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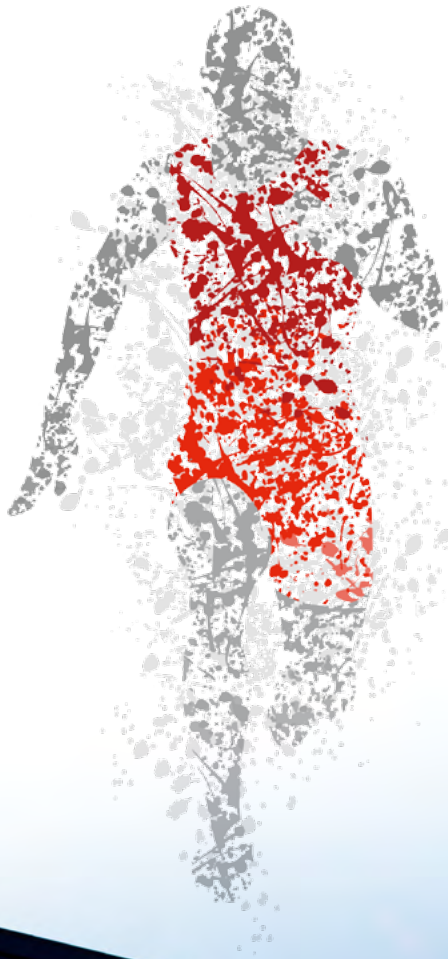

TRINITY COLLEGE DUBLIN

1st CONFERENCE IN SPORTS MEDICINE AND PRE-OSTEOARTHRITIS

IN ASSOCIATION WITH
SPORTS SURGERY CLINIC
FRIDAY 30TH OCTOBER 2015

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SPORTS SURGERY CLINIC
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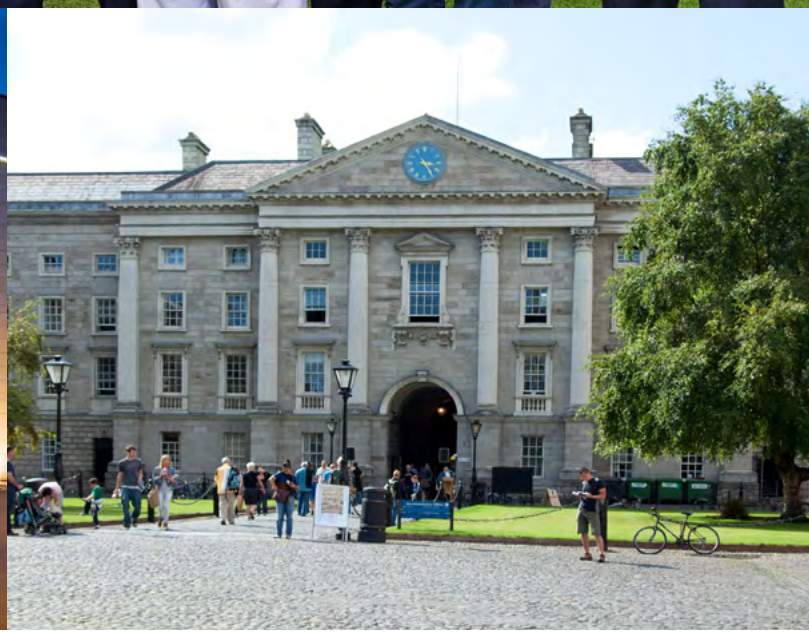


WELCOME

Welcome to the Trinity College Dublin - Sports Surgery Clinic Conference in Sports Medicine and Pre-Osteoarthritis.

This meeting is being co-hosted by Sports Surgery Clinic and Orthopaedics and Sports Medicine, a new academic unit of the School of Medicine at Trinity College Dublin.

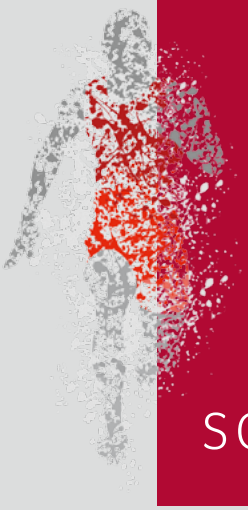
The field of joint injury, post-traumatic sequelae and related arthritic conditions is of great interest to all of us - clinicians, practitioners, rehabilitation specialists, and translational researchers. It is also of interest to our patients, our society and our economy. Our goal is to lead and facilitate national and international research programmes in a co-ordinated fashion on both a national and global scale.

