

FOREWORD

It gives us great pleasure to share the 2020 Institute of Sport, Exercise & Health (ISEH) Annual Report with all of our partners and friends.

In spite of the COVID-19 pandemic, the ISEH continues to grow clinically, academically and also in terms of its educational reach and influence. 2020 has been a relatively successful year in that we have expanded our team with experts who will help to elevate the ISEH to the next level.

Professor Mathew Wilson and Dr Paul Read have been recruited to streamline the clinical operations and to help develop a stronger translational element to the excellent work already taking place at the ISEH.

Professor Mark Hamer and his team continue to produce outstanding physical activity and public health research, but are also now further embedding an excellent doctoral and post-doctoral programme at the ISEH in order to develop the next generation of researchers.

Our education arm continues to grow under the leadership of Professor Courtney Kipps and Dr Eleanor Tillett. The challenges of 2020 have led to an online offering for all of our courses and we now have several extremely strong MSc programmes, some excellent BSc programmes and an intercalated BSc for medical students. We are also planning to expand our offering both in terms of sports science and in providing the short courses we know many are seeking. Our educational offering will be a key objective for 2021.

We are grateful to all of our partners for their ongoing strong support and collaboration. The ISEH has revisited its vision and continues to aim to be the world-leading institute for sport and exercise medicine by 2030.

We hope the summary that follows gives you an insight into the outstanding clinical work, research, teaching, training and education that takes place at the ISEH and into its potential for the future.



Professor Fares Haddad Director, ISEH







HCAHealthcare uk



niversity College London Hospitals NHS



CONTENTS PAGE

Foreword	02
About the ISEH	04
Key Achievements in 2020	06
Clinical Activity	08
NHS Clinical Activity	10
Private Clinical Activity	11
English Institute of Sport	13
Research	14
Education	18
Events	22
Communications	24
Looking Ahead to 2021	26
Appendix	28

ABOUT THE ISEH

The Institute of Sport, Exercise & Health (ISEH) was established in 2013 with a £10m grant from the Department of Health as a major legacy project from the 2012 London Olympic Games.

The ISEH's vision is to be the world-leading institute for sport and exercise medicine, providing excellence in the diagnosis, prognosis and treatment of sports injuries and illnesses, whilst bridging the gap between elite sport and recreational physical activity to support the improvement in the health of the nation.

The ISEH achieves this through:

- Providing world-class clinical delivery for elite athletes and sports enthusiasts of all abilities, both privately and through the NHS.
- Conducting world-leading research in supporting elite athlete health and performance, as well as focusing on how exercise and physical activity can play an important role in broader population health.
- Delivering world-class education and training in sports exercise medicine, both academically and through continuing professional development (CPD).

The ISEH is an International Olympic Committee (IOC) Accredited Research Centre for Prevention of Injury and Protection of Athlete Health and is one of only eleven facilities worldwide to achieve this IOC recognition.

The ISEH is a partnership between UCLH (University College London Hospitals, NHS Foundation Trust), HCA Healthcare UK, UCL, the English Institute of Sport and the British Olympic Association. It is also a founding member of the National Centre for Sport and Exercise Medicine (NCSEM).



KEY ACHIEVEMENTS IN 2020

KEY ACHIEVEMENTS IN 2020

This Annual Report details the good work that the ISEH has undertaken during 2020. Below are some of the highlights of the Institute's key achievements this year.

COVID-19 RESPONSE

The pandemic has been the overriding story of 2020 and like all organisations the ISEH has had to adapt to meet new demands and changing priorities. ISEH colleagues responded swiftly to COVID-19 across all areas of the organisation, including:

- Being one of the first London clinics to reconfigure clinical delivery to ensure that we could continue to provide face-to-face patient consultations in a safe and COVID-free environment.
- Adapting our clinical services to support the changing needs of elite sport as they face unprecedented challenges in maintaining the health and welfare of professional athletes.
- Adapting our research outputs to focus on providing influential new research to help better understand the effects and impact of the virus.
- Continuing to provide our students with the teaching and support to carry on with their undergraduate and postgraduate courses through a mix of virtual and faceto-face learning.

CLINICAL ACTIVITY

During the COVID-19 pandemic, the ISEH with the kind support of HCA Healthcare UK (HCA UK) increased the capacity for NHS clinical appointments and imaging, helping to reduce the NHS patient backlog. The ISEH has also introduced a number of new specialist clinics and recruited world-leading clinicians to lead the delivery of these new and improved sports exercise medicine services.



OUR NEW MOBILE CARDIAC LABORATORY HAS HAD A RAPID UPTAKE WITH PREMIERSHIP, CHAMPIONSHIP AND LEAGUE ONE FOOTBALL CLUBS



OVER 106 PEER-REVIEWED PAPERS PRODUCED

RESEARCH

Despite the additional challenges of this year, the ISEH has continued to deliver high levels of research activity in both COVID-19 and non COVID-19 related research themes.

This year ISEH colleagues have:

- Produced over 106 peer-reviewed papers
- Submitted a number of new research applications
- Secured significant grant-funding to launch the ProPASS Consortium project to investigate the relationship of physical activity, sleep and posture on cardiovascular disease prevention.

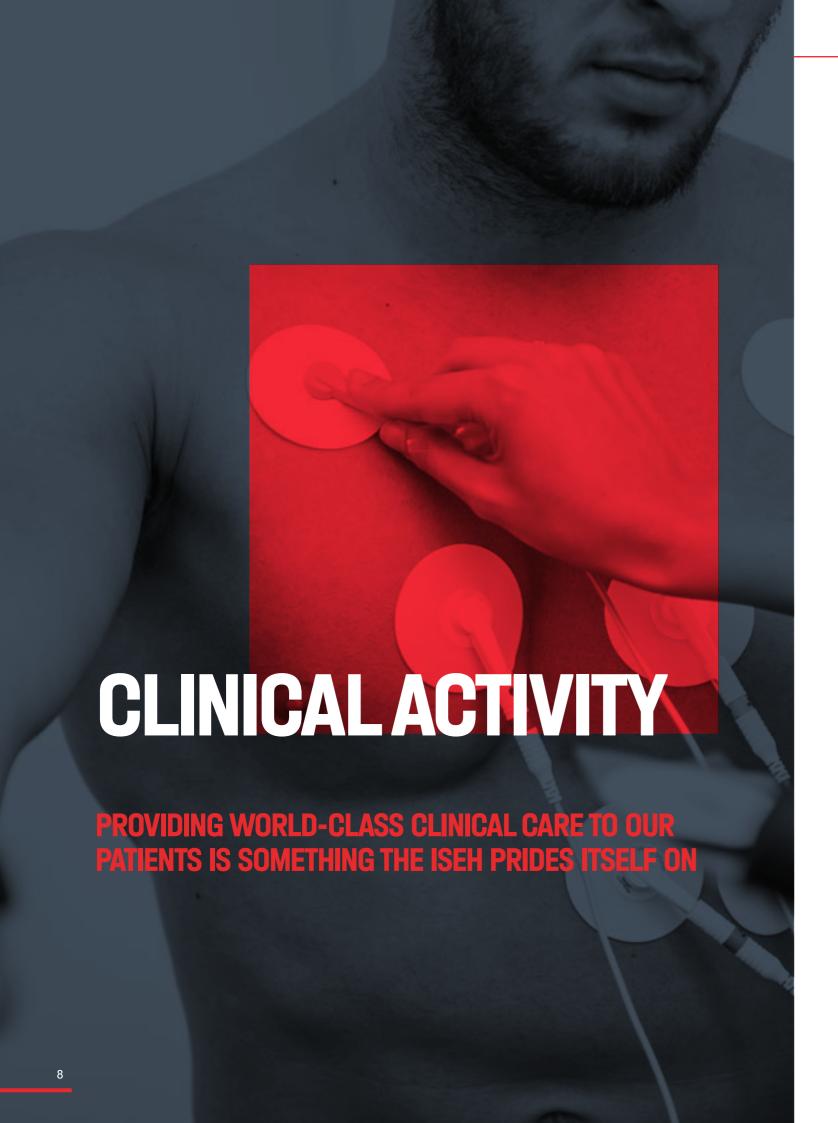
EDUCATION

Over the past year, despite COVID-19, UCL have successfully launched a new undergraduate course at the ISEH and have continued to see student numbers increase. Additional teaching staff have been recruited, deepening the teaching and academic skill set at the ISEH and the increased focus on virtual learning due to the pandemic has significantly improved the online learning resources available to students. Student satisfaction scores with courses at the ISEH remain very high.

