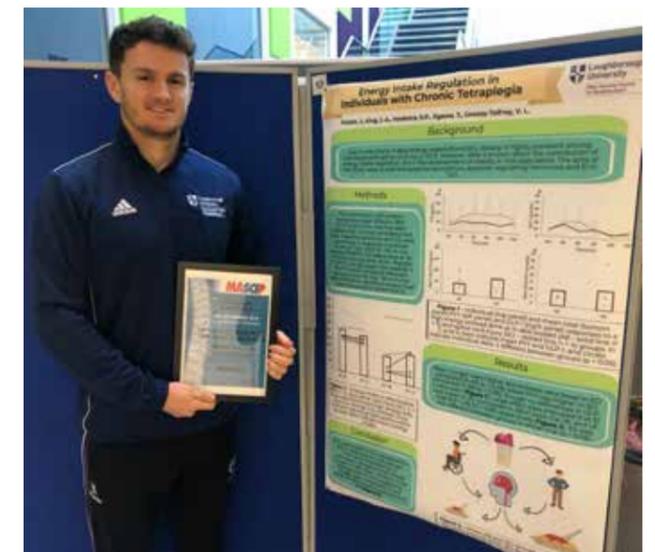
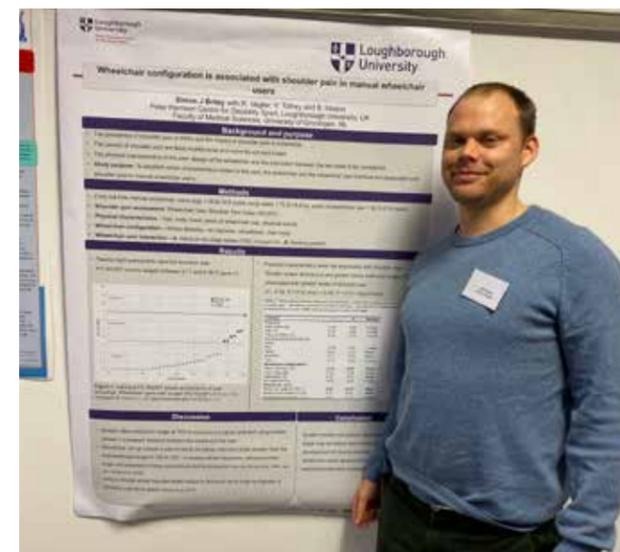
The conference also provided delegates an opportunity to present and discuss their own research through poster presentations. Four research projects were presented by PHC members on a range of topics including SCI exercise guidelines and factors associated with shoulder pain in manual wheelchair users. It was brilliant to hear that Jordan Fenton won the best poster award for his MSc research project. Jordan presented his work relating to appetite regulation in individuals with chronic tetraplegia. He is still recruiting for this study until the end of April 2020. If you are interested in taking part please see page 22.

We thank the MASCIP organising committee for providing an enjoyable and insightful day.

STOP PRESS

"Ready for a new chapter: Post-doctoral fellow at Wakayama Medical University, in collaboration with @PHC_Lboro" - @Sven_hoekstra

Find out more about Sven's time in Japan online on our new website: www.lboro.ac.uk/research/phc and in the next issue of our newsletter.



CONFERENCES

THE CANADIAN SOCIETY OF EXERCISE PHYSIOLOGY

By Professor Vicky Tolfrey

CSEP2019 (The Canadian Society of Exercise Physiology) was hosted at the Delta Hotels by Marriott Grand Okanagan Resort, in beautiful Kelowna, British Columbia in Nov-2019.

The theme of the conference 'For the Health of it - Applying Exercise Science Research to Practice, had papers from both experienced researchers and from PhD and early career researchers which formed an extensive programme.

I was invited by Prof Kathleen Martin Ginis to contribute to a symposium that discussed how research across the translational spectrum is advancing discovery and improving best-practices regarding exercise and sport for people living with spinal cord injury.

Following Kathleen's introduction that focused on Dr Guttmann's introduction of exercise and sport as a tool for treatment of young veterans at the Stoke Mandeville Spinal Injuries Unit in the mid 1940's. Using a structure 'From animal models, to community-dwelling adults, to Paralympic athletes', we presented a coherent story.

