#### Augustus Thorndike, M.D. 1896-1986

The "Father of Sports Medicine in the United States" is the late Dr. Augustus Thorndike. A member of the Harvard College class of 1919 and a 1921 graduate of Harvard Medical School, Dr. Thorndike spent more than three decades caring for the growing population of Harvard athletes, while serving as the chief of surgery for the Harvard University Health Service. He was a surgeon on the staff of the Massachusetts General Hospital.



Dr. Thorndike seemed unaware he was on the threshold of developing a new specialty. He simply focused on providing

thoughtful, comprehensive care to every patient, including Harvard athletes. In 1926, Dr. Thorndike was appointed physician to the Harvard hockey team. "It was the first time any hockey team anywhere, pro or otherwise, ever had a doctor present at games," he noted. In his new role, he insisted that all players wear helmets. This was the beginning of the Thorndike "canon" – a comprehensive list of rules and practices designed to preserve the health of the athlete. He designed a multitude of taping and bandaging techniques to prevent recurrent injuries, invented new braces and protective splints and casts, and designed and improved padding and protective gear for football players, notably the suspension helmet.

More importantly, Dr. Thorndike developed major sports medicine principles that in the 1930s represented breakthrough thinking. He decreed that every contact sport must have a physician in attendance at all games, established that physicians, not managers or coaches, would determine whether or not an athlete should play, and decided that any player who suffers three concussions should be barred from playing contact sports. These rules formed the basis for the modern discipline of sports medicine.

Dr. Thorndike also introduced nutritional guidelines for athletes, initiated on-site use of x-ray equipment – something unheard of at the time, and whirlpools. He upgraded the examination rooms and devised a meticulous record-keeping system. He wrote the first book in the United States on sports medicine, "Athletic Injuries" and "A Manual of Bandaging, Strapping & Splinting."

After he retired in 1962, Dr. Thorndike received an honorary degree from Harvard.

Previous Augustus Thorndike Lecturers are Ramon Cugat, MD, PhD (2008), Mitsuo Ochi, MD (2009), Robert E. Leach, MD (2010), Frank R. Noyes, MD (2011), James R. Andrews, MD (2012), Matthew T. Provencher, MD (2013), Neal S. ElAttrache, MD (2014), Jo A. Hannafin, MD, PhD (2015), David W. Altchek, MD (2016), K. Donald Shelbourne, MD (2017) and Scott A. Rodeo, MD (2018).

## MASSACHUSETTS GENERAL HOSPITAL DEPARTMENT OF ORTHOPAEDIC SURGERY

# 12<sup>TH</sup> ANNUAL AUGUSTUS THORNDIKE LECTURE

*Marcus C.C.W. Elliott, MD* Founder and Director, P3 Applied Sports Science

## "Sports Science in Professional Sports"



Thursday, October 17, 2019 6:45 am - 7:45 am



Massachusetts General Hospital O'Keeffe Auditorium





**Marcus C.C.W. Elliott, MD** is a Harvard-trained physician and exercise scientist and an internationally recognized leader in performance enhancement and injury prevention. For more than two decades, Dr. Elliott has been pioneering the use of sports science technologies and athlete assessment data in professional sports. In 2005, Dr. Elliott founded P3 Applied Sports Science. He and his team have redefined how we analyze athletes and use athlete data for injury prevention and performance optimization in professional sports. At P3, Dr. Elliott leads a team of nearly 20 sports scientists, engineers, and data scientists.

Prior to his work at P3, Dr. Elliott worked in research and athlete development with a number of Olympic athletes and organizations and U.S. professional teams. His first professional sports team position began in1999 with the New England Patriots, where as their injury prevention and performance specialist he launched a successful multidisciplinary prevention program. In 2010, Dr. Elliott became the first ever Director of Sports Science and Performance in Major League Baseball. Dr. Elliott now consults with dozens of top organizations in professional sports, including about half the teams in the NBA.

Utilizing a deep longitudinal athlete assessment database, Dr. Elliott and his team are now working to harness powerful machine learning and cognitive computing tools to create more insight and better models in the performance and injury space. He is confident that "big data" will begin to allow us to unlock many of the hidden codes of sport and movement, and most importantly, to create practical advantages for athletes.

Dr. Elliott lives in Santa Barbara California with his wife Nadine and their three children.

### Thursday, October 17, 2019 Massachusetts General Hospital Department of Orthopaedic Surgery

### 12<sup>TH</sup> ANNUAL AUGUSTUS THORNDIKE LECTURE

O'Keeffe Auditorium 6:45 am - 7:45 am

6:45 am	Welcome	Peter D. Asnis, MD Chief, Sports Medicine Service, Department of Orthopaedic Surgery, MGH Instructor of Orthopaedic Surgery, HMS
6:50 am	<b>Overview</b> 'Augustus Thorndike, MD - Father of Sports Medicine in the United States'	Bertram Zarins, MD Chief Emeritus, Sports Medicine Service, Department of Orthopaedic Surgery, MGH Augustus Thorndike Clinical Professor, Orthopaedic Surgery, HMS
6:55 am	Introduction	Bertram Zarins, MD
7:00 am	"Sports Science in Professional Sports"	Marcus C.C.W. Elliott, MD
7:30 am	Discussion	Bertram Zarins, MD
7:45 am	Wrap-up / Adjourn	Peter D. Asnis, MD