I wish to extend a warm welcome to all of our speakers, many of whom have travelled a long distance to join us for today's Conference. In particular, I would like to recognise the contribution of The Scientific Advisory Board of Sports Surgery Clinic.

Biologics, bioengineering, rehabilitation and related fields represent a critical part of our future. The recent launch of a new National Cartilage and Orthobiologics Centre (www.cartilage.ie), bridging Trinity, SSC, RCSI and partner institutes represents a key measure of what we can achieve together. We believe that by working in partnership across specialised academic and clinical institutes, we can set new standards of care that will provide the best possible outcomes for patients affected by sports injury and early osteoarthritis. This initiative will add to our ongoing research programmes in concussion and biomechanics. We value your input into this process.

Finally, I would also like to thank our sponsors, as well as the staff of both SSC and Trinity who have worked together to make this day possible.

Cathal Moran
Professor of Orthopaedics and Sports Medicine
Consultant Orthopaedic Surgeon



SCHEDULE

2015 | 1st Conference in Sports Medicine and Pre-Osteoarthritis

08:00	REGISTRATION
08:25	Welcome by Prof. Cathal Moran
08:30	**"The SSC Research Advisory Board & Sports Medicine Research"** – Prof. Paul McCrory, The Florey Institute, Melbourne
08:50	**"ACL Injury: When to break the link to Osteoarthritis?"** – Prof. Greg Myer, Cincinnati Children`s Hospital
09:20	**"Knee injury, Cartilage and Pre-OA targets"** – Prof. Cathal Moran, Sports Surgery Clinic & Trinity College Dublin
09:40	**"Longitudinal Studies and Biomarkers Following Sports Injury"** – Prof. Oran Kennedy, New York University
10:00	**"Regenerative Medicine and Tissue Engineering in Pre-OA"** – Prof. Danny Kelly, Trinity College Dublin
10:20	Audience Questions
10:30	COFFEE
11:00	**"Olympic Sport at a National Level – The Australian Institute of Sport Experience"** – Prof. Peter Fricker, University of Canberra
11:30	**"Paralympic Sport and Risk of OA"** – Prof. Wayne Derman, University of Cape Town
12:00	**"Biomechanics in Osteoarthritis"** – Prof. Markus O Heller, University of Southampton
12:30	LUNCH
13:30	**Keynote Lecture** **"Recreational and Daily Physical Activity As A Risk For OA"** – Prof. Steven Blair, University of South Carolina
14:15	**"Joint Loading and OA Risk in High Performance Sprinting"** – Prof. Peter Weyand, Southern Methodist University.
14:45	**"Rehabilitation and Non-Operative Strategies in Pre-OA and OA"** – Prof. Kim Bennell, University of Melbourne.
15:15	Closing Discussion
15:30	CLOSE

SPEAKERS

Keynote Speaker

Professor Steven N. Blair

CDC and University of South Carolina, USA

Steven N. Blair is Professor in the Departments of Exercise Science and Epidemiology and Biostatistics at the Arnold School of Public Health, University of South Carolina. Dr Blair is a past-president of the American College of Sports Medicine (ACSM), National Coalition for Promoting Physical Activity, and the National Academy of Kinesiology. He has received awards from many professional associations, including a MERIT Award from the National Institutes of Health, ACSM Honor Award, Robert Levy Lecture Award and Population Science Research Award from the American Heart Association, and is one of the few individuals outside the U.S. Public Health Service to be awarded the Surgeon General's Medallion. He has received honorary doctoral degrees from universities in the U.S., England, and Belgium. His research focuses on the associations between lifestyle and health, with a specific emphasis on exercise, physical fitness, body composition, and chronic disease. He has published over 600 papers and chapters in the scientific literature, and was the Senior Scientific Editor for the U.S. Surgeon General's Report on Physical Activity and Health.

Professor Cathal Moran

Consultant Orthopaedic Surgeon,
Sports Surgery Clinic, Santry

Professor Cathal Moran is a Consultant Orthopaedic Surgeon at Sports Surgery Clinic, Professor of Orthopaedics and Sports Medicine at Trinity College Dublin, and Honorary Professor of the Royal College of Surgeons in Ireland. He is also a Fellow of the Faculty of Sports and Exercise Medicine in Ireland, Secretary to the Bioengineering Section of the Royal Academy of Medicine in Ireland, and a member of the Executive Board of Trinity Centre for Bioengineering.