The symposium highlighted recent advances in spinal cord injury sport and exercise science, and innovations that are leading to better health, fitness and performance in this population.



Cells: It takes the bench to understand the biology: basic science insights into the benefits of exercise after spinal cord injury - Christopher West

Society: It takes a village to raise physical activity levels: community-based physical activity interventions - Jasmin Ma

Sport: Wheelchair sports: Pushing forward to performance and health - Vicky Goosey-Tolfrey

The benefits and challenges of working collaboratively across the translational spectrum rounded up the session.

I would like to thank my Canadian colleague for warming welcoming me to Kelowna and involving me in the International pre-conference discussions at the University prior the start of CSEP, with colleagues from Japan in attendance also.

It was certainly a busy week, but a memorable one with activities of 'wine tasting hosted by Spero Ginis, an alumni event hosted by Prof Maureen MacDonald for McMaster University and of course a shopping trip'.



BIOMECHANICS OF WHEELCHAIR MOBILITY: ELITE ATHLETES AND CLINICAL POPULATIONS

By Professor Florentina Hettinga

The British Association of Sport and Exercise Science (BASES) hosts a Conference annually, where experts meet and present and discuss topics about physical activity, exercise, health, wellbeing and sport.

This year's BASES 2019 Conference which was held on 19 & 20 November 2019 at King Power Stadium in Leicester, included the topic 'disability sport' which was well-represented.

Professor Vicky Tolfrey (Loughborough

University) joined me to deliver an 'Invited Symposium' in a session entitled 'Biomechanics of wheelchair mobility: elite athletes and clinical populations'.

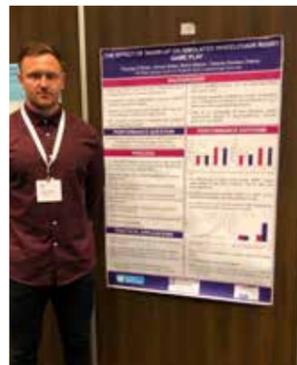
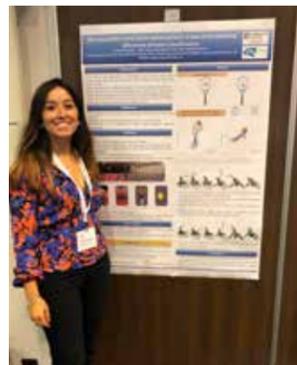
The session was well attended and illustrated how gait analysis is now a widely used method to assess gait characteristics of clinical populations. However, less is known on the biomechanics of wheelchair mobility. A better understanding of upper body biomechanics could underpin evidence-based advice to improve mobility and sport performance.

Vicky provided the background relating to wheelchair performance and

biomechanics in elite wheelchair sport and I complemented the session by focusing my discussion on wheelchair propulsion in daily life and the wider context of physical activity engagement.

The session and discussions highlighted the need for further research and knowledge translation on wheeled mobility, sport, exercise and physical activity.

Vicky commented 'It was pleasing to see that disability sport was on the programme. The session acted as a platform, for not only Floor and I to share our research but it allowed an opportunity to engage with the biomechanical community of BASES'.



"I had a great time at VISTA catching up with many of our international colleagues. It was also brilliant to be able to present my final PhD study on the effect of SCI on RPE responses. Given also the number of presentations on classification, the conference was very useful for our ongoing work in wheelchair tennis. Hopefully we will be able to present this at the next VISTA!!"

Michael Hutchinson

"Taking part in the VISTA conference was an incredible opportunity. It was amazing to share my research on wheelchair tennis with experts in the field and to receive feedback and advice during the poster presentation session."

Cristina D'Angeli

"VISTA 2019 was my first international conference with colleagues from the PHC and I was not disappointed. I was very grateful for the opportunity to present some of my early PhD work to an international audience, as well as meet new people with very similar research interests. The passion for Para-sport research could be felt with every conversation I took part in."

Tom O'Brien

GENERAL UPDATES

DR LAURA-ANNE FURLONG WINS MULTIPLE AWARDS FOR: Best paper using Electromyography

Dr Laura-Anne Furlong won the best paper using electromyography at the Clinical Movement Analysis Society of the UK and Ireland at their 2019 conference which was hosted in Sheffield by the Sheffield Teaching Hospitals and Sheffield Children's Hospital NHS Trust.

