

# Pulse

## Welcome

Welcome to the fifth issue of *Pulse*, the newsletter of the University of Portsmouth's Department of Sport and Exercise Science (DSES). Whether you are a current, future or former student, or you are simply interested in DSES, we extend a very warm welcome to you.

We hope that *Pulse* will help you to keep up to date with the many exciting and interesting projects in which our staff and students are involved. Please remember that this is your newsletter too, so if you have any projects or successes to share, or suggestions for features, please email [jo.corbett@port.ac.uk](mailto:jo.corbett@port.ac.uk). And don't forget, there is more to watch and read online at [www.port.ac.uk/sportscience](http://www.port.ac.uk/sportscience).

Best sport and exercise science department for Overall Student Satisfaction in the UK  
(National Student Survey 2015).

For our additional rankings success, visit [www.port.ac.uk/sportscience/highlights](http://www.port.ac.uk/sportscience/highlights).

## DSES staff members practise what they preach

Since the last issue of *Pulse*, exercise physiologists Zoe Saynor and Dr Jo Corbett have both enjoyed sporting victories. Zoe helped Richmond Women's Rugby Club win the Premiership title, beating Saracens in the play-off final, and Jo beat around 2,000 competitors to win the Gosport half-marathon. Biomechanists Dr Chris Mills and Dr Amy Sanchez put their understanding of human movement to excellent practical use when they both won titles at the British Masters Gymnastics Championships.



## DSES academics publish textbooks

Two DSES members of staff have recently published textbooks, which they hope will have a big impact in their respective areas.

Professor Mike Tipton's book *The Science of Beach Lifeguarding*, which he co-edited with Adam Wooler, is likely to become a key resource for water survival experts. It could also become an essential tool for informing water safety policy worldwide, particularly as the World Health Organisation recently reported that drowning is among the ten leading causes of death worldwide for children and young people. The book focuses on the scientific evidence that underpins what is taught to and practised by beach lifeguards. This is the first book to pull together all the different areas involved in beach lifeguarding and evaluate their evidence base.

Dr Andrew Scott's book *Clinical Exercise Science*, which he co-edited with Dr Chris Gidlow (Staffordshire University), provides an introduction to core principles and best practice in exercise science for practitioners working with clinical populations and students, such as those studying for an MSc in Clinical Exercise Science within DSES.

## Professor delivers inaugural lecture

Professor Joanna Scurr has delivered her inaugural professorial lecture, titled *AlgeBra: integrating science and breast health*.

In this lecture Joanna, who has been awarded the title of Professor of Biomechanics, candidly described the personal journey that led her to this area of research, the key scientific contributions that the Research Group in Breast Health have made, and her vision for the future of the area.

The lecture was well attended by an enthusiastic audience, including many individuals from across the world who have worked with this group since its inception. Anyone wanting to watch the lecture can view it at the following link: [www.port.ac.uk/research/meet-our-professors/](http://www.port.ac.uk/research/meet-our-professors/).



# Student success

## DSES Careers Development Prize

This year's DSES-sponsored £500 Career Development Prize has been presented to Mica Russell (BSc (Hons) Sport and Exercise Science, Level 6), with two further awards of £250 to Joshua Old (BSc (Hons) Sport and Exercise Science, Level 5) and Jack Orledge (BSc (Hons) Sport and Exercise Science, Level 5) and an award of £200 to Rubina Williams (BSc (Hons) Sport and Exercise Science, Level 5). These awards provide financial support to successful applicants who can clearly demonstrate how the award will enhance their career development and future employment prospects. Each of the students is using their award to assist with gaining a Level 3 Diploma in Sports Massage.



## DSES student supports Land Rover-Ben Ainslie Racing team

Ricky Wilson, who undertook his undergraduate degree in Sport and Exercise Science at the University of Portsmouth and is currently working towards his MRes, recently gained valuable industry experience working on a research project with the Land Rover-Ben Ainslie Racing America's Cup sailing team.

The project focused on identifying the optimum technique for grinding, a key task on America's Cup yachts. Ricky said: 'The experience working within an elite multidisciplinary sporting organisation was fantastic; great trust was placed in me to provide something of worth to the team. I made some excellent professional contacts and am still regularly in contact with the team. I expect to return in the future to assist with some further data collection. I was regularly invited out on the water to watch the guys at work and on my final day was even invited on board and actually helped sail the World Series-class boat!'