EVENTS

The ISEH hosted its annual two-day Sports Injuries and Sport Orthopaedics conference in partnership with the Royal Society of Medicine at the start of 2020, which saw over 200 attendees on each day listen to the latest thought-provoking content from world-leading subject area experts.

During the pandemic we adapted our events programme by switching to delivering a high-quality series of free ISEH webinars, which have attracted large audiences from across the medical and sport and exercise community.



We provide excellence in the diagnosis, prognosis and treatment of sports injuries and illnesses to both elite athletes and exercise enthusiasts.

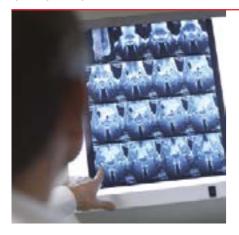
The ISEH offers private clinical care through our partner HCA UK, but also provides public healthcare through NHS appointments from UCLH. We are proud that we provide and offer the same quality of medical care and clinical support for amateur and recreational athletes as we do for Olympians and world-leading sports stars.

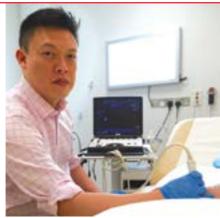
COVID-19

Over the course of 2020, the ISEH has had to change and adapt our clinical delivery in line with the COVID-19 circumstances. At the height of the pandemic the ISEH had to temporarily stop all clinical activity, but we worked hard to review and improve our patient pathway to ensure the safety of both patients and our clinical workforce to enable the ISEH to resume seeing patients promptly.

THE ISEH WAS ONE OF
THE FIRST UCLH CLINICS
TO BEGIN SAFELY
SEEING FACE-TO-FACE
OUTPATIENTS FOLLOWING
THE FIRST COVID-19
LOCKDOWN









NHS CLINICAL ACTIVITY

UCLH clinics typically take place at the ISEH on a Tuesday and Thursday morning to treat NHS patients. However, over the course of the past year and during the height of the pandemic, with the kind agreement of HCA UK, UCLH have delivered significantly more NHS clinics and imaging at ISEH to cope with the patient backlog within the NHS.

With the necessary COVID-19 health and safety procedures, UCLH have had reduced capacity to see face-to-face patients and have subsequently adapted the service delivered at the ISEH to also offer a large number of virtual patient consultations. As of the end of September 2020, the ISEH has delivered the following number of UCLH patient consultations:

2,156

Face-to-face UCLH patient consultations at ISEH

592

Virtual UCLH patient consultations at the ISEH

472

Imaging (MRI and ultrasound)
UCLH appointments at the ISEH

PRIVATE CLINICAL ACTIVITY

The ISEH's private clinics are managed by HCA UK and over the past year they have been actively recruiting world-leading clinicians to support the growth in sports exercise medicine services at the ISEH.

SPORTS RESPIRATORY CLINIC

Dr James Hull has been recruited to lead the Sports Respiratory Clinic at the ISEH; a highly specialist assessment clinic that combines world-leading expertise in the field of sports respiratory medicine, with the best tests and therapies to help diagnose and treat any respiratory issue that is causing problems during exercise.

Ms Julie Backley has also been recruited to support this clinic with respiratory physiotherapy for those individuals with dysfunctional breathing patterns.

SPORTS CARDIOLOGY CLINIC

Professor Guido Pieles has been recruited to lead the ISEH's Sports Cardiology Clinic; a specialist clinic offering the full range of cardiac services using state-of-the-art diagnostics to assess and treat cardiovascular health.

Dr Guido also oversaw the launch of our new Mobile Cardiac Laboratory, offering professional sporting teams and organisations the option of mobile cardiac evaluation. Uptake has been rapid with several Premiership, Championship and League One football clubs making use of this service for pre-competition medical assessments.

SPORTS NUTRITION CLINIC

Dr Richard Allison has been recruited to lead the ISEH Sports Nutrition Clinic, providing a highly specialised performance nutrition service to meet the individualised dietary requirements of all levels of athlete; from elite to serious amateurs, to those simply seeking to lose weight or address nutrient deficiencies.

Absolutely lovely here. Clean and organised, especially under these trying circumstances. Staff were friendly and reassuring and the facilities are amazing

Patient Facebook post



CLINICAL ACTIVITY



year for ISEH clinical activities, but we are pleased to successfully navigate through the COVID-19 pandemic, support our NHS partners, and launch new clinical service lines that put the ISEH in a strong position to grow in 2021

Professor Mathew Wilson
ISEH Head of Sport &
Exercise Medicine



Dr Paul Read has been recruited as the new HCA UK General Manager of ISEH. Paul will lead the clinical operations within the ISEH and help support the implementation of ISEH services into the wider HCA UK sport and exercise medicine portfolio.

Paul will also lead the development of the ISEH Assessment Unit, providing injured athletes with integrated clinical and biomechanical feedback during rehabilitation to help guide progress and readiness for return to sport.

OUR OTHER SPECIALIST CLINICS

Excellent progress has been made in establishing and introducing other specialist clinics at the ISEH. These include:

- Concussion Clinic (expansion)
- Tendon Clinic (expansion)
- Sports Hip and Groin Clinic
- Sports Knee Clinic
- Sports Foot and Ankle Clinic
- Sports Shoulder and Elbow Clinic
- Sports Wrist and Hand Clinic

HCA UK have also overseen a full ISEH gym refurbishment this year that now enables the ISEH to offer full strength and conditioning services.

ENGLISH INSTITUTE OF SPORT (EIS)

As a key partner of the ISEH, the EIS use the ISEH and its facilities as an important part of its services in supporting the health and performance of elite athletes. Key achievements include:

- Over the course of 2020, athletes from 10 different Olympic, Paralympic and Commonwealth Games sports accessed EIS sports medicine, physiotherapy and soft tissue therapy support at the ISEH.
- The EIS team at the ISEH provided a telephone triage and online support service during the Covid-19 pandemic lockdown and opened up for face-to-face appointments in July.
- Since then the EIS has seen an increase in athlete appointments as athletes prepare for the run-up to the postponed 2020 Tokyo Olympics and Para Olympics.

Professor Mike Loosemore, EIS Lead Sports Physician and **Anna Jackson**, EIS Respiratory Physiologist (both based at the ISEH) have been leading SARAH (Systematic Assessment of Athlete Respiratory Health) Project (a joint collaboration between EIS and ISEH) that has seen over 200 athletes who are susceptible to respiratory illness, and supported them towards optimisation of their respiratory health.

Theo Farley, EIS Senior Physiotherapist Clinical Teaching Fellow, has also played a key part in the development of Sports Concussion Guidance for the High Performance System.













NON COVID-19 RESEARCH

With COVID-19 dominating the past year and causing disruption in all walks of life, it has had obvious implications on the ISEH's research. Despite these challenges, the ISEH has been able to conduct some non COVID-19 related research based activities:

- Global Delphi Hamstring Injury Consensus Project
 At the start of 2020, the ISEH, led by Professor Fares Haddad and Dr Bruce Paton, invited 40 world-leading experts on hamstring injuries to London to conduct a global Delphi consensus project investigating current global expert practice in decision-making in the treatment of these injuries.
- London Metropolitan Police Exercise Trial
 Dr Flaminia Ronca and her team are currently analysing cross-sectional data on the interactions between exercise and brain activity, and on injury rates in policing roles.

This has led to further testing on the physical occupational demands of specialist police officers and an evaluation of their fitness tests. This research has led to the ISEH being involved in discussions on a potential nation-wide restructuring of police fitness recommendations and testing.

ProPASS Consortium

Professor Mark Hamer is leading an international collaboration centred on the next generation of evidence on cardiovascular disease prevention, through accurate assessment of physical activity and posture patterns (The Prospective Physical Activity, Sitting and Sleep consortium). This project has been awarded £855k over a five year period by the British Heart Foundation.