Professor Moran specialises in knee and shoulder surgery, with a specific interest in sports injuries, and care of athletes and active individuals of all ages, both elite and recreational. He has a particular interest in cartilage and meniscus surgery. He completed his sub-specialty Orthopaedic and Sports Medicine training in the Orthopaedic Sports Medicine and Shoulder Fellowship at Hospital for Special Surgery and Cornell Medical College in New York, the Cartilage Repair Centre at Harvard Medical School / Brigham and Women's Hospital in Boston, and Antwerp Orthopaedic Centre in Belgium. He has worked extensively with professional athletes and teams across Ireland, the US and Europe.

Professor Paul McCrory MB BS, PhD, FRACP, FACSP

Chairman of SSC Research Foundation; Consultant Neurologist, Internist and Sports & Exercise Physician, The Florey Institute of Neuroscience and Mental Health, Melbourne, Australia

Associate Professor Paul McCrory is a consultant neurologist and a sports & exercise physician. He is the chairman of the SSC Research Foundation Scientific Advisory Board. He is a world expert in sport-related neurological injury. For 15 years, he was team doctor for Collingwood in the Australian national football competition and worked at the Sydney 2000 Olympics. He is past-president of the Australasian College of Sports Physicians and is a Board member for the Institute of Sports and Exercise Medicine in the UK.

He is Co-Chair of the International Concussion in Sport Consensus Group and consults for the medical commissions of the British Horseracing Authority, International Olympic Commission, the International Rugby Board and FIFA. He has an extensive publication record in the field of mild TBI and sports neurology including over 400 publications and five edited textbooks and is the former editor in chief of the British Journal of Sports Medicine as well as former associate editor of Clinical Journal of Sports.

He serves on five other Journal editorial boards. He is Associate Professor at the Florey Institute of Neuroscience and Mental Health as well as at the Centre for Health, Exercise & Sports Medicine at the University of Melbourne. He has an ongoing professional interest in e-Health and is currently involved in the design and production of medical software for medical and allied health practice. He has also published extensively in the area of social media.

Professor Greg Myer

Director of Research and The Human Performance Laboratory, Cincinnati Children's Hospital Medical Centre

Gregory D. Myer, PhD, FACSM, CSCS*D is currently the Director of Research and The Human Performance Laboratory for the Division of Sports Medicine at Cincinnati Children's Hospital Medical Center and maintains his primary faculty appointment in the Departments of Pediatrics and Orthopaedic Surgery in the College of Medicine at the University of Cincinnati.

Professor Myer's primary research interest resides in the fields of biomechanics and injury prevention in sport and pediatric exercise science. He consults with coaches across the globe who seek to update their own training programs for athletes from preadolescence to professional level and is currently serving as an international consultant to the English Institute of Sport, who support talent identification, injury prevention and rehabilitation for the United Kingdom's Olympic Teams. In addition Professor Myer is currently serving as Senior Research Advisor to the Micheli Center for Sports Injury Prevention in Boston, Massachusetts.

Professor Myer has published more than 160 articles in the area of biomechanics of knee injury, knee injury prevention training and sports performance. He is serving as an investigator on several nationally funded grants focused on ACL injury, prevention and rehabilitation.

He was awarded the distinction of Fellow from the ACSM and was appointed as their ACL Study Group's Travelling Scientist.

Professor Oran Kennedy

Assistant Professor, Department of Orthopaedic Surgery, NYU School of Medicine

Oran is an assistant professor at New York University, in the Departments of Orthopaedic Surgery and Biomedical Engineering. Prior to this appointment he was a Research Associate in the Department of Biomedical Engineering at The City College of New York.

After completing his PhD in Bioengineering at Trinity College Dublin in 2008, Oran was awarded a Fulbright Scholarship to carry out his post doctoral fellowship at The City College New York. His research interests are in the area of biomechanics and mechanobiology in musculoskeletal tissues. Specifically his laboratory is focused on Post Traumatic Osteoarthritis and the role of early stage damage responses, as a strategy to identify potential therapeutic targets. Furthermore, his group is involved in developing new translational approaches that can have clinical impact in the short to medium term.