This was a paper co-authored with PhD student Natalie Egginton entitled 'Using statistical parametric mapping to quantify differences in muscle activation during gait' and described methodological challenges in the use of novel time-series techniques to analyse electrical activity of muscle, and how to potentially address these.

Samples of data from our ongoing data collection of persons with an amputation (see flyer in this newsletter to get involved) were included in this presentation.

Hans Gros Emerging Researcher and Fellowship of the Society awards

Dr Laura-Anne Furlong was the recipient of two awards from the International Society of Biomechanics in Sports last July in Ohio, USA.

She is the first female recipient of the Hans Gros Emerging Researcher Award which is awarded for excellent in early career research (less than five years post PhD) which embodies the philosophy of bridging the gap between research and applied practice.

Her keynote talk was entitled 'Measuring muscles in motion: applications, implications and challenges in sports biomechanics'.

She also became the youngest recipient of Fellowship of the society, this is reserved for individuals who have made outstanding contributions in sports biomechanics over a period of years in both research and service activities.

STOP PRESS

Mike Hutchinson has not only had a busy year with completing his PhD and getting married, but over recent months Mike has played host to couple of PHC guests (Kyungsu Jung from Japan and Ingrid Kouwijzer from the Netherlands). We are excited to be working with both these guests on projects (2019-20) related to exercise prescription and guidelines for persons with a spinal cord injury and how they may be able to regulate and monitor their exercise intensity.



It has been a great opportunity over the last few weeks for Simon Briley to learn from Fransiska Bossuyt (Siska) from the Swiss Paraplegic research centre.

Siska has been over in the UK collaborating on an exciting project that is exploring the changes in supraspinatus and biceps tendon following fatigue in wheelchair athletes.

We are most grateful to the Doctoral College International PhD exchange funding for making this possible.

Please keep an eye out for the next issue for further updates on this project.

RESEARCH UPDATES

JAPAN/IWRF CLASSIFICATION UPDATE

By Barry Mason

In October, Dr Barry Mason attended the World Wheelchair Rugby Challenge in Tokyo.

The tournament included some of the top teams in the world and provided a fantastic insight into what the Paralympic Games might look like in 2020. However, the main objective of this trip was to finalise data collection for the IPC funded classification research project exploring arm strength impairment in wheelchair rugby players.

Joined by Tom O'Brien, the trip did not exactly get off to the best start thanks to Typhoon Hagibis, the most powerful tropical storm to hit Japan in over 50 years. This meant a cancelled flight and an extra night spent around Heathrow airport before we could finally make our way to Japan. This delay meant that our intended 'rest/recovery day' had to be scrapped and upon arrival we headed straight to the impressive

competition venue to start setting up the equipment ready for the arrival of the athletes.

Testing went well and over the course of the competition we had added another 15 athletes to our sample from some of the highest ranked teams in the world, meaning that in total 60 athletes have now undertaken the isometric strength testing protocol. This was a very pleasing number and we are very grateful to the tournament organisers, IWRF and the teams/athletes for taking part and facilitating this evidence-based research, which is vitally important for the sport of wheelchair rugby as they strive to be 'code compliant' with the IPC classification code.

Aside from the successful data collection and amazing standard of wheelchair rugby on display, we were also privileged to experience some fantastic Japanese hospitality during our stay. A group of local Japanese classifiers led by Yuki Izuchi took us for a traditional Japanese dinner one evening where we were able to

sample some of the local cuisine and were incredibly well looked after.

Upon our return to the UK, the analysis commenced and hopefully early in 2020 some of the preliminary results will be available and ready to feedback to both the IWRF and the IPC. Watch this space for the results.....

'Fantastic crowds at the World Wheelchair Rugby challenge event in Tokyo, thank you to the IWRF for inviting me to the VIP function on the Friday's match of GB vs. Japan. Great experiences for the players as they pass through their training camp in Kitakyushu, narrow margins still be gained by the GB - exciting times ahead for 2020'.