2020 has been a challenging year for everyone, but despite the significant challenges the ISEH has adapted to take advantage of new research opportunities

Professor Mark Hamer ISEH Chair of Sport & Exercise Medicine Research RESEARCH



COVID-19 RESEARCH

Whilst COVID-19 this year has meant many of the ISEH's planned research activities being halted, the ISEH quickly adapted to provide research support to help better understand the different aspects and consequences of the pandemic:

- The ISEH, led by Professor Mark Hamer and Professor Courtney Kipps, has initiated a new collaboration with UCL health economist, Professor Lorgelly to investigate the health burden of inactivity during lockdown.
- Professor Mark Hamer and his team have utilised COVID-19 hospital data from the large UK Biobank study to produce early evidence on the importance of lifestyle risk factors, particularly physical activity and obesity.
- The ISEH has been at the forefront of athlete health during COVID-19, for example publishing high impact papers on respiratory health and the return to sport (Loosemore, Hull, Schwellnus, Wilson).
- We have influenced thinking on the impact of COVID on various facets of orthopaedic and trauma care (Haddad).
- Professor Hugh Montgomery has played a significant role in the UK and international response to COVID-19 producing a wide range of research and communications to:
 - Initiator and Chair, National Emergency COVID Critical Care Committe
 - Chair, National COVID Rehabilitation Forum
 - House of Commons and House of Lords Experts input on post-COVID UK
 - Contributor and oversight, national gym/sports facility COVID reopening policy
 - Advisor and reviewer, UK Fitness Industry post-COVID plan for recreational facilities
 - US Military and international panel, human subject testing; 'ICU 2020 and Beyond' national planning and advisory committee
 - Collaborator, Dept Health in Iran cf COVID Trials
 - Collaborator, Dept Health in Qatar cf COVID Trials

NEW RESEARCH AND GRANT APPLICATIONS

The ISEH has initiated several new collaborations leading to grant applications this year:

- The ISEH are collaborating with Professor Alun Hughes (UCL Cardiovascular Sciences) on a grant entitled Adult peak circulatory capacity: Mechanisms and Exposures submitted to the British Heart Foundation (Hamer, co-I).
- This work will examine the factors responsible for differences in peak circulatory capacity by studying participants in the Avon Longitudinal Study of Parents and Children (ALSPAC), a birth cohort of over 15,000 individuals.
- We have been involved in several bids in collaboration with Professor Gershuny (UCL Institute of Education) to fund The ESRC Centre for Time Use Research (CTUR) that will address three interconnected research areas:
 - · Economic welfare and subjective wellbeing
- Health-related behaviours
- Environmental impacts associated with particular lifestyles (particularly physical activity)
- Professor Courtney Kipps and Professor Mark
 Hamer are collaborating with Professor Lorgelly
 (UCL Epidemiology and Health Care) on an NIHR
 grant application to estimate the burden of
 unintended consequences of inactivity during
 lockdown and exploring effective, cost-effective and
 equitable solutions to increase physical activity and
 address sedentary behaviours during the recovery.



ACADEMIC OUTPUTS

During 2020 the ISEH published **106 peer-reviewed papers**. A list of the ISEH's research outputs for this year are included in the **Appendix**.

We continue to strengthen our influence in the field through various routes, particularly through holding editorial positions on key journals:

- The Bone and Joint Journal (Editor in Chief; Professor Fares Haddad)
- Scandinavian Journal Medicine & Science Sports (Senior Section Editor; Professor Mark Hamer)
- British Journal Sports Medicine (Associate Editors; Dr Eleanor Tillett, Professor Mathew Wilson)

In addition, ISEH colleagues sit on a number of influential working groups:

- Professor Mark Hamer is a member of the BASEM Scientific Advisory Group
- Professor Mathew Wilson is an International Olympic Committee (IOC) Scientific and Medical Expert Committee member
- Professor Courtney Kipps and Professor Charles Pedlar co-organise Marathon Medicine, the largest and longest running conference on the medicine and science of endurance sports worldwide.
- Professor Guido Pieles is a member of the Association of European Paediatric and Congenital Cardiology (AEPC) Sports Cardiology working group.









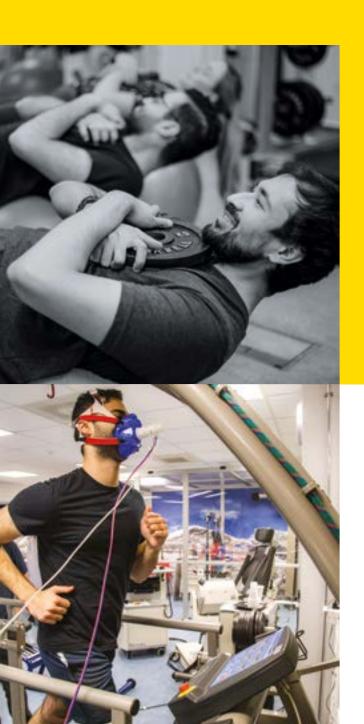
THE ISEH HOSTED FOUR UCL DEGREE COURSES IN 2020

- 1. MSc in Sports Medicine, Exercise & Health now in its 12th year with over 100 students enrolled for 2020-21; this programme attracts students from all around the world and is one of the few MSc courses in this field to train doctors and physiotherapists alongside other physical therapists and sports scientists, thereby replicating the highly multidisciplinary nature of the specialty.
- 2. MSc in Peforming Arts Medicine
- 3. Intercalated BSc in Sport & Exercise Medical Science highly sought after degree for medical students at UCL which, for the first time this year, has admitted students external to UCL allowing an increase in numbers to 25 from a usual maximum of 15.
- 4. BSc in Sport & Exercise Medical Science now in its second year, this degree grounds students with the knowledge and skills to help athletes achieve their performance potential and patients to optimise their health. There are 23 students enrolled for this year.



EDUCATION

91% OF STUDENTS FEELTHAT THEIR ACADEMIC ABILITIES HAVE BEEN ENHANCED*



KEY SUCCESSES IN 2020

- Despite COVID-19, we have seen a continued increase in student numbers.
- Three new recruits to our teaching team increasing the breadth and depth of our sports science and sports medicine education skill set.
- Professor Courtney Kipps, who co-leads the MSc programme at ISEH, has been awarded a Senior Fellowship of the Higher Education Academy and has been promoted to Professor (Teaching) in Sport and Exercise Medicine.
- Dr Eleanor Tillett and Dr Flamina Ronca have been elected onto the UCL Academic Board.
- Successful conversion of all four degree courses at the ISEH from face-to-face to online learning in response to the COVID-19 pandemic.
- Strong positive feedback from both the undergraduate and postgraduate student surveys in 2020.

Our class is deeply grateful for all you've done to smooth over the unprecedented challenges over this last academic year. We're very lucky to have you and the MSc team leading during this time

MSc student rep from 2019-20

This has been an extraordinary year as we have very quickly transformed our teaching from face-to-face to online in response to the COVID-19 pandemic. At the ISEH we had an advantage as we already ran a distance learning route for our MSc programme, which meant we had the technology and skills in place to rapidly convert the remaining teaching and assessment into the virtual environment.

This drive to optimise our virtual learning has enabled us to improve our teaching resources to create a learning environment that is adaptable to students whatever their time zone and working commitments

Professor Courtney Kipps & Dr Eleanor Tillet ISEH Education Programme Leads



I found my MSc @SportsMedUCL was very engaging and challenging in a very positive way. My knowledge increased as well as other skills like presenting, research and stats. Our course was based at @TheISEH so we had exposure to elite consultants and athletes. I would recommend

MSc student Twitter post



With the COVID-19 pandemic having such a detrimental effect on the entire events industry over the past year, the ISEH like many other organisations have had to adjust and adapt their event plans.

SPORTS INJURIES AND SPORT ORTHOPAEDICS

Fortunately, at the start of the year the ISEH was able to host its annual Sports Injuries and Sport Orthopaedics conference in partnership with the Royal Society of Medicine on the 28th and 29th January, 2020.

Key speakers included:

Professor Fares Haddad

Dr David Wood

Professor Mathew Wilson

Professor Mike Loosemore

This two-day conference attracted over 200 attendees each day and was aimed at consultants and trainees in orthopaedics, sport and exercise medicine and all related specialties including physiotherapists and osteopaths, as well as anyone involved or interested in the care of sportsmen and sportswomen.

Topics included:

- Key updates from elite sport and dance
- Hot topics in tendinopathy
- A deep dive into hamstring injuries
- Adolescent overuse injuries and their prevention
- Key issues in sports hip injury management
- Critical debates in the management of acute injuries

A Hamstring Consensus meeting was also held at the Royal Society of Medicine led by Professor Fares Haddad, Dr Bruce Baton and James Moore with the leading experts on hamstrings from across the world.

Fascinating talk delivered by Dr David Wood on results of Proximal Hamstring repairs and his new classification system for these injuries @TheISEH @RSM_SEM #SportsOrth

Conference attendee Twitter post

VIRTUAL EVENTS

Other events planned for the remainder of the year were either cancelled or postponed as a result of the pandemic. However, with our partner HCA UK we adapted our plans to run a number of free online webinars.

