

Pulse

Welcome

Welcome to *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. However, this is your newsletter too, so if you have any projects or successes to share, please email jo.corbett@port.ac.uk. And don't forget, there is more to watch and read online at www.port.ac.uk/sportscience.

Best sport and exercise science department for Overall Student Satisfaction in the South East of England and fourth in the UK (National Student Survey 2013–2014)

For our additional rankings success, visit www.port.ac.uk/sportscience/highlights.

Portsmouth to host BASES Student Conference

We are honoured and thrilled to be hosting the British Association of Sport and Exercise Sciences (BASES) Student Conference 2014 on 8 and 9 April.

The conference theme, 'Putting the Pieces Together', combines the various strands of sport and exercise science in an exciting programme. It includes presentations from Katherine Grainger, Nigel Walker, Dr Steve Ingham, Chris Neville and Professor Mike Tipton, plus workshops in our first-class facilities, student oral and poster presentations, and networking opportunities.



For more information and to book, visit www.port.ac.uk/BASES2014, and read our full review in the next edition of *Pulse*.

Advice to the stars

In DSES, we frequently receive requests from the media to provide expertise for various projects. In recent months we have hosted not only Steve Backshall, television presenter and BAFTA award-winning naturalist, but also the cast and crew of the forthcoming disaster movie *Everest*, including Jake Gyllenhaal, Josh Brolin and producer Baltasar Kormákur.

We helped Steve Backshall to prepare for his latest television series *Deadly Pole to Pole* and gave advice to the *Everest* visitors about their forthcoming challenges of filming in cold, high altitude conditions. Our Extreme Environments Laboratory also gave the actors crucial experience of these conditions. The film, which is currently in production, is based on real-life events that took place in 1996 when a freak storm hit the world's tallest mountain, leaving eight climbers dead.

Take a look at the facilities the stars used at www.port.ac.uk/sportscience.



Student success

DSES student presents to Sport England

One of our third-year BSc (Hons) Sports Development students, Lauren Hunnisett, recently presented to over 170 people at a British Universities and Colleges Sport and Sport England conference, after completing a three-month internship with Sport England.

Lauren's presentation covered some of her work produced during her internship on project challenges and solutions. The role, for which she beat over 500 applicants, was in the Children and Young People Team working on projects such as the School Games, Active Colleges, Active Universities and Sportivate, and gave her valuable vocational experience.



Students awarded to help career development

This year's DSES-sponsored £500 Career Development Awards have been presented to Ricky Wilson (Year two BSc (Hons) Sport and Exercise Science), Moudood Hassan (Year three BSc (Hons) Sport and Exercise Science) and Christine McBride (MSc Clinical Exercise Science). These awards provide financial support to successful applicants who can clearly demonstrate how the award will enhance their career development and future employment prospects.

Ricky, who is currently undertaking an internship at Portsmouth FC, plans to use the money to go on UKSCA strength and condition workshops to further develop expertise in the areas of Olympic lifting and plyometrics, agility and speed. Moudood plans to use the money to work towards a CYQ Level 3 Award in Programming and Supervising Exercise with Disabled Clients, enabling him to deliver exercise programmes for individuals with a range of disabilities. Christine, who is looking to work in cardiac or pulmonary rehabilitation when she finishes her studies, will use her award to fund a Level 3 GP referral course.

Student profile

Name: Mikael Naess
Hometown: Trondheim, Norway
Course: BSc (Hons) Sport and Exercise Science (Year one)

Why did you choose to study at Portsmouth? I heard a lot of positive things about the University and staff through a company called SONOR (Study Outside Norway), which helps people to study abroad. The location is brilliant for me – close to London and the airport, from where you can travel to wherever you want. It also has a nice seafront and is relatively warm (compared to Norway!).



What's your favourite thing about being a student at Portsmouth? I really like the academic staff. They are there when you need them, whatever you need help with. They are also experts when it comes to their field – it seems they know everything. I also find the practical classes and seminars useful; you learn so much by doing things and I really enjoy it.

What do you hope to do when you finish your studies? I would really like to be a sports scientist in a football club, specialising in injury rehab and injury prevention, or a strength and conditioning coach for a football club. As long I can work with the sport I love I am happy!

Graduation prizewinners

At the end of each academic year we award a number of prizes to students in the graduating cohort. The most recent prizewinners were:

- **Kimberley Bignall** (outstanding academic achievement, BSc)
- **Kevin Reeves** (outstanding academic achievement, MSc)
- **Adam Walmsley** (most improved student)
- **Cassie Thorp** (best project grade, BSc (Hons) Sports Development)
- **Sam Miles** (best project grade, BSc (Hons) Sport and Exercise Science)
- **Sonny Gates** (best MSc project)
- **Richard Cumner** (outstanding contribution to the Department)

Prizes are sponsored by companies or individuals associated with DSES, and prizewinners and their families are invited to attend an awards lunch.

For those looking to graduate in 2014, these prizes should offer a further incentive to put in that 'final push', and we look forward to seeing who our next round of winners are later this year.