'Barry has done a tremendous job with the PHC research team members and collaborators of getting to this stage of the project'

Vicky Tolfrey

WHAT'S MORE IMPORTANT, WINNING OR TAKING PART?



DAVID, 17 AND STEFAN, 13. DAVID AND STEFAN BOTH HAVE A SEND AND GO TO A SPECIAL SCHOOL



TALKING INCLUSIVE SCHOOL GAMES WITH THE YOUTH SPORT TRUST ON THE INTERNATIONAL DAY OF PERSONS WITH DISABILITIES

By Lesley Sharpe

In recognition of International Day of Persons with Disabilities Day, I was invited to the Youth Sport Trust to talk about her inclusive School Games research.

The day began with the recording of an online webinar, recorded in collaboration with Vicci Wells who is the Trust's national manager for targeted interventions.

I outlined her School Games research but gave a specific focus on the importance of including young people

with special educational needs and disabilities throughout the entire research process.

I also discussed her use of digital technology in research, including Augmented Reality, vlog recording and video editing to facilitate inclusive and accessible research. The webinar forms part of the Trust's online training and will be sent to their network of School Games Organisers and development coaches.

Next, I was invited by Vicci to record a conversation style interview on inclusive school sport for the Youth Sports Trust's podcast.

Together they talked broadly about inclusive school sport, My research, inclusive research and early findings. Keep an eye out on the Youth Sport Trust's podcast channel for my interview.

STOP PRESS

Dr Janine Coates and Lesley Sharpe have been invited to attend the European funded Sport Empowers Disabled Youth 2 kick off meeting in January 2020 to deliver training about inclusive sport research with young people. This project draws on multinational team including academics and practitioners from six sites across Europe to further examine inclusion in sport for young people.

RESEARCH UPDATES

PROMOTING PHYSICAL ACTIVITY IN PEOPLE WITH SCI

By Vicky Tolfrey

PHC played host to further our relationship with facilitating the promotion of physical activity to people with spinal cord injury (SCI).

Dr Toni Williams, Carnegie School of Sport, Leeds Beckett University hosted a meeting in October at Loughborough University to co-design and develop the interactive workshop for physiotherapists aimed at facilitating the promotion of physical activity to

people with spinal cord injury (SCI). Toni is a former PHC PhD student who completed her PhD in 2016 and was supervised by Prof Brett Smith and Dr Anthony Papathomas. Since moving to Leeds, Toni continues to work with members of the PHC in her collaborative efforts.

The day's activities involved two break-out sessions which focused the discussion on:

1. Designing the structure and content of the interactive workshop
2. SCI guidelines and project evaluation

Prof Vicky Tolfrey said "I am delighted that Toni is continuing this work in partnership with the PHC, we are keen to ensure that the International exercise guidelines for persons with a spinal cord injury are utilised in the UK" (see www.spinalcord.com/blog/2019-exercise-guidelines-released-spinal-cord-injury or www.ncsem-em.org.uk/sciguideurope)

If you would like to hear more about this on-going project then please contact Toni at T.L.Williams@leedsbeckett.ac.uk



PARA-ATHLETE WELLBEING

By Carolyn Plateau

In June 2019, Dr Jamie Barker and Dr Carolyn Plateau hosted a one-day roundtable event on para-athlete wellbeing at the Elite Athlete Centre on Loughborough University Campus.

The event brought together key stakeholders to discuss challenges to para-athlete wellbeing, and to identify key research priorities and collaborative opportunities.

The event was funded by the Sport and Exercise Research Beacon at the University. Representatives from academia, mental health and a variety of different sports organisations attended the day, including colleagues from British Athletics, British Triathlon, British Paralympic Association, Talented Athlete Scholarship Scheme, English Institute of Sport, Child Protection in Sport Unit at the NSPCC and the Ann Craft Trust.

Nik Diaper, the Head of Para-Sport at Loughborough University, presented an overview of Loughborough's vision for para-sport, and Professor Vicky Tolfrey discussed the role and remit of the PHC for Disability Sport, including the recent outcomes from the collaborative project with the EIS (Project PRISM). Research presentations were also delivered by Clare Cunningham and Dr Emma Pullen.