These online events have proved immensely popular with the sports exercise medicine community, with over 400 people joining live. The ISEH have delivered the following webinars:

- Orthopaedic Hip and Knee webinar series with Professor Fares Haddad (25th June – 19th August)
- Cardiopulmonary Exercise Testing and COVID-19: the what, when and how with Professor Mat Wilson, Dr James Hull, Professor Guido Pieles, Dr Karl Sylvester and Dr Gulammedhdi Haji (29th June)
- Tales from The Tendinopathy Clinic with Dr Lorenzo Masci and Chris Myers (18th August)
- Exercise breathlessness and wheeze in the young: what next? with Dr James Hull (6th October)
- Calf tears in sport: Is it muscle, aponeurosis or tendon?
 And does it matter? with Dr Carles Pedret and Dr Lorenzo Masci (14th October)



COMMUNICATIONS

COMMUNICATIONS

2020 has seen the ISEH undergo a brand refresh with a new logo and brand identity to support our vision to become the leading institute for sport and exercise medicine by 2030. This will continue to be rolled out into 2021 with a new website, interior branding and marketing assets being developed.

OLD LOGO



SOCIAL MEDIA

There has been positive growth and engagement with the ISEH's social media channels which is an increasingly important way to promote the ISEH, its services and activities and engage with our stakeholders.

- @Webb_Physio: "Last week at Watford FC we used the newly launched Mobile Cardiac Laboratory from ISEH to carry out some of our cardiac screening. Professor Guido Pieles attends with the van and tests included ECG, ECHO, CPET and Stress test. #ISEH #elitehealth"
- @artistlhbevan: "Discharged from the fabulous @TheISEH!! Thanks hugely to the team & Dr Bevin McCartan for your expertise. After a life time of on/off back issues/episodes I finally feel as a runner I now know the what's what on rehabilitation & getting 'back' strong #thanks!"
- **@RebeccaMLiv:** "Thank you @TheISEH for the opportunity to teach a keen and engaged group this morning on your Sports Medicine, Exercise and Health MSc. Lots of great ideas and discussion around #physicalactivity and #pulmonaryrehab in #COPD and #lungdisease"



The ISEH twitter account now has over 7,250 followers



MEDIA

During 2020 the ISEH has had a great deal of interest from a variety of media and has become a key point of contact for current media stories around sport, exercise and health.

Below are some highlights of 2020. For all media stories please see our press coverage page on the ISEH website.

The Athletic: What happens to a fighter's brain afte suffering a KO?

ISEH's Lead Consultant in Sport and Exercise Medicine Professor Mike Loosemore spoke to The Athletic on what happens to the brain when a fighter is knocked out and during the recovery process that follows.

The Times: The health benefits of cycline

ISEH's Head of Sport and Exercise Medicine Professor Mat Wilson spoke to The Times and provided advice on how to get the most out of cycling.

Netdoctor: Exercising in the heat safely

ISEH's Consultant in Sport and Exercise Medicine Professor Courtney Kipps spoke to Netdoctor providing expert advice on how to exercise safely in warm weather.

The Athletic: The impact of COVID19 on elite athletes

ISEH's Sport Scientist Dr Flaminia Ronca discussed the impact of COVID-19 on elite athletes in The Athletic.



LOOKING AHEAD TO 2021

LOOKING AHEAD TO 2021

Whilst 2021 promises to see a continued unsettling period with the UK and all nations continuing to battle with COVID-19, at the ISEH we are optimistically excited about the year ahead.

We of course will continue to adapt our services to meet the ongoing challenges of living with COVID-19 and will continue to provide high quality clinical support, research and education to help the wider community better understand and cope with the impact of the virus and our work in supporting UCLH is vital in achieving this.

KEY EVENTS AND SUPPORT FOR ATHLETES

2021 will see an exciting number of rescheduled major sporting events take place, including the Tokyo Olympic Games. We are looking forward to supporting elite athletes, as well as working with our key partners the British Olympic Association and the English Institute of Sport, to provide the necessary preparation and support to ensure optimal performance in these major events.

HCA UK are looking to further develop the clinical and performance support services that are on offer at the ISEH, to ensure that we continue to provide world-leading support to both elite athletes and recreational sports enthusiasts.

INVESTING IN EDUCATION AND RESEARCH

Over the next year ISEH will work with UCL to further expand our research capacity, to ensure that we can effectively deliver against our research strategy and attract new and novel research projects that provide greater insight into our identified research themes.

The ISEH will also continue to support UCL in providing a high quality learning experience for students, as well as further developing our capabilities in delivering and offering online education and learning in sports exercise medicine and physical activity.



ISEH RESEARCH OUTPUTS IN 2020

The list below outlines the academic research outputs of the ISEH in 2020. The list primarily covers peer-reviewed papers, but also includes other formats of research delivery (e.g. presentations, conferences etc.).

Published Peer Reviewed Papers

NAME OF ISEH CONTRIBUTOR	TITLE OF PAPER	DATE	PUBLICATION	ADDITIONAL REFERENCING DETAILS	OUTPUT COLLABORATORS (names of other contributors)
Hugh Montgomery	Effect of intermittent or Continuous Feed on Muscle Wasting in Critical Illness: A Phase 2 Clinical Trial	Jul 2020	Chest Journal	158(1):183-194. doi: 10.1016/j.chest. 2020.03.045	McNelly AS, Bear DE, Connolly BA, Arbane G, Allum L, Tarbhai A, Cooper JA, Hopkins PA, Wise MP, Brealey D, Rooney K, Cupitt J, Carr B, Koelfat K, Damink SO, Atherton PJ, Hart N, Montgomery HE, Puthucheary ZA
Hugh Montgomery	Low serum 25-hydroxyvitamin D status in the pathogenesis of stress fractures in military personnel: An evidenced link to support injury risk management.	March 2020	PLoS One	15(3):e0229638. doi: 10.1371/journal. pone.0229638	Armstrong RA, Davey T, Allsopp AJ, Lanham-New SA, Oduoza U, Cooper JA, Montgomery HE, Fallowfield JLw
Hugh Montgomery	Thirst-guided participant- controlled intravenous fluid rehydration: a single blind, randomised crossover study	Jan 2020	Br J Anaesth	S0007-0912(19)30974- 2. doi: 10.1016/j. bja.2019.12.008	Lacey J, Corbett J, Shepherd A, Dubois A, Hughes F, White D, Tipton M, Mythen M, Montgomery H
Hugh Montgomery	Application of the optimised carbon dioxide rebreathing method for the measurement of total haemoglobin mass in chronic liver disease	March 2020	Physiol Rep	8(6):e14402. doi: 10.14814/phy2.14402.	Plumb JOM, Otto JM, Kumar SB, Wright M, Schmidt W, Grocott MPW, Montgomery HE
Hugh Montgomery	Diarrhoea in critical care is rarely infective in origin, associated with increased length of stay and higher mortality.	July 2020	J Int Care Soc	(1):72-78. doi: 10.1177/ 1751143719843423	Murali M, Ly C, Tirlapur N, Montgomery HE, Cooper JA, Wilson AP. Diarrhoea in critical care is rarely infective in origin, associated with increased length of stay and higher mortality
Hugh Montgomery	COVID-19: UK frontline intensivists' emerging learning J Int Care Soc	July 2020	J Int Care Soc		Hugh Montgomery, Niran Rehill, Luigi Camporata, Nicki Credland, Mike Grocott, mark Hamilton, Daniel Martin, Brijesh Patel, Ganesh Suntgharalingam, Tamas Szakmany, Shana Uddin, Andre Vercueil, Mike Roberts. et al COVID-19: UK frontline intensivists' emerging learning J Int Care Soc
Daniel Coughlan	International consensus statement: methods for recording and reporting of epidemiological data on injuries and illnesses in golf	August 2020	British journal of sports medicine	doi: 10.1136/ bjsports-2020- 102380	Andrew Murray1,2,3, Astrid Junge 4,5, Patrick Robinson2,25, Mario Bizzini5,6, Andre Bossart7, Ben Clarsen8,9, Dan Coughlan2,10, Corey Cunningham11,12, Tomas Drobny13,14, Francois Gazzano15, Lance Gill16,17, Roger Hawkes1,18,19, Tom Hospel1,20,21, Robert Neal22, Jonathan Lavelle1,23,24, Antony Scanlon1, Patrick Schamasch1,26, Bruce Thomas1,27, Mike Voight17,28, Mark Wotherspoon1,29,30, Jiri Dvorak5,13,31
Daniel Coughlan	The Effect of a 12-Week Strength and Conditioning Programme on Youth Golf Performance	Jan 2020	International journal of golf science		Daniel Coughlan*, Matthew J D Taylor†, William Wayland‡, David Brooks**, Jo Jackson

