



2019 Brain Health and Performance Summit

Welcome to the 2019 Global Brain Health and Performance Summit, hosted by The Ohio State University Wexner Medical Center and the Stanley D. and Joan H. Ross Center for Brain Health and Performance.

We bring together leaders across all fields of brain health and performance to share, discover and challenge our colleagues for deeper, broader and better understandings related to the complex questions within the field of neuroscience.

If you too are dedicated to decoding the mysteries of the human brain for the betterment of society, join us in Columbus, Ohio for this incredible event.

An Evening with Dale Earnhardt Jr.

NASCAR royalty Dale Earnhardt Jr. will spend an evening with summit attendees and community members discussing his public journey recovering from the traumatic brain injury he suffered at the wheel of the number 88 Chevrolet SS. Joining Earnhardt Jr. is internationally renowned sports-concussion expert Micky Collins, PhD, who helped guide the driver through his recovery. Together, they will cover the effects of concussion, the "return to race" pressures faced by injured professional drivers and Earnhardt's journey to recovery.

Collins, a 2019 Brain Health & Performance Summit keynote speaker, also penned the foreword to Earnhardt Jr.'s memoir, *Racing to the Finish: My Story*, a chronicle of Earnhardt's struggles with long-lasting concussion symptoms and how he managed to close out his career on his own terms.

Wednesday June 5

Day One: Brain Health and Sport: A Focus on Concussion and Mental Wellness

How is new research changing the way we diagnose and treat concussions? How does the timing of physical therapy affect recovery? And how does an emphasis on sports psychology improve the emotional well-being and physical performance of student athletes? Experts from across the country bring their experience and analysis to the table in this comprehensive examination of traumatic brain injury and mental health.

Presentations

- Walking the Walk and Talking the Talk: What Does the Treadmill Tell Us About Concussion?
- Neuroimaging of Chronic Mild Traumatic Brain Injury
- Management of Complex Sports Concussion
- More Than A Clipboard: Navigating the Mental Health Continuum of Today's Athlete
- Return to Learn: School-Based Concussion Management Program in Columbus City Schools
- Partner-Inflicted Brain Injury: An Under-Recognized Cause of Concussion
- "PINK" Concussion - Sex, Gender and Why Both Matter
- Chatter: Dialogue on Mental Health of the Modern Athlete

Thursday June 6

Day Two: Technology and Analytics

Professionals in nearly any industry can benefit from these presentations on creative problem-solving, dazzling new technology and the ethics of data-gathering. What is the future of wearable technology? What ethical and legal responsibilities exist when wearables' health data is collected? How are XR and AI influencing human potential for physical and cognitive performance? And how can "design thinking" improve our problem-solving skills?

Presentations

- Cognition and Technology
- Design Thinking
- Future of XR in Healthcare Disruption
- Whose Data Is It?
- Turning Data Into Insights Using Cloud-Based Data Management and Analytics
- Virtual Reality Platform for Distraction During Pediatric Intravenous Procedures

- Creating a "Third Culture" for the Human Domain? Artificial Intelligence and the Social Sciences
- Creativity & The Brain

Friday June 7

Day Three: Pain and Performance

While an opioid addiction epidemic sweeps the United States, we still face an epidemic of chronic pain, with some 100 million people in some form of pain management treatment throughout the country. How do healthcare providers, researchers and patients work together to find root causes and new, effective treatments for that pain? Internationally respected researchers and clinicians discuss how to give patients their life back through orthobiologics, neuro-visual stimulation, mindfulness and other treatments.

Presentations

- The Role of Orthobiologics for Pain Management
- Opioids in Chronic Pain Management: "Wait a sec, is that still a thing?"
- Interventional Pain Therapies – Tools in the Toolkit for Severe Pain
- Enhancing Neuromodulation-Induced Analgesia Through Personalized Neuro-Visual Stimulation
- Role of Diet in Chronic Pain and Reconditioning
- Giving Patients Their Lives Back: A Mental Health Provider's Experience in a Specialty Pain Clinic
- rTMS for Chronic Pain: It Works and It's Here
- A Balanced Approach to Pain Management
- Keynote Speaker - Cannabis: Therapeutic Use for Pain and Mental Health

Speakers

Jeremy Abbate

VP & Publisher

Scientific American

Jeremy A. Abbate is the VP & Publisher of Scientific American, Scientific American MIND and SA Worldview. He is responsible for developing and executing new media programs, brand extensions and collaborative ventures serving the international opinion leadership that turns to Scientific American and its related titles for the best views of the future.

