

# PERFORMANCE PERFECTED PERIODICAL

## SPORTS AND EXERCISE SCIENCE



Lancaster University

Performance. Perfected.

This is the quarterly newsletter from the Sports and Exercise Science team within Lancaster Medical School.

We will share information to provide an insight into the wide range of activities going on in Sports and Exercise Science.

We hope this newsletter is enjoyed by students, colleagues, health care professionals, sports teams, athletes, communities and many more.

Please get in touch if you have any queries [HPL@lancaster.ac.uk](mailto:HPL@lancaster.ac.uk)

### STAFF NEWS

#### WELCOME TO FIONA IREDALE

Fiona joins the team on a one-year contract as a Teaching Associate in Sports and Exercise Science, from Edith Cowan University (Perth, Australia). Her area of expertise is clinical musculoskeletal rehabilitation

### STUDENT NEWS

#### WILD NORTH

Final year student Matt Alpin discovered cold water swimming during lockdown and has successfully set up his own business catering for the sport. Check out the press release [here](#), and the Wild North website [here](#).

### COURSE NEWS

#### 4<sup>TH</sup> NEW COHORT

This month we expand our community by welcoming our 4<sup>th</sup> cohort of undergraduate students to the BSc (Hons) Sports and Exercise Science degree programme. We wish them well over the next three years.

## RESEARCH IN THE SPOTLIGHT

A recent systematic review by PhD researcher and local MD/Surgeon Dr Joel Lamberts (ELHT Blackburn) and Dr Chris Gaffney has been published in the Annals of Surgery.

The review focuses on the use of exercise pre-habilitation in cancer patients and concluded that it should be encouraged to accelerate recovery from cancer surgery as demonstrated by reduced length of hospital stay access the paper [here](#), and the press release [here](#).

This is the foundation for a series of upcoming research including an RCT implementing an exercise programme developed by 2021 graduate Ben Law.

Watch this space.

## STUDENT HIGHLIGHTS

We graduated all our first cohort in July 2021 and we really hope they will return in 2022 to sport their cap and gowns. *What are they doing?*

**Glenn Sherwin** has started the MSc Physiology and Nutrition in Sport and Exercise at Loughborough University, the World number 1 institution for sport science. Glenn was also awarded The Physiological Society Undergraduate Prize for Best Overall Student at Lancaster University. Read his tweet [here](#).

**Jo Wootton** has started an MSc specialising in Sports Biomechanics at Michigan University USA, so we've gone international!

**Jack Goodwin** has started the MSc Strength and Conditioning at Northumbria University, a growing area of study and employment within the sport and exercise sciences.

**Isaac Appleton** is staying at Lancaster University but spreading his wings into LUMS to study MSc Digital Business, Innovation and Management, highlighting great transferability of sport and exercise science into other areas.

**Ben Law** continues to work at 315 Health Clubs in Lancaster, advancing their services with a future Exercise Referral Scheme alongside UHMBT and enhancing his CV within the industry.



2021 Natural Sciences graduate **Megan Court** who studied the Sport and Exercise Science pathway will be starting a Physician Associate course at the University of Manchester in January 2022. Alastair Mair, also a Natural Sciences graduate who did the SaES pathway has started a PGCE in Chemistry at St Mary's University.

### DR SARAH POWELL APPOINTED TO THE NEW BASES OUTREACH PROJECT TEAM

Dr Sarah Powell is our Part 1 Director of Studies and our amazing Director of Outreach, and we are thrilled she has been appointed to the new [British Association of Sport and Exercise Sciences \(BASES\) Outreach Project Team](#).

Sarah will be working closely with some internationally renowned sport and exercise scientists from within the UK including the Chair of BASES. We are excited that Sarah will get to share her enthusiasm and creativity for outreach at a national level. Well done. Read Sarah's tweet [here](#) when the news was announced by BASES.

**18 students have qualified as Level 2 Gym Instructors through the partnership with Active iQ. Doing our bit to enhance student employability!**

Thanks to Dr Michelle Swainson, Dr Sarah Powell & Eddy Pike

**DID YOU KNOW?** Exercise is as equally effective at lowering systolic blood pressure when compared to anti-hypertensive medication. Find out more [here](#).

## CURRENT AND UPCOMING RESEARCH PROJECTS

### ARE YOU HEALTHY, MALE & 18-30?

Be part of the MiniEx Study that investigates the minimum amount of exercise needed to improve glycaemic control.

Contact [c.gaffney@lancaster.ac.uk](mailto:c.gaffney@lancaster.ac.uk)

### ARE YOU AN OPEN WATER SWIMMER?

Be part of a study looking at the potential links between cold water swimming and mental health.