APPENDIX					
NAME OF ISEH CONTRIBUTOR	TITLE OF PAPER	DATE	PUBLICATION	ADDITIONAL REFERENCING DETAILS	OUTPUT COLLABORATORS (names of other contributors)
Marco Cardinale	Validation of fabric-based thigh-wearable EMG sensors and oximetry for monitoring quadricep activity during strength and endurance exercises.	Sep 2020	Sensors	20 (17), 1-13. doi:10.3390/s20174664	Di Giminiani, R., Cardinale, M., Ferrari, M., & Quaresima, V.
Marco Cardinale	The Effect of High Volume Power Training on Repeated High-Intensity Performance and the Assessment of Repeat Power Ability: A Systematic Review.	Feb 2020	Sports Medicine	50 (7), 1317-1339. doi:10.1007/s40279- 020-01273-0	Natera, A. O., Cardinale, M., & Keogh, J. W. L.
Marco Cardinale	Skin Temperature, Training Load, and Subjective Muscle Soreness in Junior Endurance Athletes: A Case Study.	Jan 2020	International Journal of Sports Physiolgy and Performance	1-4. doi:10.1123/ ijspp.2019-0748	Jones, T. W., Shillabeer, B. C., & Cardinale, M.
Marco Cardinale	Skeletal maturation and growth rates are related to bone and growth plate injuries in adolescent athletics.	Feb 2020	Scandinavian Journal of Medicine and Science in Sports	30 (5), 894-903. doi:10.1111/sms.13635	Wik, E. H., Martinez-Silvan, D., Farooq, A., Cardinale, M., Johnson, A., & Bahr, R.
Marco Cardinale	Performance progression of elite jumpers: early performances do not predict later success.	2020	Scandinavian Journal of Medicine and Science in Sports	doi:10.1111/sms.13819	Boccia, G., Cardinale, M., & Brustio, P. R.
Mark Hamer	Device-measured light-intensity physical activity and mortality: A meta-analysis.	Jan 2020	Scand J Med Sci Sports.	2020 Jan;30(1):13- 24. doi: 10.1111/ sms.13557.	Ku PW, Hamer M, Liao Y, Hsueh MC, Chen LJ.
Mark Hamer	Lifestyle risk factors, inflammatory mechanisms, and COVID-19 hospitalization: A community-based cohort study of 387,109 adults in UK.	July 2020	Brain Behav Immun	2020 Jul;87:184- 187. doi: 10.1016/j. bbi.2020.05.059.	Hamer M, Kivimäki M, Gale CR, Batty GD.
Mark Hamer	Association of Healthy Lifestyle With Years Lived Without Major Chronic Diseases. J	May 2020	JAMA Intern Med	2020 May 1;180(5):760- 768. doi: 10.1001/ jamainternmed. 2020.0618.	Nyberg ST, Singh-Manoux A, Pentti J, Madsen IEH, Sabia S, Alfredsson L, Bjorner JB, Borritz M, Burr H, Goldberg M, Heikkilä K, Jokela M, Knutsson A, Lallukka T, Lindbohm JV, Nielsen ML, Nordin M, Oksanen T, Pejtersen JH, Rahkonen O, Rugulies R, Shipley MJ, Sipilä PN, Stenholm S, Suominen S, Vahtera J, Virtanen M, Westerlund H, Zins M, Hamer M, Batty GD, Kivimäki M.
Mark Hamer	Cardiorespiratory Fitness Is Associated With Early Death Among Healthy Young and Middle-Aged Baby Boomers and Generation Xers.	Aug 2020	Am J Med	2020 Aug;133(8):961- 968.e3. doi: 10.1016/j. amjmed. 2019.12.041.	Cao C, Yang L, Cade WT, Racette SB, Park Y, Cao Y, Friedenreich CM, Hamer M, Stamatakis E, Smith L.
Mark Hamer	Overweight, obesity, and risk of hospitalization for COVID-19: A community-based cohort study of adults in the United Kingdom.	Sept 2020	Proc Natl Acad Sci U S A	2020 Sep 1;117(35):21011- 21013. doi: 10.1073/ pnas.2011086117.	Hamer M, Gale CR, Kivimäki M, Batty GD.
Mark Hamer	Association of Changes in Physical Activity and Incidence and Remission of Overall and Abdominal Obesity in 113,950 Adults.	Mar 2020	Obesity	2020 Mar;28(3):660- 668. doi: 10.1002/ oby.22709.	Martinez-Gomez D, Hamer M, Ortega FB, Cabanas-Sanchez V, Sadarangani KP, Lavie CJ, Rodríguez-Artalejo F.
Mark Hamer	Change in device-measured physical activity assessed in childhood and adolescence in relation to depressive symptoms: a general population-based cohort study.	April 2020	J Epid Comm Health	2020 Apr;74(4):330- 335. doi: 10.1136/jech- 2019-213399.	Hamer M, Patalay P, Bell S, Batty GD.
Mark Hamer	BLOOD PRESSURE TRAJECTORIES IN YOUTH AND HYPERTENSION RISK IN ADULTHOOD: THE 1970 BRITISH COHORT STUDY	Feb 2020	Am J Epidemiol	2020 Feb 28;189(2):162-163. doi: 10.1093/aje/kwz241.	Hamer M, Kivimäki M, Batty GD.

NAME OF ISEH CONTRIBUTOR	TITLE OF PAPER	DATE	PUBLICATION	ADDITIONAL REFERENCING DETAILS	OUTPUT COLLABORATORS (names of other contributors)
Mark Hamer	Diabetes, glycaemic control, and risk of COVID-19 hospitalisation: Population- based, prospective cohort study.	Aug 2020	Metabolism	2020 Aug 22;112:154344. doi: 10.1016/j. metabol.2020. 154344.	Hamer M, Gale CR, Batty GD.
Mark Hamer	Feasibility of Measuring Sedentary Time Using Data From a Thigh-Worn Accelerometer.	Sept 2020	Am J Epidemiol	2020 Sep 1;189(9):963- 971. doi: 10.1093/aje/ kwaa047.	Hamer M, Stamatakis E, Chastin S, Pearson N, Brown M, Gilbert E, Sullivan A.
Mark Hamer	Association of Childhood Psychomotor Coordination With Survival Up to 6 Decades Later.	April 2020	JAMA Netw Open	2020 Apr 1;3(4):e204031. doi: 10.1001/ jamanetworkopen. 2020.4031.	Batty GD, Deary IJ, Hamer M, Frank P, Bann D.
Mark Hamer	The descriptive epidemiology of standing activity during free-living in 5412 middle-aged adults: the 1970 British Cohort Study.	Sept 2020	J Epid Comm Health	2020 Sep;74(9):757- 760. doi: 10.1136/jech- 2020-213783.	Hamer M, Stamatakis E.
Mark Hamer	Estimated cardiorespiratory fitness in childhood and cardiometabolic health in adulthood: 1970 British Cohort Study.	May 2020	Scand J Med Sci Sports.	2020 May;30(5):932- 938. doi: 10.1111/ sms.13637.	Hamer M, O'Donovan G, Batty GD, Stamatakis E.
Mark Hamer	Associations of sitting and physical activity with grip strength and balance in midlife: 1970 British Cohort Study.	Aug 2020	Scand J Med Sci Sports.	2020 Aug 5. doi: 10.1111/sms.13793.	Cooper R, Stamatakis E, Hamer M
Mark Hamer	Physical activity and the risk of sudden cardiac death: a systematic review and meta- analysis of prospective studies.	July 2020	BMC Cardiovasc Disorder	2020 Jul 6;20(1):318. doi: 10.1186/s12872- 020-01531-z.	Aune D, Schlesinger S, Hamer M, Norat T, Riboli E.
Mark Hamer	Joint associations of device- measured physical activity and sleep duration with cardiometabolic health in the 1970 British Cohort Study.	Aug 2020	J Sci Med Sport	2020 Aug 2:S1440- 2440(20)30695-2. doi: 10.1016/j. jsams.2020.07.012.	Huang BH, Inan-Eroglu E, Hamer M, Stamatakis E.
Mark Hamer	Does adequate physical activity attenuate the associations of alcohol and alcohol-related cancer mortality? A pooled study of 54 686 British adults.	May 2020	Int J Cancer	2020 May 14. doi: 10.1002/ijc.33052.	Feng Y, Powell L, Vassallo AJ, Hamer M, Stamatakis E.
Mark Hamer	Secular changes in mid- adulthood body mass index, waist circumference, and low HDL cholesterol between 1990, 2003, and 2018 in Great Britain.	Sept 2020	Eur J Clin Nutr	2020 Sep 16. doi: 10.1038/s41430-020- 00758-5.	Johnson W, Norris T, Hamer M.
Mark Hamer	Educational differentials in key domains of physical activity by ethnicity, age and sex: a cross-sectional study of over 40 000 participants in the UK household longitudinal study (2013-2015).	Jan 2020	BMJ Open	2020 Jan 20;10(1):e033318. doi: 10.1136/ bmjopen-2019-033318.	Fluharty ME, Pinto Pereira SM, Benzeval M Hamer M, Jefferis B, Griffiths LJ, Cooper R, Bann D.
Mark Hamer	Is the positive relationship of infant weight gain with adolescent adiposity attenuated by moderate-to-vigorous physical activity in childhood? Evidence from the Millennium Cohort Study.	Aug 2020	Int J Obesity	2020 Aug 21. doi: 10.1038/s41366-020- 00656-7.	Johnson W, Norris T, De Freitas R, Pearson N, Hamer M, Costa S
Mark Hamer	Yoga programme for type-2 diabetes prevention (YOGA-DP) among high risk people in India: a multicentre feasibility randomised controlled trial protocol.	Sep 2020	BMJ Open	2020 Sep 6;10(9):e036277. doi: 10.1136/ bmjopen-2019-036277.	Chattopadhyay K, Mishra P, Singh K, Harris T, Hamer M, Greenfield SM, Lewis SA, Manjunath NK, Nair R, Mukherjee S, Harpe DR, Tandon N, Kinra S, Prabhakaran D
Mark Hamer	Cross-sectional associations of device-measured sedentary behaviour and physical activity with cardio-metabolic health in the 1970 British Cohort Study.	Aug 2020	Diab Med	2020 Aug 27. doi: 10.1111/dme.14392.	Huang BH, Stamatakis E, Chastin S, Pearso N, Koster A, Hamer M.