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# Alumni update

The Department of Sport and Exercise Science at the University of Portsmouth has a strong employment record and we are proud of the successes of our ex-students. In this regular feature we catch up with one of our alumni to find out what they have done since leaving the University of Portsmouth.

**Name:** Debbie Risius

**Courses studied:** PhD, Sport and Exercise Science, Biomechanics

**Job:** Senior Strategic Analyst, Defence Science and Technology Laboratory, Ministry of Defence

**Typical day:** Planning, conducting and analysing defence-related research projects. My work primarily focuses on military capability, personnel and wellbeing.

**Best thing about your job:** There are always multiple projects on the go and lots of flexibility to work on the things that you find interesting. The job involves travelling to different sites in the UK and abroad, so there are always different people to meet, places to see and new opportunities for research.

**How did you get to where you are now?:** Gaining lots of research experience, making as many contacts as possible, and some good luck. I had no background in the armed forces, but showing interest goes a long way; even if you know very little about a topic, be interested in learning.

**Advice you would give to DSES students wanting to pursue a similar career:** Get involved early (volunteer for some physiology studies, often backed by Defence Science and Technology Laboratory [DSTL]), consider a summer placement at DSTL and plan an undergraduate dissertation in a related topic. DSTL runs an established graduate scheme here, and is open to graduates with any educational or military background.

**Best memory of your time at Portsmouth:** Working in the biomechanics lab with all the team. This wonderful bunch of people made my time at Portsmouth great.



## Student profile

**Name:** Marcus Campopiano

**Course:** BSc (Hons) Sport and Exercise Science (Level 6)

**What did you do before starting at the University of Portsmouth?** I was a keen sportsman at Hurstpierpoint College in West Sussex where I competed in rugby, hockey and cricket. Whilst at college I undertook the International Baccalaureate, completing maths, French, chemistry, English, biology and psychology. I knew then that I wanted to study sports science.

**Why did you choose to study at Portsmouth?** It was obvious that Portsmouth 'punched above its weight' in the university rankings for sports science. I was amazed by the student satisfaction, but after seeing the facilities and completing my first year at the university it made sense.

**What's your favourite thing about being a student at Portsmouth?** It's difficult to pinpoint my favourite aspect of university due to the crossover between my studies and my sport. Everything I learn in my studies I try to apply to sport. This has been perfectly balanced in my work placement where I am the strength and conditioning coach at Portsmouth Rugby Football Club. Here, my lectures turn into action almost immediately and I apply this knowledge to improve athletes of all ages. I also develop my goal setting and performance profiling skills as captain of the University's rugby club.

**What do you hope to do when you finish your studies?** I don't want to finish! I have applied to study the MSc in Sports Performance. After that, I am going to continue with my self-employed cricket coaching business which the University has helped me with.



## New psychology course

We have recently introduced a new BSc (Hons) course in Sport and Exercise Psychology, with the first student intake due to start study in September 2016. The course represents the first step on the career path to becoming a British Psychological Society Chartered Sport and Exercise Psychologist and Health and Care Professions Council Registered Psychologist. Students will examine how psychological principles and theories can be employed to benefit those in high performance environments (e.g. elite sport) and the health and fitness sectors (e.g. physical activity prescription and promotion). For more information on the BSc (Hons) Sport and Exercise Psychology course please contact [science.admissions@port.ac.uk](mailto:science.admissions@port.ac.uk).

## DSES academic wins conference award

Zoe Saynor who lectures in physical activity, exercise and health was recently invited to address researchers and clinicians in Australia on chronic respiratory disease. She also spent time on a placement in the Children's Hospital at Westmead in the paediatric cardiopulmonary exercise testing (CPET) laboratory. Zoe also gave two teaching sessions to the Australasian Cystic Fibrosis Society and presented important novel data examining oxygen use during exercise in individuals with cystic fibrosis at the 11th Australasian Cystic Fibrosis Society conference. For this work Zoe was awarded the best oral presentation prize.

## New staff join DSES

Two new members of staff have recently joined DSES. Dr Denise Hill, who has previously worked at the University of Gloucestershire, will be lecturing in sport and exercise psychology. Denise is an elite golfer herself and her research has focused on how to avoid 'choking' under pressure.