Contact [j.meggs@lancaster.ac.uk](mailto:j.meggs@lancaster.ac.uk)

## ARE YOU INTERESTED IN PERFORMANCE TESTING?

We will soon be offering bespoke performance testing in our purpose-built Human Performance Laboratory so members of the public have access to sport science tests that could help to inform their training. In the first instance tests are likely to include:

- VO2 max testing – watch this [video](#)
- Lactate threshold determination – watch this [video](#)

The web space is currently under development but once it's ready this is where bookings will be possible and we will be very excited to provide this service to you.

## RECENT ACTIVITIES & NEWS

### APPLIED SPORT SCIENCE SUPPORT

#### DR JENNY MEGGS

Jenny continues to support Swim England North West by providing psychological workshops to youth swimmers. To date, the programme has provided excellent opportunities for 8 of our students to engage in workshop delivery to support elite athletes. Press release from February 2021 [here](#). Jenny is working with HPL Manager Jack Cunnington on the development of our Sport and Exercise Science Consultancy and web space, with the help of final year students Charlotte Simpson and Emily Howarth.

#### DR TIM BARRY

Tim has played a fundamental role in the development of sport science support internships at Burnley FC. Congratulations to final year students Erin Griffiths and Jamie Bedford on securing these valuable positions. Thanks to Tim, final year students Robert Stockdale and Tom Wide are working with Morecambe FC offering sport science support and performance analysis. Tim is also in discussions with Lancaster City FC to offer sport science support opportunities to benefit players and students.

#### DR THEO BAMPOURAS

Theo continues to be the Head Coach the Scotland Women's National Water Polo Team where he works with to prepare the team to perform at international tournaments such as the Commonwealth Championships in Manchester 2022.

### EXTERNAL QUALIFICATIONS

#### DR MICHELLE SWAINSON

Michelle has recently revalidated her Level 4 BACPR Cardiac Rehabilitation Exercise Instructor qualification which will be useful for future projects in cardiac rehabilitation.

## RECENT PUBLICATIONS & OUTPUTS

### RESEARCH PUBLICATIONS

**Gaffney C, Cunnington J, Rattley C, Wrench E, Dyche C & Bampouras T.** (2021) [Weighted vests in CrossFit increase physiological stress during walking and running without changes in spatiotemporal gait parameters.](#) *Ergonomics* [In press].

**Bampouras T, Wilson A & Papadopoulos K.** (2021) [Upper limb muscle strength and knee frontal plane projection angle asymmetries in competitive female water-polo field players.](#) *Sports Biomechanics* [In Press]

Lambert JE, Hayes LD, Keegan TJ, Subar DA & **Gaffney CJ.** (2021) The impact of prehabilitation on patient outcomes in hepatobiliary, Colorectal, and Upper Gastrointestinal Cancer Surgery: A PRISMA-Accordant Meta-analysis. *Annals of Surgery*, 274(1):70-77.

Nixon AC, **Bampouras TM,** Gooch HJ et al. (2021) [Home-based exercise for people living with frailty and chronic kidney disease: a mixed-methods pilot randomized controlled trial.](#) *PLoS ONE*, 16(7): e0251652.

Hayes LD, Elliott BT, Yasar Z, **Bampouras TM** et al. (2021) [High intensity interval training \(HIIT\) as a potential countermeasure for phenotypic characteristics of sarcopenia: a scoping review.](#) *Frontiers in Physiology*, 12: 715044.

**Meggs J. & Ahmed W.** (2021). Applying cognitive analytic theory to understand the abuse of athletes on Twitter. *Journal of Sport Management* [In Press].

**Meggs J & Chen M.** (2021) [Applied mindful sport performance enhancement in national competitive swimmers.](#) *Case studies in Sport and Exercise Psychology.*

**Meggs J & Chen M.** (2021). [The effect of a Brief Mindfulness intervention on psychophysiological exertion and Flow-State among Sedentary adults.](#) *Journal of Perceptual Motor Skills*, 128 (3), 312-320.

Barker L, McKeown A, Small M, **Meggs J.** (2021). [Validating the Essen Climate Evaluation Schema modified for people with learning disabilities in a low-risk secure forensic setting.](#) *Criminal Behaviour and Mental Health*. 31(2): 143-150.

### EDUCATIONAL PUBLICATIONS

**Powell SM.** (2021) Hydration: Is Water Enough? The importance of replenishing fluids before, during and after exercise. *PE Review*, 17(1): 18-21, Hodder Education.