APPENDIX

NAME OF ISEH CONTRIBUTOR	TITLE OF PAPER	DATE	PUBLICATION	ADDITIONAL REFERENCING DETAILS	OUTPUT COLLABORATORS (names of other contributors)
Mark Hamer	Association between TV viewing and heart disease mortality: observational study using negative control	April 2020	J Epid Comm Health	2020 Apr;74(4):391- 394. doi: 10.1136/jech- 2019-212739.	Hamer M, Ding D, Chau J, Duncan MJ, Stamatakis E.
Charlie Pedlar	outcome. Variations in strength-related measures during the menstrual cycle in eumenorrheic women: a systematic review and metaanalysis	May 20	JSAMS	https://iris.ucl.ac.uk/iris/ publication/1794992/7	Blagrove R, Bruinvels G and Pedlar C
Charlie Pedlar	The validity of the session rating of perceived exertion method for measuring Internal training load in professional classical ballet dancers.	May 20	Frontiers in Physiology	https://iris.ucl.ac.uk/iris/ publication/1794999/3	Shaw JW, Springham M, Brown DB, Mattiussi AM, Pedlar CR and Tallent J
Charlie Pedlar	Are there benefits for the use of fish oil (omega-3) supplements in athletes? A systematic review	Sep 20	Advances in Nutrition	https://iris.ucl.ac.uk/iris/ publication/1795000/2	Lewis N A, Daniels D, Calder P C, Castell L and Pedlar CR.
Charlie Pedlar	The association of parental genetic, lifestyle and social determinants of health with offspring overweight.	Mar 20	Lifestyle Genomics	https://iris.ucl.ac.uk/iris/ publication/1795527/3	Graham C A-M, Pedlar CR, Hearne G, Lorente-Cebrián S, González-Muniesa, P, Mavrommatis Y
Charlie Pedlar	Custom-fitted compression garments enhance recovery from muscle damage in rugby players	Feb 20	Journal of Strength and Conditioning Research	https://iris.ucl.ac.uk/iris/ publication/1795530/13	Brown F, Jeffries O, Gissane C, Howatson G, van Someren K, Pedlar C, Myers T, Hill JA
Charlie Pedlar	Systemic ß-adrenergic receptor activation augments the ex vivo expansion and anti-tumor activity of Vg9Vd2 T-cells	Jan 20	Frontiers in Immunology	https://iris.ucl.ac.uk/iris/ publication/1795528/3	Baker FL, Bigley AB, Agha NH, Pedlar CR, O'Connor DP, Bond RA, Bollard CM, Katsanis E, Simpson RJ
Charlie Pedlar	Increased oxidative stress in injured and ill elite international Olympic rowers	May 20	IJSPP	https://iris.ucl.ac.uk/iris/ publication/1795529/3	Lewis N A, Simpkin A J, Moseley S, Turner G, Homer M, Redgrave A, Pedlar CR and Burden R
Charlie Pedlar	Covid and exercise (detraining) - New York Times	Mar-20	NY Times	https://www.nytimes. com/2020/03/19/well/ move/coronavirus- covid-exercise- outdoors-infection- fitness.html	Lewis N A, Simpkin A J, Moseley S, Turner G, Homer M, Redgrave A, Pedlar CR and Burden R
Charlie Pedlar	The prevalence and frequency of menstrual cycle symptoms are associated with women's availability to train and compete: A study of 6,812 exercising women recruited using the Strava exercise app	In press (accepted 30th Sept)	BJSM	In press (accepted 30th Sept)	Bruinvels G, Goldsmith E, Blagrove RC, Simpkin AJ, Lewis NA, Morton K, Suppiah A, Rogers JP, Ackerman KE, Newell J, Pedlar CR
Fares Haddad	COVID-19 and orthopaedic and trauma surgery.	May 2020	Bone Joint J	doi: 10.1302/0301-620X.102B5. BJJ-2020-0552.	
Fares Haddad	Alignment in total knee arthroplasty.	Mar 2020	Bone Joint J	doi: 10.1302/0301-620X.102B3. BJJ-2019-1729.	
Fares Haddad	Revision total hip arthroplasty for metal-on-metal failure.	Jan 2020	J Clin Orthop Trauma.	doi: 10.1016/j. jcot.2019.09.021.	
Fares Haddad	Cardiorespiratory considerations for return-to- play in elite athletes after COVID-19 infection: a practical guide for sport and exercise medicine physicians	2020	Br J Sports Med	doi: 10.1136/ bjsports-2020-102710.	
Fares Haddad	The Changing Face of Infection, Diagnosis, and Management in the United Kingdom.	Apr 2020	Orthop Clin North Am	doi: 10.1016/j. ocl.2019.12.003.	
Fares Haddad	The effect of anterior cruciate ligament resection on knee biomechanics.	Apr 2020	Bone Joint J	doi: 10.1302/0301-620X.102B4. BJJ-2019-1238.R2.	