The roundtable discussions highlighted some important, para-specific challenges and threats to wellbeing, and the need for further, para-specific research into wellbeing and mental health. A collaborative project with colleagues at the English Institute of Sport is a direct result of these discussions and is now underway.

Thank you to the Sport and Exercise Research Beacon for funding this event and to the delegates for their insightful input into the discussions.

STOP PRESS

We would like to congratulate Dr Mike Hutchinson and Dr Ben Stone on graduating in December 2019.



VISITS



JULIA KATHRIN BAUMGART VISITS LOUGHBOROUGH UNIVERSITY AS A VISITING RESEARCHER

by Julia Baumgart

For six weeks I have been at Loughborough University as a visiting researcher joining Christof Leicht & co to observe and be part of how you do things here – hats off and respect: the vibe that you create in engaging students, having dedicated teachers and researchers is fantastic!

Living on campus at the University Lodge including a (daily!) English breakfast and dinners in the dining hall as well as the comparably

summer-ish temperatures made my stay here a very enjoyable experience.

After finishing the first PhD in the Paralympic area in Norway last year, my role now is to coordinate Paralympic research at the Centre for Elite Sports Research at the Norwegian University of Science and Technology in Trondheim.

The vision of the Centre is to conduct applied science of relevance to Norwegian elite sports. Of relevance to the Norwegians are snow sports. Children seem to be born with skis on their legs, and the Norwegians do roller-skiing in the summer instead of running and biking to optimally prepare themselves for the next

winter cross-country skiing season. What all this whole-body exercise does is creating seemingly fit adults with comparably good cardio-vascular health.

To facilitate good communication with the sports, we have moved from the university campus and are now located close to the athletes in the same building as the Top Sports Centre of Mid-Norway in Trondheim.

The leaves me to say: takk for nå (thank you for now)! Further to taking the experiences from my stay here at Loughborough back to Norway, I hope (and think) that we will be able to collaborate in the future.

INTERNATIONAL COLLABORATIONS

VISITING THE KOREA PARALYMPIC COMMITTEE

by Christof Leicht, Anthony Papatomas & Vicky Tolfrey

A PHC delegation was invited to Korea for the "International Seminar for Para Sports Science", hosted by the Korea Paralympic Committee on October 16.

We were invited to lead a debate on topics such as Paralympic sports science, mental health in Paralympic sport, and physical health issues in Paralympic athletes. The conference was followed by the signing of a Memorandum of Understanding between Loughborough University and the Korea Paralympic Committee, laying the foundation for future research collaborations, joint educational programmes, and research and student exchanges.

The PHC team were warmly welcomed and treated to a busy and informative two-day schedule; including tours around the state-of-the-art Paralympic Icheon Training Center and several meetings with Korean Paralympic officials and academic leaders in the

field of Sport Science. The team also had an opportunity to get a feel for the professional approach adopted – ranging from the impeccable organisation of the seminar, the opportunities given to Korean people with a disability, and the standard of the training facilities built exclusively for Paralympic athletes.

Consistent with the famed Korean hospitality, a well-rounded social programme gave the team further insights into Korean culture. This included the opening ceremony of the National Para Games, a variety of traditional foods, and a visit to a Korean Folk village museum.

Vicky Tolfrey said:

"The signing of this Memorandum of Understanding signifies the start of a journey. We wish to share expertise for the benefit of the Paralympic movement, whereby Loughborough academics and students are able to enjoy the outstanding facilities offered by the Korean Paralympic Committee through mutual research and knowledge exchanges."

The team returned home with valuable cultural and educational experiences and are looking forward to advancing the Paralympic field together with the new contacts in Korea.

STOP PRESS

Other visitors to the PHC included Dr Viola Altmann who was here to finalise a classification project in wheelchair rugby with Dr Barry Mason. It was also great to welcome back Jan van der Scheer, who has recently returned to the UK from Canada.



SPOTLIGHT ARTICLE

Q&A WITH PASAN KULARATNE

Could you tell us a bit about yourself and your early career?

