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The British Association of
Sport and Exercise Sciences

 **National
Biomechanics
Day** April 7, 2021



B A S E S B I G 2 0 2 1 B I O M E C H A N I C S I N T E R E S T G R O U P

CELEBRATING THE 21ST CENTURY'S BREAKTHROUGH SCIENCE

Friday 9 April 2021

www.solent.ac.uk/solent-sport/bases-big-2021-meeting

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**Professor Syamantak
Bhattacharya**

Pro Vice-Chancellor, Research
and Knowledge Exchange,
Solent University

"As Pro-Vice Chancellor for Research and Knowledge Exchange, I would like to welcome you to Solent University, where we are proud of our applied research and knowledge exchange work. We excel in a wide range of key subjects at the University and are particularly proud of Sport and Exercise Science.

We have been submitting internationally excellent and world-leading research in the national Research Excellence Framework exercises since 2014. Our knowledge exchange activities draw from our research work which received a boost in 2019 with the opening of our new Solent Sports Complex, bringing together cutting-edge equipment and facilities. I am proud of Solent University hosting this Biomechanics Interest Group Conference and wish this event a great success."



Dr Andrew Mitchell

Chair, BASES Division of
Biomechanics and Motor Behaviour

"As Chair of the BASES Division of Biomechanics and Motor Behaviour I would like to welcome you to BIG2021. Whilst I have been attending BASES Student Conferences for 20 years and BASES Annual Conferences for nearly 30 years, the BIG events have always been a highlight of the calendar, that I have encouraged both my staff and students to attend.

I would like to congratulate the BIG2021 organising committee on putting together such an exciting event, so perfectly timed with the National Biomechanics Day (NBD) initiative, with a good range of disciplines represented alongside some world-class keynote speakers. I am hoping you find the content of the BIG2021 event both interesting and inspiring."



**Associate Professor
Adam Hawkey FBASES**

BASES Biomechanics Interest
Group/BASES BIG2021 Chair,
Solent University

"As Chair of the BASES BIG2021 event, I welcome you to Solent University. Run in partnership with the National Biomechanics Day initiative and the International Sports Engineering Association (ISEA) this global event celebrates biomechanics as the 'breakthrough science of the 21st century'.

I am delighted to welcome some truly world-leading speakers to present at this event: Professor Janie L Wilson from McMaster University (and President of the Canadian Society for Biomechanics); Dr Philip Graham-Smith from Aspire Academy in Qatar; Dr Martin Warner from the University of Southampton; and Dr Laura Jade Elstub, Shane King, Maura Eveld, and Cameron Nurse and Rachel Teater from the CREATE laboratory at Vanderbilt University. We have put together an exciting programme and I hope that you enjoy BASES BIG2021 and all that the event has to offer."

KEYNOTE SPEAKERS



Professor Janie L Wilson

is Professor of Surgery, Biomedical Engineering, and Mechanical Engineering, at McMaster University, Canada. Here she runs a multidisciplinary research program in human movement biomechanics. She is President of the Canadian Society for Biomechanics and a past President of the Canadian Orthopaedic Research Society.



Dr Philip Graham-Smith

is Head of Biomechanics and Innovation at Aspire Academy in Qatar. He is the former Consultant Head of Biomechanics to the English Institute of Sport. He is also a Fellow of BASES, a British Olympic Association (BOA) registered Performance Analyst, and a Certified Strength and Conditioning Specialists®.



Dr Martin Warner

is a Lecturer in Health Sciences at the University of Southampton and works within the Centre for Sport, Exercise and Osteoarthritis Versus Arthritis. Martin's research experience involves understanding the biomechanical mechanisms of joint dysfunction, specifically the upper limb and shoulder, in sport and physical activity.



Dr Laura Jade Elstub

is a Postdoctoral Research Scholar in the Center for Rehabilitation Engineering and Assistive Technology (CREATE) laboratory at Vanderbilt University, where her research focuses on the development of wearable technology and exosuits to decrease injury risk in a range of different populations and use cases.



Shane King

is a PhD student in mechanical engineering in the CREATE laboratory at Vanderbilt University, studying the human stumble recovery response, the biomechanical analysis of the stumble response and the design and validation of a stumble recovery controller for a powered knee prosthesis.



Maura Eveld

is a PhD student in mechanical engineering in the CREATE laboratory at Vanderbilt University, where she studies the biomechanics of stumble recovery, using experimental insights to design and control assistive technology interventions (for example prostheses and exoskeletons) that can reduce fall risk.



Cameron Nurse

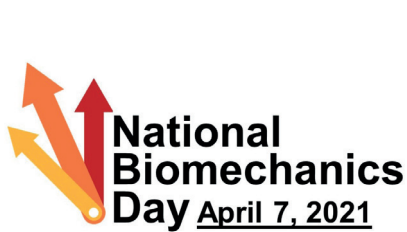
is a PhD student in mechanical engineering in the CREATE laboratory at Vanderbilt University, where his research focuses on developing and assessing wearable technology to mitigate injury and improve performance.



Rachel Teater

is a PhD student in mechanical engineering in the CREATE laboratory at Vanderbilt University, where her research focuses on developing and evaluating ankle-foot prostheses to improve the mobility of transtibial prosthetic device users.

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Garry Halsey

BA (Hons) Football Studies, 2014,
Education Development Coordinator, FA Education

Solent University helped me to gain invaluable work experience and contacts within the professional game, as well as knowledge surrounding both professional and grassroots football. Without my time at Solent, I would not have the confidence I now have in my abilities and understanding of the game.





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