APPENDIX

NAME OF				ADDITIONAL	OUTPUT COLLABORATORS
ISEH CONTRIBUTOR	TITLE OF PAPER	DATE	PUBLICATION	REFERENCING DETAILS	(names of other contributors)
Fares Haddad	Is Outpatient Arthroplasty Safe? A Systematic Review.	Jul 2020	J Arthroplasty	doi: 10.1016/j. arth.2020.02.022.	
Fares Haddad	Cemented versus uncemented hip implant fixation: Should there be age thresholds?	Jan 2020	Bone Joint Res	doi: 10.1302/2046- 3758.812.BJR-2019-0337	
Fares Haddad	Reinstating elective orthopaedic surgery in the age of COVID-19.	2020	Bone Joint J	doi: 10.1302/0301-620X.102B7. BJJ-2020-0808.	
Fares Haddad	Long-term survivorship of hip and knee arthroplasty.	April 2020	Bone Joint J	doi: 10.1302/0301-620X.102B4. BJJ-2020-0183.	
Fares Haddad	Hamstring injuries and surgery: a new perspective.	Oct 2020	Bone Joint J	doi: 10.1302/0301-620X. 102B10.BJJ-2020-1641.	
Fares Haddad	The effects of COVID-19 on perioperative morbidity and mortality in patients with hip fractures.	Sept 2020	Bone Joint J	doi: 10.1302/0301-620X.102B9. BJJ-2020-1127.R1	
Fares Haddad	Sport after total hip arthroplasty: undoubted progress but still some unknowns.	June 2020	Bone Joint J	doi: 10.1302/0301-620X.102B6. BJJ-2020-0208.	
Fares Haddad	Surgical Management of Chronic Incomplete Proximal Hamstring Avulsion Injuries.	Apr 2020	Am J Sp Med	doi: 10.1177/03635465 20908819.	
Fares Haddad	Is it time to revisit cementless total knee arthroplasty?	Aug 2020	Bone Joint J	doi: 10.1302/0301-620X.102B8. BJJ-2020-0962.	
Fares Haddad	Does Multimodal Therapy Influence Functional Outcome After Total Knee Arthroplasty?	Oct 2020	Orthop Clin North Am	doi: 10.1016/j. ocl.2020.06.011.	
Fares Haddad	Robotic technology: current concepts, operative techniques and emerging uses in unicompartmental knee arthroplasty.	May 2020	EFORT Open Rev	doi: 10.1302/2058- 5241.5.190089.	
Fares Haddad	MAKO CT-based robotic arm-assisted system is a reliable procedure for total knee arthroplasty: a systematic review.	Sept 2020	Knee Surg Sports Traumatol Arthrosc.	doi: 10.1007/s00167-020- 06283-z.	
Fares Haddad	Management of hamstring injuries: current concepts review.	Oct 2020	Bone Joint J	doi: 10.1302/0301-620X. 102B10.BJJ-2020-1210.R1	
Fares Haddad	A prospective double-blinded randomised control trial comparing robotic arm-assisted functionally aligned total knee arthroplasty versus robotic arm-assisted mechanically aligned total knee arthroplasty.	Feb 2020	Trials	doi: 10.1186/s13063-020- 4123-8.	
Fares Haddad	Management of limb length problems during total hip arthroplasty for patients with developmental dysplasia of the hip.	Jul 2020	Br J Hosp Med (Lond)	doi: 10.12968/ hmed.2019.0362.	
Fares Haddad	A cost-effectiveness assessment of dual-mobility bearings in revision hip arthroplasty.	Sept 2020	Bone Joint J	doi: 10.1302/0301-620X.102B9. BJJ-2019-1742.R1.	
Fares Haddad	Characterisation of the tensile properties of Demineralised Cortical Bone when used as an anterior cruciate ligament allograft.	Oct 2020	J Mech Behav Biomed Mater.	doi: 10.1016/j. jmbbm.2020.103981.	

NAME OF ISEH CONTRIBUTOR	TITLE OF PAPER	DATE	PUBLICATION	ADDITIONAL REFERENCING DETAILS	OUTPUT COLLABORATORS (names of other contributors)
Fares Haddad	Acute Surgical Repair of Complete, Nonavulsion Proximal Semimembranosus Injuries in Professional Athletes.	Jul 2020	Am J Sp Med	doi: 10.1177/03635465 20934467.	
Fares Haddad	Surgical Repair of Distal Musculotendinous T Junction Injuries of the Biceps Femoris.	2020	Am J Sp Med	doi: 10.1177/03635465 20938679.	
Fares Haddad	Musculotendinous Junction Injuries of the Proximal Biceps Femoris: A Prospective Study of 64 Patients Treated Surgically.	Jul 2020	Am J Sp Med	doi: 10.1177/03635465 20926999.	
Fares Haddad	Long-Term Results of Revision Total Hip Arthroplasty Using a Modern Extensively Porous- Coated Femoral Stem.	Jun 2020	J Arthroplasty	doi: 10.1016/j. arth.2020.06.052	
Fares Haddad	Decellularized porcine xenograft for anterior cruciate ligament reconstruction: A histological study in sheep comparing cross-pin and cortical suspensory femoral fixation.	Jul 2020	Bone Joint J	doi: 10.1302/2046-3758.96. BJR-2020-0030.R2.	
Fares Haddad	The direct superior approach versus posterior approach for total hip arthroplasty: study protocol for a prospective double-blinded randomised control trial.	Jun 2020	Trials	doi: 10.1186/s13063-020- 04484-y	
Monty Mythen	Perioperative QualityInitiative (POQI) consensus statement on fundamental concepts in perioperative fluid management: fluid responsiveness and venous capacitance.	Apr 20	Perioper Med (Lond).	21;9:12.	
Monty Mythen	Thirst-guided participant- controlled intravenous fluid rehydration: a single blind, randomised crossover study.	Jan 2020	Br J Anaesth.	31:S0007- 0912(19)30974-2.	
Monty Mythen	Two hours too long: time to review fasting guidelines for clear fluids.	Jan 2020	Br J Anaesth.	17:S0007- 0912(19)31004-9. doi: 10.1016/j. bja.2019.11.036.	
Monty Mythen	Effects of dietary nitrate supplementation on microvascular physiology at 4559 m altitude - A randomised controlled trial (Xtreme Alps).	Jan 2020	Nitric Oxide.	1;94:27-35.	
Hakan Alfredson	ICON 2019: International Scientific Tendinopathy	2020	Br J Sports Med		
Hakan Alfredson	Surgical treatment of insertional Achilles tendinopathy: results after removal of the subcutaneous bursa alone-a case series.	2020	BMJ Open Sport & Exercise Medicine.	doi:10.1136/ bmjsem-2020-000769.	
Mathew Wilson	Lower limb EMG activation during reduced gravity running on an incline. Speed matters more than hills irrespective of indicated bodyweight	Oct 2020	Gait & Posture	doi.org/10.1016/j. gaitpost.2020.09.029	
Mathew Wilson	Cardiorespiratory considerations for return-to- play in elite athletes after COVID-19 infection: a practical guide for sport and exercise medicine physicians	Sept 2020	Br J Sports Med	doi.org/10.1136/ bjsports-2020-102710	

NAME OF ISEH CONTRIBUTOR	TITLE OF PAPER	DATE	PUBLICATION	ADDITIONAL REFERENCING DETAILS	OUTPUT COLLABORATORS (names of other contributors)
Mathew Wilson	Effect of Speed and Gradient on Plantar Force When Running on an AlterG® Treadmill.	Oct 2020	Br J Sports Med	doi.org/10.21203/ rs.3.rs-62931/v1	(names of other contributors)
Mathew Wilson	Better reporting standards are needed to enhance the quality of hop testing in the setting of ACL return to sport decisions: a narrative review	June 2020	Br J Sports Med	doi.org/10.1136/ bjsports-2019-101245	
Mathew Wilson	Lower Limb Kinetic Asymmetries in Professional Soccer Players With and Without Anterior Cruciate Ligament Reconstruction: Nine Months Is Not Enough Time to Restore "Functional" Symmetry or Return to Performance	April 2020	The American Journal of Sports Medicine	doi. org/10.1177/03635465 20912218	
Mathew Wilson	Repeated sprint cycling performance is not enhanced by ischaemic preconditioning or muscle heating strategies	April 2020	European Journal of Sport Science	doi.org/10.1080/17461 391.2020.1749312	
Mathew Wilson	A novel mixed living high training low intervention and the hematological module of the athlete biological passport	Jan 2020	Drug Testing and Analysis	doi.org/10.1002/ dta.2723	
Mathew Wilson	Does passive heat acclimation impact the athlete's heart continuum?	March 2020	European Journal of Preventive Cardiology	doi. org/10.1177/20474873 19836522	
Mathew Wilson	Sudden Cardiac Death in Athletes: Incidence, Causes and Prevention Strategies	April 2020	Textbook of Sports and Exercise Cardiology	doi.org/10.1007/978-3- 030-35374-2_5	
Mike Loosemore	Sports-related concussion (SRC) in road cycling: the Roadslde heaD Injury assEssment (RIDE) for elite road cycling.	Feb 2020	Br J Sports Med	doi: 10.1136/ bjsports-2019-101455.	
Mike Loosemore	Prospective associations of cardiovascular disease with physical performance and disability: A longitudinal cohort study in the Osteoarthritis Initiative.	Feb 2020	Wien Klin Wochenschr	doi: 10.1007/s00508- 019-01567-y.	
Mike Loosemore	Concussion Guidelines in National and International Professional and Elite Sports.	Aug 2020	Neurosurgery	doi: 10.1093/neuros/ nyaa057.	
Mike Loosemore	Associations between self- reported physical activity and oral health: a cross-sectional analysis in 17,777 Spanish adults	Mar 2020	Br Dent J	doi: 10.1038/s41415- 020-1306-3.	
Mike Loosemore	Integrated sports and respiratory medicine in the aftermath of COVID-19.	Sept 2020	The Lancet Resp Med	doi: 10.1016/S2213- 2600(20)30307-6.	
Mike Loosemore	Identification of Research Priorities in Exercise Oncology: A Consensus Study.	Feb 2020	J Cancer	doi: 10.7150/jca.42992.	
Mike Loosemore	Salivary IgA as a Potential Biomarker in the Evaluation of Respiratory Tract Infection Risk in Athletes.	Aug 2020	J Allergy Clin Immunol Pract.	doi: 10.1016/j. jaip.2020.07.049.	
Mike Loosemore	Respiratory health in athletes: facing the COVID-19 challenge.	June 2020	The Lancet Resp Med	doi: 10.1016/S2213- 2600(20)30175-2.	