As the founder of Scientific American's Worldview enterprise, a global exploration of health and life science innovation produced in collaboration with the Biotechnology Innovation Organization, he leads the teams that create its content, distribution network and visibility platforms for its sponsors.

He has made many appearances at conferences and events to facilitate high-level discussions on innovative science and technology. He has spearheaded co-branded partnerships with several international organizations including the TEDMED, the Bill & Melinda Gates Foundation and The Carter Center. Working to bring important scientific ideas into a dynamic media environment, he has led projects serving some of the world's largest corporate organizations, including Colgate Palmolive, Procter & Gamble, Philips, Life Technologies and Amgen.

Additionally, he leads several content and product initiatives at Scientific American that serve the educational and STEM markets. Abbate was previously the director of New Business for The Scientist magazine, a media entity servicing working scientists and industry leaders.

He serves on the advisory board for The Global Wellness Institute.

Alicia Almond, PT, DPT, NCS

Physical Therapist

The Ohio State University

Alicia Almond received her Bachelor of Applied Health Science degree with a specialization in pre-physical therapy from Bowling Green State University in 2011. She received her Doctorate of Physical Therapy from The Ohio State University in 2014. Dr. Almond completed the Neurologic Physical Therapy Residency program at The Ohio State University in 2015, and she currently works in outpatient neurologic rehab as the Outpatient Rehabilitation Brain Injury Team program coordinator, a member of the spinal cord injury team and NeuroRecovery Network and an active member of Ohio State's Adapted Sports and Wellness program. Dr. Almond is a board certified neurologic clinical specialist, as well as a faculty member for the Ohio State University Neurologic Physical Therapy Residency.

Hisham Awan, MD

Associate Professor, Orthopedic Surgery

The Ohio State University

As a hand and upper extremity orthopedic surgeon at The Ohio State University Wexner Medical Center, Hisham Awan, MD, specializes in surgeries of the hand, wrist, elbow and shoulder. Upper extremity surgeons must be well-versed in different surgical techniques, including trauma, sports related injuries, joint replacement, tendon repairs and transfers, nerve repair and reconstruction, arthroscopy, microsurgery and many others.

Dr. Awan currently is the associate program director for education within the Ohio State University Orthopedic Residency. He also helped establish the Ohio State University Hand and Upper Extremity Fellowship.

Christopher Bailey, PhD, ABPP-CN

Associate Professor, Neuropsychology

Case Western Reserve University

Christopher Bailey, PhD, ABPP-CN, is a neuropsychologist and associate professor of neurology at the Case Western Reserve University School of Medicine. He also serves as the director of the UH Sports Medicine Concussion Center and the director of the Concussion Program for the Neurological Institute at University Hospitals Cleveland Medical Center. Dr. Bailey is also the founding director of the Adult Neuropsychology Post-Doctoral Fellowship

Program at University Hospitals Cleveland Medical Center. He completed his graduate training at Penn State University before completing an internship in neuropsychology at the University of North Carolina School of Medicine and serving as the chief fellow in neuropsychology at the University of Virginia School of Medicine.

At University Hospitals in Cleveland, Dr. Bailey has worked collaboratively with multiple departments and specialties to update, integrate and standardize concussion management services across a large hospital system, including developing a network of multidisciplinary concussion specialists with the goal of improving concussion identification and management on and off the sports field. Clinically, he has assisted in the neuropsychological management of concussion in all contexts, including work at all levels of sport. His current clinical roles include being the neuropsychological consultant to the Cleveland Browns and the Cleveland Monsters, as well as assisting in the management of sports concussion at multiple colleges/universities, high schools and youth sport organizations in northeast Ohio. Dr. Bailey is active in several national neuropsychology organizations, including being a board member and fellow of the Sports Neuropsychology Society. He is the principle investigator on several research projects focused on advancing our understanding of how to facilitate clinical recovery following sports concussion, through both a fuller understanding of how to objectively identify the injury as well as to better understand the effectiveness of clinical interventions with concussed athletes.