Dr Joseph Costello (right) has moved from a research post within the University of Portsmouth to a lecturing post in exercise physiology. Before working at Portsmouth, Joseph worked in academic positions in Ireland and Australia. Joseph's research interests focus on understanding the physiological effects of various stressors (e.g. exercise, environment) on human performance and establishing evidence-based practice in sport and exercise science through systematic reviews and meta-analyses.



## Staff profile

**Name:** Dr Gemma Milligan

**Title:** Senior lecturer in Exercise Physiology

**What's your background?** I studied my BSc (Hons) Sports Science and MSc Exercise Physiology at the University of Chichester from 1999–2003. I then worked as a scientific officer at the Institute of Naval Medicine. This involved working in the heat illness clinic, developing the acclimatisation protocol used by personnel deployed to Iraq and looking at load carriage and injuries with the Royal Marines. I also started working in rugby as a strength and conditioning coach. Following a year out I returned to work as a research assistant at the University, developing the fitness standards for the oil and gas industry and the Maritime and Coastguard Agency. This turned into my PhD. Alongside this I continued to work as a rugby strength and conditioning coach. In 2010 I became a lecturer in DSES.

**What are your teaching duties?** My teaching revolves around strength and conditioning and research methods.

**What are your research interests?** My main research focuses are occupational physiology and strength and conditioning.

**What advice would you give students to help prepare for a career in sports science?** Be proactive, get as much experience as you can and ask questions.

**What's the best thing about DSES?** The people!



# Research focus

We are proud that every member of our academic staff is actively involved in research in some capacity. This research informs our teaching and helps to ensure that we remain at the cutting edge of sports and exercise science, with a number of students volunteering as participants for this work. Read about some of our recent research highlights below.

## New DSES research generates media interest



Two recent research publications from DSES have generated considerable media interest. Dr Joseph Costello's recent paper *Whole-body cryotherapy (extreme cold air exposure) for preventing and treating muscle soreness after exercise in adults* was published in the *Cochrane Database of Systematic Reviews*. Following the publication of this paper Joseph gave 33 interviews over a ten-day period including interviews to CNN, BBC and *The Washington Post*. Similarly, a study by Dr Tom Webb

called *Referees and the Media: A Difficult Relationship but an Unavoidable Necessity* analysed live commentaries and post-match discussions for 20 English Premier League matches. In contrast to popular perceptions, Tom showed that of 67 total comments made about the referee during the matches, only 29 were judged negative. This new finding generated considerable debate and resulted in Tom being asked to give interviews about his work on Radio 5.

## DSES research changes international policy

Recent research conducted within DSES is already having an international impact. FINA, the international governing body of swimming, and the International Triathlon Union (ITU) jointly funded the Extreme Environments Laboratory at the University to undertake research to determine the safe water temperatures for swimmers competing in open water and triathlon events.

The research by PhD student Jane Hall, along with Dr Heather Lunt, Dr Mitch Lomax and Professor Mike Tipton examined the thermo-physiological responses to swimming in water at different temperatures. As a result of this research, both FINA and the ITU have changed their guidelines for the lower water temperature at which swimming events can be undertaken, and have adjusted the temperature rules at which competitors must wear a wetsuit. These new guidelines will be enforced in swimming and triathlon competitions from grassroots all the way up to Olympic level.



[www.port.ac.uk/sportscience](http://www.port.ac.uk/sportscience)

## DSES strengthens NHS research links

A number of recent projects have shown that DSES is strengthening its collaborative links with the NHS. Alongside clinical partners at Southern Health NHS Foundation Trust, Dr Paul Gorczynski is investigating communication strategies to improve physical activity promotion amongst patients with schizophrenia.

Dr Andrew Scott is currently overseeing multiple clinical placements for DSES students, but also researching effects of pre and post-cancer treatment exercise on fitness and function, and together with Dr Mitch Lomax they are overseeing research examining the effect of respiratory muscle training in chronic obstructive pulmonary disease and asthma patients.

Emma Burnett is currently running a study with patients who are experiencing benign breast pain from the breast clinic at Queen Alexandra hospital.

Finally, Zoe Saynor is involved in a number of collaborative research projects, mainly in the area of cystic fibrosis but also working with children with general joint hypermobility syndrome.



## Contact us

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