I have been working as the Head of Sport and Physical Activity for WheelPower since June 2018. I was a commissioned officer in the Sri Lanka Army where I was actively involved in shooting sport as an athlete, coach and official. I started my sports shooting career in 1987 as a Practical Pistol Shooter and represented the Sri Lanka from 1990 to 2003. I served as the National Coach for Shooting in Sri Lanka from 2003 to 2005 and trained the Sri Lanka team for Commonwealth Games, Asian Games and 2004 Olympic Games. Thereafter I went on to lead the GB Paralympic Shooting Team for three cycles. I am also an ISSF 'A' and IPC 'A' International Shooting Sports Judge.



How did you become involved in the Paralympic sport movement?

During my early coaching career, I developed a strong interest in Sports Psychology.

I met Dr Paul Holmes and Professor Neil Fowler from the Manchester Metropolitan University when completing my Level 'B' International Sports Shooting Coaching Qualification in 2004, who encouraged me to pursue Sports Psychology academically.

I thereafter completed a Masters' programme in Sports Psychology at Manchester Metropolitan University 2005/2006.

Alongside my Masters, I was working for DTSGB (Disability Target Shooting GB) as a fast track coach which was my first exposure to Paralympic sports.

Could you tell us more about your experience as a Paralympic coach?

I was given a Performance Programme with two athletes and a target of achieving at least one final place at the Beijing Paralympic Games.

With the guidance from Claire Stirling, then Performance Manager of BPA Managed Sports Programme and then Chairman of DTSGB, Rikki Singh, a Pre-selection Programme was conducted to bring in new athletes targeting 2012 Paralympic Games. As a result, we found eight new talented athletes and were able to obtain four places for Beijing Paralympic Games.

Out of those new eight athletes, I spotted two highly talented individuals, Matt Skelhon and James Bevis. Matt won medals in both Beijing and London Paralympic Games and James won a medal at the London Games.

Tell us more about your career achievement

My best career achievement as an athlete was in 1993, as a member of the Sri Lanka Shooting Team. During that time, we had very limited facilities, however, we were able to win the Team Gold Medal at the Three Gun Championships held in New Zealand.

As a coach my proudest moment was producing a Paralympic Gold Medallist in one and half years; Matt Skelhon won the Gold Medal in Beijing Paralympic Games with an equalled world record. I knew that he was going to be the dark horse in the competition.

Matt's outstanding performance gave me great confidence in my talent spotting abilities and for including him in the ParalympicsGB Team, just four months prior to the Games. He was a reserve until the final selections and was included to the team based on my recommendations as a future potential for 2012.

Matt's achievement gave great credibility to disability shooting in Great Britain and as a result funding was increased for London 2012. He won two medals in London 2012 and has won many World and European medals since then. I would say he is the most decorated disabled shooter Great Britain has produced to date.

Do you miss your military career in Sri Lanka?

To be honest, yes, I do, at times I miss Sri Lanka. I am grateful for what I have learned, and I am also happy with what I have given back to Sri Lanka; 26 years of military service, my youth to the nation during the troubled time.

I am also grateful to Great Britain for the great exposure and opportunity; what I have learned and achieved over the last 13 years.



Although I took an early retirement from my military career, I am content with my involvement with military activities. I am one of the founding committee members of Sri Lanka Ex-service Persons' Association in UK and a Council Member of Royal Commonwealth Ex-services League (RCEL) representing Sri Lanka.

Could you tell us more about your current role around participation in SCI persons?

I manage the sports team and coordinate and implement the delivery of events and programmes that provide opportunities, facilities, expertise and equipment that enable disabled people to participate in sport and physical

activity to lead healthy active lives.

One of my key roles is to manage, develop and expand a project within Spinal Injury Centers to increase the range of sports and physical activities.

Further project aims to provide advice on sport and physical activity to patients through eight Physical Activity Advisors who are based in seven Spinal Injury Centers across the England and Scotland

Could you tell us about your future work and what that is looking to achieve?

WheelPower's vision is to transform lives through sport. Sport and physical activities provide tremendous

benefits for people with disabilities; improve health and physical well-being, increases self-esteem and confidence and improve social opportunities, all of which result in a better quality of life and independence.

I feel there is a slight lack of translation from research to practice by the end user, people with SCI. Therefore, going forward I would like, WheelPower to be a centre of resources for people with SCI. I hope that I can strengthen the link between WheelPower and the PHC to help disseminate some of their important research through our physical activity advisors, with focus on distributing some of their resources that are currently available and best practice for exercise guidelines for people with SCI.