Teaching excellence recognised

University of Portsmouth Vice-Chancellor, Professor Graham Galbraith, recently recognised our academics Dr Richard Thelwell, Chris Hughes, Kieren McEwen and Dr Neil Weston for being awarded Senior Fellowships of the Higher Education Academy (HEA).

The HEA is a professional recognition scheme linked to the UK Professional Standards Framework, and Senior Fellowship marks one of the highest levels that can be achieved. This accolade makes DSES the department in the University with the highest number of staff to have achieved this level of professional recognition.

Director of Learning and Teaching, Chris Hughes, said: 'The achievement of Senior Fellowships by this many staff shows our ongoing commitment to high-quality teaching and the student experience in DSES, and will enable us to continue to deliver an excellent range of student-focused courses.'

New facilities

As a direct response to student feedback, we have installed a new IT and computing suite on the first floor of the Spinnaker Building, giving our students a permanent local study base.

We have also created a new, large multi-purpose laboratory on the ground floor, providing more space for staff and student research, reflecting our ongoing commitment as a centre for cutting-edge sport and exercise science research. Take a look at our facilities at www.port.ac.uk/sportscience.

DSES Professor speaks at Arctic conference

Professor of Human Physiology, Mike Tipton, spoke at the Arctic Frontiers Conference in Norway in January about dealing with cold injury and cold immersion from both policy and scientific perspectives. The conference, which is the largest international meeting of its kind addressing issues of development in the Arctic, hosted over 1,000 politicians, environmentalists, scientists and representatives from industries such as the oil industry.

Mental and physical health expert to join DSES

We will soon be welcoming Dr Paul Gorczynski to our academic team. Dr Gorczynski joins us from The Centre for Addiction and Mental Health in Toronto, one of the world's leading research centres in the area of addiction and mental health, where he has conducted research in the areas of mental health, physical activity and obesity.

Paul completed his doctoral studies in the Department of Exercise Science at the University of Toronto and he holds a Master of Arts in Kinesiology from Western University, specialising in physical activity and exercise behaviours of Canadian youth. These areas of expertise will ensure that Paul will be well placed to make a valuable contribution to our teaching and research profile.



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 one of our recent research highlights below.

Slower speed and inspiratory muscle training can reduce fatigue

Recent research, conducted by Dr Mitch Lomax and published in the *International Journal of Swimming Kinetics*, examined how swimming speed affected the extent of inspiratory muscle fatigue in swimmers.

Swimmers are especially susceptible to inspiratory muscle fatigue (IMF) which causes the body to divert blood, oxygen and nutrients to the muscles responsible for breathing.

She said: 'In swimming, most of the propulsion comes from the upper body, but some of the muscles used for this are also required for breathing. When swimmers reach a certain speed there is a point at which the body steals blood flow from the working muscles and diverts it to the breathing muscles. This conflict can worsen performance and can have negative effects on swimming stroke.'

Dr Lomax's research found that by training at a level below this speed, swimmers can focus on improving their technique. And by specifically training the inspiratory muscles, it is possible to make them more resistant to fatigue and to improve breathing when swimming at speed, as in a competition environment.

She said: 'It's all about getting the balance right.'



www.port.ac.uk/sportscience

Staff profile

Name: Dr Jim House

Title: Reader in Environmental Physiology



What's your background?

I graduated from the University of Glasgow in 1989 (physiology and sports science) and joined the Ministry of Defence as a Scientific Officer, working at the Institute of Naval Medicine for 18 years. In 2006, I gained a PhD and then joined the Extreme Environments Laboratory (EEL) here in May 2008.

What are your teaching duties? I am coordinator for the MSc Project Unit and Environmental Factors Affecting Sports Performance Unit and I lecture to undergraduates on environmental and occupational physiology and ethics of human research. I also supervise undergraduate and postgraduate student projects, and MPhil and PhD students (four currently), and chair the DSES Scientific and Ethical Review Committee.

What are your research interests? Human performance and survival in hot environments, particularly cooling methods and effects of protective clothing and equipment on military personnel. I am also interested in control of skin blood flow in hot and cold environments.

What advice would you give students to help prepare for a career in environmental physiology? Volunteer for a range of experiments to see what interests you and to understand what you'll be asking volunteers to do in future. This will help you to develop your area of interest, so that you can then undertake a suitable project in the EEL. It is also a good idea to undertake a work placement in the EEL, and seek opportunities from within EEL and outside the University to fund your area of interest.

What's the best thing about DSES? I can continue to work in research that is of prime interest to me, with a very collegiate group of academics, technicians, administrative staff and postgraduate researchers and students. I can't think of any other career where I could find myself upside down underwater in the dark trying to escape from a helicopter underwater escape trainer, help the coastguard with mud and cliff rescues, eat ice-cream on oil rigs, be part of developing the next range of chemical protective clothing for our military, help young children to swim in cold water (and break a channel-crossing record) and help UK sport with elite performance of the future, all whilst teaching young students how to do the same in future.

Contact us

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