

Breast Health

January 2017
Issue ve

News

Meet the team

As we continue to expand our research group, within the last 12 months we have welcomed ve new team members to the Research Group in Breast Health.

We would also like to congratulate Professor Joanna Wake eld-Scurr on getting married over the summer.

New members:

Dr Tim Blackmore has recently joined the group as a Senior Research Associate. Tim previously completed a PhD at Southampton Solent and Nottingham Trent universities under the supervision of Professor Joanna Wake eld-Scurr, and for the last three years has been developing his biomechanical skills while contributing to age-related gait and balance research projects.



Dr Tim Blackmore

Jacqui Henderson previously worked with the group as a research assistant in product testing, and is now completing a Master's by Research. She is investigating the use of underwires in sports bras by optimising their t, comfort and support.



Jacqui Henderson

Melissa Jones has recently joined the group as a Research Assistant, having previously completed an MSc in Sports Biomechanics at Loughborough University, and working as a gym instructor and biomechanist.



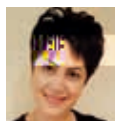
Melissa Jones

Michelle Norris has recently joined the group as a Senior Research Associate. Michelle's research is in the area of breast support and strain, and the development of appropriate breast support garments. Michelle has previously worked at Institutions in Ireland and the USA, conducting research examining runners' lower limb mechanics and movement variability.



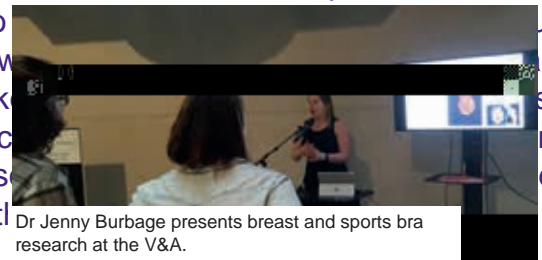
Michelle Norris

Atefeh Omrani has recently joined the group as a PhD researcher at St Mary's University, Twickenham. Atefeh's research interests are in the area of breast health and breast education, particularly for adolescents girls. Atefeh is keen to investigate the impact of breast health education on adolescent girls' knowledge of breast health, sport and exercise participation, enjoyment and body image satisfaction.



Atefeh Omrani

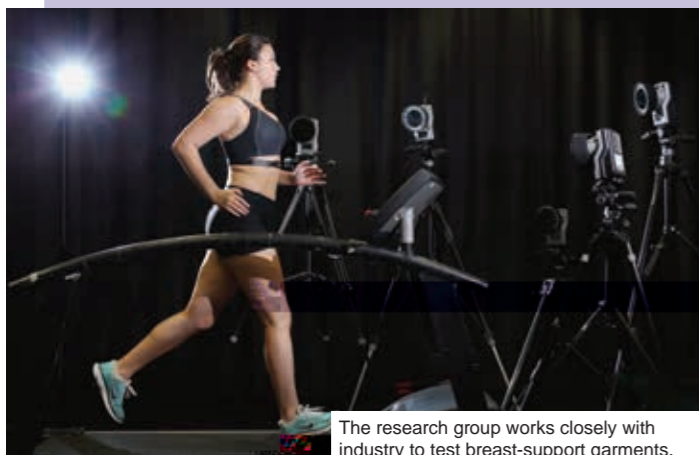
Welcome to the 5th edition of the Research Group in Breast Health newsletter from the University of Portsmouth. The group, led by Professor Joanna Wake eld-Scurr, is internationally renowned for conducting research this year. In June, Dr Jenny Burbage and Professor Emma Sharland gave presentations about the sports bra to the public as part of the Victoria and Albert Museum's Late series. The V&A's Undressed: A Brief History of the exhibition provided a unique platform to highlight the Group's work. In September, Jenny chaired a panel at the British Science Association Festival in Swansea, on women in sport and the barriers they face for taking part. The panel comprised a female Welsh international rugby player, a representative from the Women's Sports Trust, and two researchers. We were able to discuss the barriers for women in sport and the barriers for women in sport. Joanna Wake eld-Scurr was at all at a local Science Association event throughout the year.



Dr Jenny Burbage presents breast and sports bra research at the V&A.



Bra-testing service helps develop best products



The research group works closely with industry to test breast-support garments.

The Research Group in Breast Health (RGBH) offers scientific bra-testing services to help develop the best possible products.

Since the creation of the Bronze, Silver and Gold bra-testing packages in 2014, the group has worked closely with 11 of the top breast support/lingerie brands and manufacturers in the world to test breast-support garments in the University's specialist breast biomechanics laboratory.

This level of testing has brought multiple benefits to those the group have provided packages for, including marketing campaigns, data on the performance of competitor products, consumer preferences and, of course, the garment's ability to reduce the movement of the breast. The products can be tested over a variety of standardised activities, such as everyday activities, jumping and treadmill-running.