SPORT SCIENCE SUPPORT



IN THE UAE WITH THE ENGLAND VISUALLY IMPAIRED CRICKET TEAM

by Michael Hutchinson

In November, I travelled as the Performance Scientist with the England VI cricket team for a series against Pakistan.

We arrived in Dubai for a few days of acclimatisation and training, before transferring to Ajman for the six Twenty20 matches. Playing Pakistan was always going to be a tough ask, and so it turned out with the team, unfortunately, losing all of the matches. However, that doesn't get close to telling the whole story.

The team showed an excellent attitude and put together some amazing performances across the games, showing that the ability to compete with the best is there, if it all comes together at the same time.

Three players also made their England debut, whilst players came back into the fold after time away from the sport.

The tour was a great challenge for us as a Science and Medicine team also. Given the condensed nature of the tour we had a real focus on preparation and recovery strategies to make sure all players were available for all the matches.

The climate was another challenge with temperatures into the 30s.

We used an ice vest and ice slurries to cool players between innings and are looking to continue investigating the effectiveness (physiological and performance) of these on future tours.

The touring party returned enthused about the direction that the team is moving in. 2020 is sure to be an exciting one for the squad as well with Australia heading over to contest the Blind Ashes in August. Watch this space for future updates.

EIS PARALYMPIC UPDATE

PHC / EIS COLLABORATION ON TOKYO HEAT PREPARATION WINS EXCELLENCE AWARD

by Tom Paulson

2019 was a very busy year across the high-performance system with practitioners, coaches and sports all working towards qualification for Tokyo.

It also provided the last full calendar year for sports to refine their Performance plans leading into the Paralympic games. Due to the challenging environmental conditions expected for the Tokyo Olympics and Paralympics, a large emphasis has been placed on ensuring athletes are best prepared to live, train and compete in the hot and humid conditions often experienced during a Japanese summer.

This preparation is even more important for our Paralympic athletes given the altered thermoregulatory function experienced in this group.

Management of the heat to protect health and performance requires a proactive and well-rehearsed strategy including chronic (acclimation or acclimatisation) and/or acute (eg. pre/during/post-cooling) heat alleviation methods. The exact protocols of which have to be an individualised for each athlete depending on event demands/logistics and an athlete's impairment.

A key element of the support provided by EIS to the Paralympic Sports this cycle has been to identify those athletes at greatest risk to health by competing in these conditions and developing individualised strategies to combat the extreme conditions. The EIS are proud to have collaborated closely with the PHC in this work and with the expertise of Ben Stephenson have rolled out Project Theta. To date over 50 athletes and 25 staff from across a number of sports have experienced

simulated Tokyo conditions to support the development of sport and athlete-specific heat alleviation strategies.

Other important outputs of the work to date are a literature review titled 'Heat-related issues and practical applications for Paralympic athletes at Tokyo 2020' alongside Prof Vicky Tolfrey and other collaborators.

Recently the Project Theta team won the Excellence Award at the EIS National Conference. The award is recognition of the collaborative and multi-disciplinary delivery of the project as well as the impact it has had on preparing athletes and staff for Tokyo. However, the important work is still to come, and project team look forward to moving into the final stages of the work in 2020. The EIS and PHC have collaborated on a number of high impact projects over recent Paralympic cycles and this is sure to continue post Tokyo as attention begins to turn to Paris 2024.



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RECRUITMENT

Appetite regulation in people with a spinal cord injury

PURPOSE

- We are looking to investigate whether high rates of obesity in spinal cord injury populations are attributed to impaired appetite regulation