Michael Baria, MD

Associate Professor, Physical Medicine & Rehabilitation

Sports Medicine

The Ohio State University

As a former collegiate wrestler who underwent four knee surgeries, Michael Baria, MD, is passionate about helping athletes and active individuals ward off the effects of old injuries and combat the effects of time on the injured joint. A sports medicine physician at The Ohio State University Wexner Medical Center, his special clinical and research interests include using orthobiologic treatments that restore health to injured tissue, with the goal of stopping the damaging joint process. His goal for each patient is to eliminate sore joints so that they can maximize their quality of life.

Dr. Baria is a USA Wrestling physician, a community high school team physician and a co-lead of Sports Orthobiologics at the Ohio State Wexner Medical Center. He established an Ohio State Sports Orthobiologic Outcomes Database that allows healthcare providers to track patient progress for years in order to optimize treatment plans.

James Borchers, MD

Associate Professor, Family Medicine

Sports Medicine

The Ohio State University

James Borchers, MD, specializes in sports medicine at The Ohio State University Wexner Medical Center, where he provides care for injuries and medical conditions that affect a patient's ability to be active throughout his or her lifetime.

Dr. Borchers played football at The Ohio State University from 1989 to 1993, and the physicians who cared for him when he was a student-athlete inspired him to pursue a career in medicine. As a former athlete, Dr. Borchers enjoys helping patients of all ages

recover from injuries and return to the activities they enjoy. He sees patients for acute sports injuries, overuse sports injuries and chronic musculoskeletal conditions.

When not working, Dr. Borchers enjoys spending time with his family, traveling and running.

Steve Broglio, PhD

Professor, Athletic Training

University of Michigan

Steven Broglio is a professor of kinesiology, neurology and physical medicine and rehabilitation at the University of Michigan in Ann Arbor. Dr Broglio completed his training at the University of Georgia in 2006 and took his first faculty position at the University of Illinois at Urbana-Champaign. He has been at the University of Michigan since 2011.

As director of the Michigan Concussion Center, Dr. Broglio oversees clinical care, educational outreach and multi-disciplinary research aimed at fundamental questions on concussion prevention, identification, diagnosis, management and outcomes. His research has been supported by the National Athletic Trainers' Research and Education Foundation, the National Institutes of Health, the National Collegiate Athletic Association and the Department of Defense, and it is chronicled in medical journals and book chapters. Dr. Broglio was awarded the Early Career Investigator Award by the International Brain Injury Association, the Early Career Award by the National Athletic Trainers' Association and a fellowship in the American College of Sports Medicine and National Athletic Trainers' Association.

Twitter: @UMichConcussion

Will Burrus

Founder and CEO, Modern Technologies

Entrepreneur

Will Burrus is a visionary technology entrepreneur and executive known for taking highly complex technology concepts and translating them into practical, accessible business opportunities for everyone. He has built a successful career out of leveraging his extensive infrastructure, application development and interactive experiences to start companies, build products, drive campaigns and optimize business processes in various industries.

Over the last 20 years, Will has held leadership positions with companies in the corporate sector, advertising and international manufacturing. With his own consultancy, 247 Interactive, Will was a founding sponsor of the Ohio Interactive Awards and enjoyed frequent public speaking engagements on opportunities created at the intersections of technology and business.

As an entrepreneur, Will has founded seven companies, providing innovative solutions to critical challenges in health care, the music industry, human resources and, most recently, augmented and virtual reality. Notable products that he has envisioned and taken to market are an independent music distribution application for which he was featured on CNBC in 2004, and a voice-driven programming language designed to leverage artificial intelligence and chat-based messaging to make programming easier for non-technical people. Most recently, he developed an algorithm, assessment and score called the Development Quotient, which can quantify how people work in the form of a number, for which he was awarded a patent in 2015.