NAME OF ISEH CONTRIBUTOR	TITLE OF PAPER	DATE	PUBLICATION	ADDITIONAL REFERENCING DETAILS	OUTPUT COLLABORATORS (names of other contributors)
James Hull	Lung function testing in the COVID-19 endemic	July 2020	The Lancet Resp Med	doi: 10.1016/S2213- 2600(20)30246-0.	
James Hull	Cardiopulmonary exercise testing in the COVID-19 endemic phase	2020	Br J Anaesth	doi: 10.1016/j. bja.2020.06.006.	
James Hull	High prevalence of exercise- induced stridor during Parkrun: a cross-sectional field-based evaluation.	2020	BMJ Open Respir Res	doi: 10.1136/ bmjresp-2020-000618.	
James Hull	Is the Healthy Respiratory System Built Just Right, Overbuilt or Underbuilt to Meet the Demands Imposed by Exercise?	2020	J Appl Physiol	doi: 10.1152/ japplphysiol.00444. 2020.	
James Hull	The impact of a heat and moisture exchange mask on respiratory symptoms and airway response to exercise in asthma.	June 2020	ERJ Open Res.	doi: 10.1183/23120541. 00271-2019.	
James Hull	ARTP statement on pulmonary function testing.	Jul 2020	BMJ Open Respir Res.	doi: 10.1136/ bmjresp-2020-000664.	
Bruce Paton	The adapted Zelen was a feasible design to trial exercise in myeloma survivors.	Sept 2020	J Clin Epid	doi: 10.1016/j. jclinepi.2020.04.004.	
Bruce Paton	Fatigue, quality of life and physical fitness following an exercise intervention in multiple myeloma survivors (MASCOT): an exploratory randomised Phase 2 trial utilising a modified Zelen design.	Jul 2020	Br J Cancer	doi: 10.1038/s41416- 020-0866-y.	
lan Needleman	Implementation of a behavioural change intervention to enhance oral health behaviours in elite athletes: a feasibility study.	Jun 2020	BMJ Open Sport Exerc Med.	doi: 10.1136/ bmjsem-2020-000759.	
Guido Pieles	The adolescent athlete's heart; A miniature adult or grown-up child?	Aug 2020	Clin Cardiol	doi: 10.1002/clc.23417.	
Guido Pieles	Characterisation of LV myocardial exercise function by 2-D strain deformation imaging in elite adolescent footballers.	Oct 2020	Eur J Appl Physiol	doi: 10.1007/s00421- 020-04510-6.	

NAME OF ISEH CONTRIBUTOR	OUTPUT TYPE	TITLE OF OUTPUT (e.g. title of paper/ conference/ award etc)	DATE OF OUTPUT	SOURCE OF OUTPUT (e.g. journal title, host of conference etc)
Hugh Montgomery	Invited Talk	Climate Change and Health	May 2020	Westminster Academy
Hugh Montgomery	Invited Talk	Climate Change and Health	May 2020	West Midlands Physicians Association
Hugh Montgomery	Invited Talk	Hypoxic adaptation	Jan 2020	North Thames Anaesthetic Winter Meeting
Hugh Montgomery	Invited Talk	Genetics of survival	Jan 2020	North Thames Anaesthetic Winter Meeting
Hugh Montgomery	Invited Talk	Determinants of athletic performance	Jan 2020	North Thames Anaesthetic Winter Meeting
Hugh Montgomery	Invited Talk	Global environmental health	Jan 2020	North Thames Anaesthetic Winter Meeting
Hugh Montgomery	Invited Talk	Muscle wasting in crucial care	Jan 2020	North Thames Anaesthetic Winter Meeting
Hugh Montgomery	Invited Talk	Artificial Intelligence in Medicine	Jan 2020	North Thames Anaesthetic Winter Meeting
Hugh Montgomery	Invited Talk	COVID	March 2020	Price Waterhouse
Hugh Montgomery	Media	CoVid	March 2020	Chris Evans Radio Show (Virgin Radio)
Hugh Montgomery	Media	CoVid	April 2020	Chris Evans Radio Show (Virgin Radio)
Hugh Montgomery	Media	CoVid	March 2020	Victoria Derbyshire (BBC Radio)
Hugh Montgomery	Media	CoVid	April 2020	Victoria Derbyshire (BBC Radio)
Hugh Montgomery	Media	CoVid	March 2020	Channel 4 News
Hugh Montgomery	Media	CoVid	April 2020	Channel 4 News
Hugh Montgomery	Media	CoVid	May 2020	Channel 4 News
Hugh Montgomery	Media	CoVid	May 2020	ITN News
Hugh Montgomery	Media	CoVid	April 2020	ABC Breakfast (Australia
Hugh Montgomery	Media	CoVid	May 2020	ABC Breakfast (Australia
Hugh Montgomery	Media	CoVid	Sept 2020	ABC Breakfast (Australia
Hugh Montgomery	Media	CoVid	May 2020	RT Radio
Hugh Montgomery	Media	CoVid	May 2020	RT Radio
Hugh Montgomery	Media	CoVid	Sept 2020	RT Radio
Hugh Montgomery	Invited Talk	AI AND HEALTHCARE	Feb 2020	EMC3 Berkeley Square briefing
Hugh Montgomery	Conference Speaker	How the Light Gets In (Hay Festival)	May 2020	

NAME OF ISEH CONTRIBUTOR	OUTPUT TYPE	TITLE OF OUTPUT (e.g. title of paper/ conference/ award etc)	DATE OF OUTPUT	SOURCE OF OUTPUT (e.g. journal title, host of conference etc)
Hugh Montgomery	Media	Covid	March 2020	Contributor, Channel 4 Dispatches
Hugh Montgomery	Media	Covid	March 2020	Vanessa Feltz (BBC Radio)
Hugh Montgomery	Media	Covid	April 2020	Vanessa Feltz (BBC Radio)
Hugh Montgomery	Media	Covid	May 2020	Vanessa Feltz (BBC Radio)
Hugh Montgomery	Conference Speaker	Covid	April 2020	Big Tent Festival
Daniel Coughlan	Other	Strength and Conditioning in Golf – How did Bryson get so big?	August 2020	BJSM podcast
Rahul Patel	Invited Talk	Biological Knee Society - live surgical demonstration and faculty	Jan 2020	Downing College, Cambridge
Rahul Patel	Conference Speaker	Royal Society of Medicine Sports Orthopaedics & Sports Medicine meeting - Avulsion injuries in Paediatrics	Jan 2020	Royal Society of Medicine
Rahul Patel	Conference Speaker	Royal Society of Medicine Sports Orthopaedics & Sports Medicine meeting - Tibial tubercle osteotomies	Jan 2020	Royal Society of Medicine
Rahul Patel	Other	How to get the best out of your Total Knee Replacement - podcast	April 2020	Joint School Live
Rahul Patel	Other	Evolution of ACL treatment - international webinar	May 2020	Arthrex OrthoEnageg Series
Rahul Patel	Other	Meniscal root and ramp repair - international webinar	Sept 2020	Arthrex OrthoPaedia Series
lan Needleman	Invited talk	Oral health, elite sport and performance	Jan 2020	ISEH/RSM
lan Needleman	Invited moderator	Oral health, elite sport and performance	Sep 2020	Federation Dentaire Internationale (FDI)
lan Needleman	Invited talk	Oral health, elite sport and performance	Oct 2020	International Association of Dance Medicine and Science (IADMS)
lan Needleman	Invited talk	Oral health, elite sport and performance	May 2020	University of Liege, Belgium



WITH YOU 100%

www.iseh.co.uk