Over the last two years, a large database of the performance the sports bras tested has been compiled. Although the identity of these bras cannot be made public, it allows the customer to see where their own products rank against others tested, in terms of breast movement reduction. This has been extremely beneficial to the companies we have worked with and adds to the extensive knowledge base of the RGBH, built on years of previous experience investigating the performance of bras and support.

Our achievements since 2006

- Published 39 scientific peer-reviewed papers
- Delivered over 200 presentations to national and international audiences
- Tested over 900 women in our laboratory
- Tested the performance of over 600 bras
- Completed over 20 commercial projects

Effect of breast support on willingness to run

Research indicates that, while willingness to exercise and breast velocity are significantly affected by breast support levels during running, muscle activity, heart rate and breathing frequency are not.

Department to host Biomechanics Interest Group meeting

The Department of Sport and Exercise Science is delighted to be hosting the BASES Biomechanics Interest Group (BIG) meeting on 19 April, 2017. The meeting acts as a forum for staff and students to share scientific knowledge, provides a supportive and constructive environment in which to discuss issues around teaching and research, serves as an opportunity for professional development, and facilitates communication and networking between individuals, research groups and institutions/organisations. Many of the Research Group in Breast Health will be presenting their research with the aim of engaging the wider scientific community with the work which we are currently undertaking.



@BIG2017UoP

New resource for female horse riders



The Research Group in Breast Health has collaborated with the British Equestrian Trade Association and the British Equestrian Federation to develop an educational resource for horse riders on breast health issues, as recommended by research published this year in the Journal of Sports Sciences by Dr Jenny Burbage and Lorna Cameron (Sparsholt College). This resource helps horse riders achieve a good bra fit and an understanding of appropriate breast support for this activity. The resource is freely available to download from the British Equestrian Trade Association's website. Find it at <http://www.beta-uk.org/media/Bra%20Guide.pdf>

The science of breasts and bras



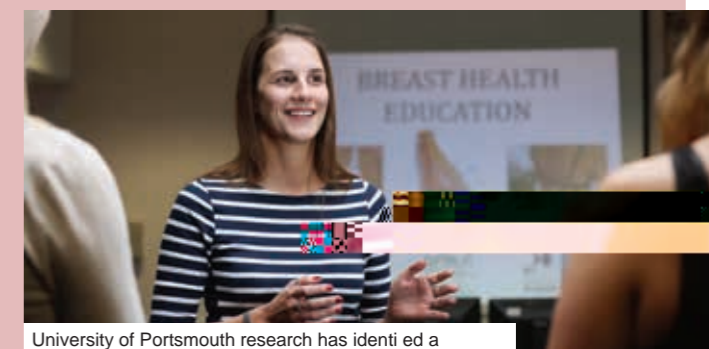
The September 2016 workshop cohort.

This year Dr Jenny Burbage hosted two more one-day Breast Science Workshops in our state-of-the-art breast research laboratory. Individuals and companies from all over the world came to find out about the science behind breasts and bras, for which the Research Group in Breast Health is internationally renowned. This is the third year running that these biannual

workshops have been held at the University. Thanks to their continued popularity, more workshops have been planned for 2017. Watch this space!

If you are interested in taking part in a Breast Science Workshop or would like further information please email Dr Jenny Burbage at jenny.burbage@port.ac.uk.

Empowering schoolgirls with breast health knowledge



University of Portsmouth research has identified a need for breast health education among schoolgirls.

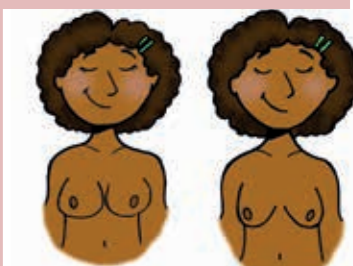
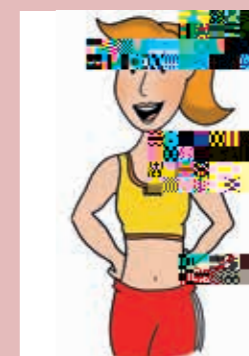
Adolescence is a tricky time for girls. The physical changes that occur during puberty can have a negative effect on body image and self-esteem. Breast development is the first visible sign of puberty, yet breast knowledge among females is poor. Our research has shown a clear need for breast health education for UK schoolgirls, with 87% of girls reporting wanting to learn more about breasts.

Our Aims

Our aims are to improve the lives of thousands of schoolgirls by:

- Teaching good bra fit and bra habits for life.
- Keeping more girls in sport by eliminating the breast as a barrier to sports participation.
- Reducing or eliminating embarrassment associated with breast development.
- Reducing or eliminating breast pain and worries about breast sag.
- Raising awareness of the signs of breast cancer.

To do this we are about to launch interactive breast education resources for teachers, which will be freely available to download. These resources will help to deliver custom-made workshops in a school environment. Please visit www.port.ac.uk/breastresearch to keep an eye out for the launch.



Images from the breast education resources, illustrating different bra types and breast shapes.

Making an impact

To contribute to our objectives of broadening understanding and raising awareness in this important aspect of women's health, the team from the