Currently, Burrus is the founder and CEO of immersive.is, a virtual reality content creation studio exploring the limits of cognition and empathetic response in simulated environments.

Andrew Chacko, MD

Founder of ChackoMD

J. Andrew Chacko, MD, MSE, is the founder of ChackoMD, a company formed to drive healthcare innovation. Dr. Chacko is the only practicing clinician to have graduated from Stanford University's Product Design program that pioneered "design thinking," and he seamlessly knits together years of expertise in three seemingly disparate cultures. He built his deep understanding of health care through clinical experience as a board certified psychiatrist, an attending physician, a private clinic director and a medical director for a Veterans Affairs addiction consultation and treatment program. His hard-won acumen as a leader and team-builder began long before his admittance to the U.S. Naval Academy and continued through his career as a naval officer and beyond. His singular mission is to help institutions and people transform the future of health care, teaching his design thinking principles around the world.

Micky Collins, PhD

UPMC Sports Medicine Concussion Program Director

Michael "Micky" Collins, PhD, is an internationally renowned expert in sports-related concussion and serves as director and a founding member of the UPMC Sports Medicine Concussion Program. Established in 2000, it remains the largest research and clinical program focused on the assessment, treatment, rehabilitation, research and education of sports-related mild traumatic brain injury in athletes of all levels, and it attracts patients embodying youth, high school, collegiate and pro athletes with concerns about safe return to play and clinical management and treatment of sports concussion.

Collins also has been a lead author and investigator on numerous groundbreaking studies of high school and college athletes published in JAMA, Neurosurgery, American Journal of Sports Medicine and Pediatrics and has authored or co-authored over 110 peer-reviewed research articles. Dr. Collins has upward of \$10 million in funding for his research efforts.

Nationally, Dr. Collins has been an instrumental source in developing concussion-management policy in youth sports, state legislation on youth safety and the Centers for Disease Control's concussion toolkit, and he is pioneering targeted treatment pathways for his patients. He is a co-founder of ImPACT (Immediate Post-Concussion Assessment and Cognitive Testing). He is a leader in educating and implementing the proper usage of such baseline and post-injury neurocognitive testing as one tool to help determine an injury's severity and recovery for safe return to play.

Collins also advises numerous athletic organizations – NFL teams, including the Pittsburgh Steelers, the NHL Penguins, MLB clubs and several NCAA programs. He serves as an associate editor of the Journal of Neurosurgery and the Journal of Sports Neurology.

Mark D'Esposito, MD

Professor, Psychology

University of California, Berkeley

Mark D'Esposito, MD, earned his medical degree in 1987 at the SUNY Health Science Center at Syracuse and completed clinical training in neurology at Boston University Medical Center in 1991. After residency training, he was awarded a NIH Javits Fellowship to pursue research training at the Memory Disorders Research Center at Boston University and Braintree Rehabilitation Hospital. In 1993, he was appointed Assistant Professor of Neurology at the University of Pennsylvania School of Medicine, where he later became chief of the Cognitive Neurology Division. In 2000, he was recruited to the Helen Wills Neuroscience Institute at the University of California Berkeley to become a professor of neuroscience and the director of the newly created Henry H. Wheeler Jr. Brain Imaging Center. He also practices neurology at the Northern California VA Medical Center.

Dr. D'Esposito's research investigates how the brain supports cognitive processing, how the brain recovers from injury and potential treatments for the injured brain. He has over 350 research publications, has written and edited six books and has received numerous competitive NIH research grants. He has trained over 75 graduate students and postdoctoral fellows and received many clinical and academic awards. He is currently the editor-in-chief of the Journal of Cognitive Neuroscience.