Furthermore, his group is involved in developing new translational approaches that can have clinical impact in the short to medium term.

Professor Danny Kelly

Director of the Trinity Centre for Bioengineering (TCBE)

Danny is currently a Professor in the School of Engineering in Trinity College Dublin and Director of the Trinity Centre for Bioengineering (TCBE). The aim of the TCBE is to promote and facilitate research and education in Bioengineering and related disciplines, and to ensure this research finds its way into the clinic in order to improve patient care. Professor Kelly leads a large multidisciplinary orthopaedic tissue engineering group based in the Centre. The goal of his lab is to understand how environmental factors regulate the fate of adult stem cells. This research underpins a more translational programme aimed at developing novel biomaterial and mesenchymal stem cell (MSC) based therapies to regenerate damaged and diseased orthopaedic tissues such as articular cartilage and bone.

Professor Kelly's lab is pioneering the use of adult stem cells isolated from synovial joints such as the knee, combined with bioreactors to mechanically stimulate these cells, to tissue engineer functional cartilage grafts. They have also demonstrated how complex tissues, such as the bone-cartilage interface, can be regenerated by designing tissue engineering strategies that recapitulate aspects of the normal long bone developmental process. In the field of stem cell mechanobiology, his lab has demonstrated how extrinsic mechanical cues can override the influence of the local substrate to regulate stem cell fate, a study that received the 2012 Perren Award of the European Society of Biomechanics for best scientific paper. His lab has also identified novel roles for both mechanical signals and oxygen in regulating chondrogenesis and hypertrophy of MSCs.

Professor Peter Fricker

University of Canberra, Australia

Professor Peter Fricker is currently consulting in sports medicine, sports science, health and exercise, and holds professorial appointments at Victoria University, University of Canberra and Griffith University.

From 2005 -2011 Professor Fricker was Director of the Australian Institute of Sport. He joined the AIS in 1981 as the AIS's first sports physician, consulting from his own practice in Canberra. In 1983 he joined the AIS as staff medical officer. From that time until he was appointed Director he worked at the AIS as Head of Sports Science and Sports Medicine, then as Deputy Director of the AIS.

Professor Fricker has served as medical officer and medical director for Australian teams to six Commonwealth Games (1986-2006) and five Olympic Games (1988-2004). He currently chairs the Medical Commission of the Australian Olympic Committee (AOC) as well as the Research Advisory Board for the IOC accredited Australian Centre for Research into Injury in Sport and its Prevention (ACRISP) at Federation University. Peter has also served as Chair of the Medical Commission of the Australian Commonwealth Games Association (ACGA), as a Member of the Australian Sports Drugs Medical Advisory Committee, a Member of the National Antidoping Research Committee, as advisor to the World Antidoping Agency (WADA) on antidoping research, and as a member of the AFL Research Committee, among other roles over many years.

He has edited and authored three text books and a book on fitness, and has published numerous papers on sports injuries, athlete health, and immunology and exercise in particular.

He was awarded the Medal of the Order of Australia in 1993, the Australian Sports Medal in 2001, the Citation for Distinguished Service to Sports Medicine by the Australasian College of Sports Physicians in 2010, and the Order of Merit of the Australian Olympic Committee in 2012.

Professor Wayne Derman

UCT Cape Town, South Africa

Wayne Derman is Professor of Sports and Exercise Medicine at the UCT / Sport Science Institute of South Africa and is Co-Director of the Clinical Sports Medicine Services and Research Group, incorporating the FIFA Medical Centre of Excellence and IOC Research Centre for Injury Prevention and Protection of Health of the Athlete.

He is a senior partner of Derman & Schwellnus Inc., the Sports Medicine Practice at the Sport Science Institute of South Africa. This practice provides specialist Sports Medical consulting services to the South African Rugby, Soccer, Cricket, Commonwealth, Olympic and Paralympic Teams as well as members of the public.

Professor Derman has played an important role in clinical support for South Africa's athletes at International level. He fulfilled the positions of Chief Medical Officer for the South African Team to the Sydney 2000, Athens 2004 Olympic Games, Medical Officer for the South African Paralympic Team to Beijing in 2008 and Chief Medical Officer for the South African Paralympic Team in London in 2012. He is presently a member of the International Paralympic Committee's Medical Commission. In December to May 2002, he served as Flight Surgeon to Cosmonaught Mark Shuttleworth during the "First African in Space" mission in Russia and served as the Medical Officer for Cape Town for the FIFA 2010 World Cup.