INCLUSION CRITERIA

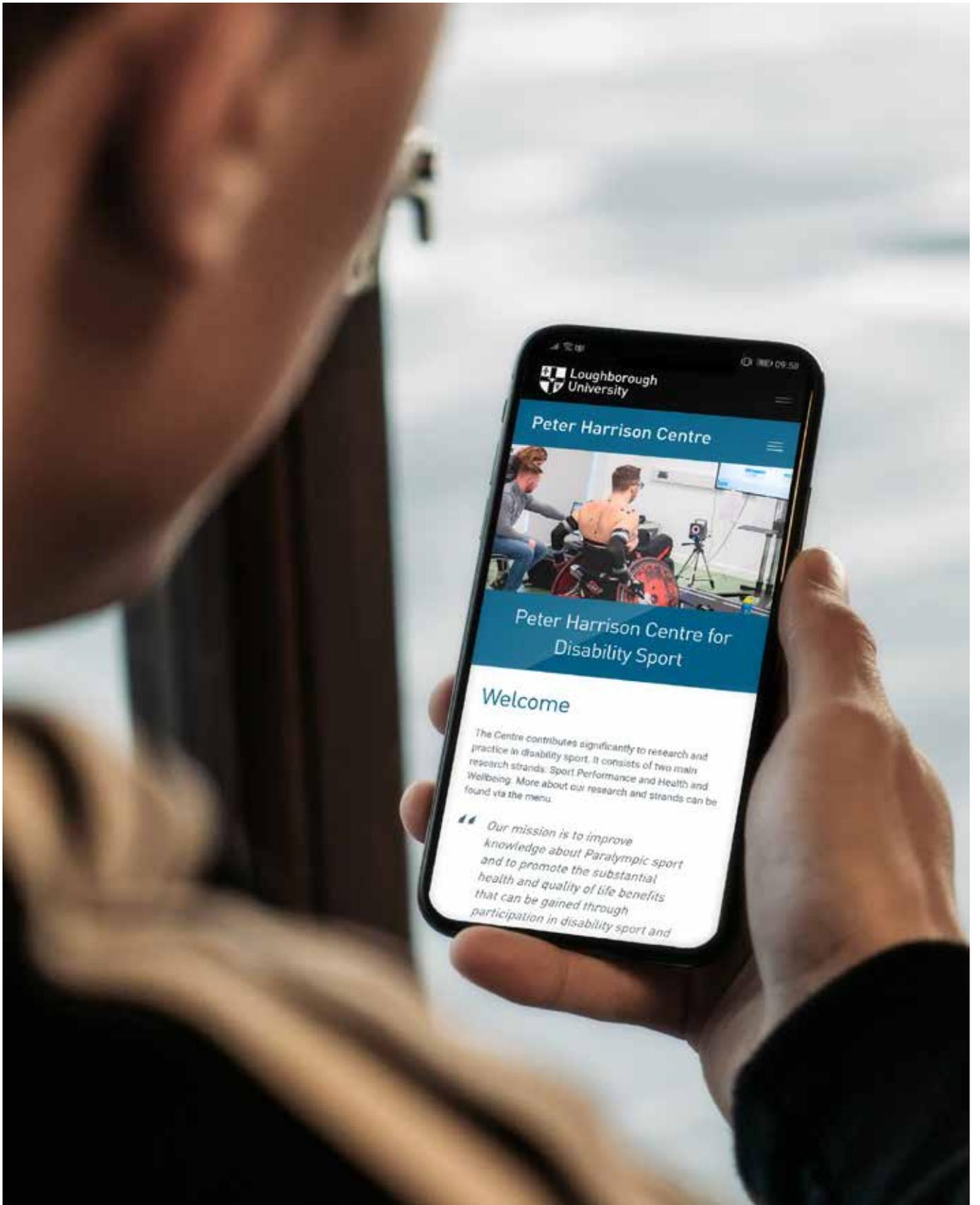
- Spinal cord injury (cervical/high thoracic [above T6])
- Males
- Above 18 years old
- Non-smoker
- Metabolically healthy – No known cardiovascular or metabolic disease such as diabetes, respiratory or heart disease
- Weight stable in the past 6 months

WHAT HAPPENS WHEN I TAKE PART?

- Body weight and body fat will be measured
- You will be given a milkshake and pasta meal, separated by 2.5 hours
- We will collect a number of expired air (breath) and blood samples
- You will get some personal feedback on your metabolism and nutrition

Please contact J.Fenton@lboro.ac.uk for more information.





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 @PHC_Lboro

T: 01509 226387
E: phc@lboro.ac.uk

www.lboro.ac.uk/phc

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