Having diverse interests, he has been awarded many accolades in his career ranging from a Fellowship of the American College of Sports Medicine; the Val Schreire Award for the Outstanding Investigator in the Cardiovascular Field in Southern Africa; the Paul Harris award from Rotary International for community contribution; to a Mondi Award nomination for journalism.

In December 2004, Professor Derman was named recipient of the Department of Health and Health Professionals Council award for Excellence in Health Care in South Africa.

Professor Markus O Heller

Professor of Biomechanics,
Universith of Southampton

Our research is based on the premise that an understanding of the interactions between function and the associated internal loading conditions during activities of daily living is an essential prerequisite for the treatment of injury and disease to the loco-motor apparatus and for the prevention of musculoskeletal injury and degeneration. Here, the forces acting on the bones and joints of the human skeleton are known to be multiples of bodyweight, even during normal daily activities. Overloading of these musculoskeletal structures can occur due to bone deformities, muscular deficits or disturbed movement patterns, which can all lead to failure of soft tissue structures and, in the longer term, degeneration of the entire joint. Through accurate and validated models of the mechanics of the human lower limb, determined using movement patterns gained from the gait lab, we are able to understand the subject specific loading conditions to better assess individual functional deficits and the risk of mechanical overload.

By capitalizing on a unique combination of complementary expertise our work aims to advance the understanding of musculoskeletal interactions in order to solve biomechanical problems relevant to the therapy of disorders of the musculoskeletal system.

Professor Peter Weyand

SMU, Dallas, USA

Dr Weyand is a physiologist and biomechanist who joined SMU's Department of Applied Physiology and Wellness in the Fall of 2008. Dr Weyand earned his Ph.D. in Exercise Physiology from the University of Georgia in 1992. He subsequently directed research efforts at Harvard University's Concord Field Station, a large animal facility specializing in terrestrial locomotion and later the Locomotion Laboratory of Rice University. Dr Weyand has also served as a Senior Research Fellow at the US Army's Research Institute for Environmental Medicine and as a television science analyst for the Harvard-Smithsonian Center for Astrophysics Science Media Group.

Dr Weyand is an expert in the locomotion of humans and other terrestrial animals with broad research interests that focus on the relationships between muscle function, metabolic energy expenditure, whole body mechanics and performance. His research draws on the largely distinct traditions of human exercise physiology and comparative biomechanics to consider basic functional issues. Dr Weyand's research on the limits of human and animal performance has led to featured appearances on the British Broadcasting Corporation, the Canadian Broadcasting Corporation, CNN, the Discovery Channel, the History Channel, NHK Television in Japan, National Public Radio and others.

His specific expertise on the mechanical basis of sprint running performance led to his involvement in the "Michael Johnson, Wired Athlete" project undertaken in conjunction with FitSense Inc. and NBC prior to the Sydney Olympics in 2000. In the Spring of 2008, Dr Weyand served as a lead investigator and the host of the scientific team who performed the experimental work to appeal the Olympic/IAAF ban of double amputee, South African sprinter, Oscar Pistorius, aka the "blade runner" to the Court of Arbitration for Sport in Lausanne, Switzerland.

Professor Kim Bennell

Professor and Director of the Centre of Health, Exercise and Sports Medicine, University of Melbourne, Australia

Prof Kim Bennell is a research physiotherapist and her current position is Professor and Director of the Centre for Health, Exercise and Sports Medicine, in Physiotherapy at the School of Health Sciences, University of Melbourne. Here she leads a multidisciplinary team of professionals from physiotherapy, medicine, exercise science, podiatry and psychology.

Kim's research focuses on conservative non-drug management of musculoskeletal conditions including osteoarthritis and osteoporosis, with an emphasis on the role of exercise in both prevention and management.

Kim commenced a 4 year Future Fellowship in 2010 in association with the Australian Research Council and along with colleagues from the University of Queensland she was awarded an NHMRC program grant of $7.57 million which commenced in 2011 to further her research into knee osteoarthritis. She has over 200 publications including papers in the British Medical Journal. Kim is currently a board member of the Osteoarthritis Research Society International.

Sports Surgery Clinic, Located in Santry, Dublin is a state of the art private hospital spanning 12,500sq.m, dedicated to orthopaedics and sports medicine.

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