Markus Deutsch

CEO, Fusion Sports

Markus completed his PhD at the University of Otago in the Physiology of Rugby, during which time he also lectured in Advanced Athletic Strength & Conditioning and was a consultant Sport Scientist to the New Zealand All Blacks, Otago Highlanders and other elite athletes. His passion for using technology to monitor athletes and improve performance through highly specific fitness testing and training methods led Markus to return to Australia and start-up Fusion Sport in January 2003. His deep understanding of sports performance assessment, training and athlete monitoring allows him to guide the evolution of the SMARTSPEED products, SMARTABASE solutions and technical integration from a strong background as strength and conditioning coach and sport scientist. In his role as CEO Markus performs a wide range of functions including product development, marketing strategy, corporate relations and he maintains an active role in the market working with a range of clients and technology partners.

Nick Domicone

Director of Sports Science, Department of Athletics
The Ohio State University

Nick Domicone joined The Ohio State University in 2018. As the Director of Sports Science, he works to improve performance and reduce injury risk of all student athletes at Ohio State. In 2014, Nick received a Bachelor of Science degree in biomedical engineering with a specialization in biomechanics from The Ohio State University. During his undergraduate studies, he participated in an internship involving the design and production of various biomedical devices to be used by individuals with neurological and orthopedic impairments. He also participated in various biomedical research projects, including microfluidics and liquid lens technology. He is co-author of the latter, which is published in Optics Letters. He was also a member, vice president, and coach of the Ohio State University Men's Volleyball Club. Immediately after graduation, Nick worked as an engineer for TS Tech Americas, Inc., where he developed and tested new-model seats for Honda vehicles. In his two years there, he was the project lead for seven automotive projects, which are all currently in production.

In 2016, Nick accepted a position as a contractor for the United States Air Force Research Lab at Wright-Patterson Air Force Base, studying the use of wearable technology to enhance performance and reduce injuries of the modern warrior. He managed AFRL's interaction with sports science testing and workflow for The Ohio State University, University of Cincinnati, Columbus Crew Soccer Club, Air Force Special Operations Command and the Marine School of Infantry. He was also heavily involved with validation and testing of various wearable devices and recovery modalities.

Amy Dunn, MD

Associate Professor

Pediatrics- Nationwide Children's Hospital, OSU

Amy L. Dunn, MD is an Associate Professor of Pediatrics at Nationwide Children's Hospital/Ohio State University where she is the Director of Pediatric Hematology and directs the Hemophilia Treatment Center. Dr Dunn received her medical degree from Wright State University School of Medicine in Dayton, Ohio and completed her pediatric and pediatric hematology/oncology training at Emory University in Atlanta, Georgia. Dr Dunn is a member of various professional associations including the American Society of Hematology, World Federation of Hemophilia, The International Society of Thrombosis and Hemostasis, the International Pediatric Hemophilia Network, the International Prophylaxis Study Group and the Hemophilia and Thrombosis Research Society (HTRS). She has served as a reviewer for hematologic journals including Pediatric Blood and Cancer, the Journal of Thrombosis and Haemostasis, Blood and Haemophilia. She has published numerous peer-reviewed articles and has given presentations at national and international medical symposia. She has received awards that include US News and World Report Top Doctors, Castle Connolly Exceptional Women in Medicine, America's Most Honored Professionals, the Atlanta Business Chronicle Healthcare Hero for Healthcare Innovation, #What's Good Award at South by Southwest and The Children's Miracle Network Achievement Award. She has been a finalist for Most Wired Magazine Innovator Award and for the South by Southwest Health Medicine and Biotechnology Award.

David Eagleman, PhD

Neuroscientist, Bestselling Author

To most 'experts,' creativity is anecdotal: a highly personal, largely mysterious process that either speaks to you or doesn't. David Eagleman doesn't see it that way. He starts with neuroscience—how the brain actually functions—and shows that innovation doesn't have to be a private, enigmatic exercise. Knowing how the mind really works means that yes, we can understand human creativity—how it shapes and transforms companies, classrooms, and individual creators. His newest book is *The Runaway Species: How Human Creativity Remakes the World*: a stunning, full-color collaboration with composer Anthony Brandt on the foundations—and furthest reaches—of creativity. But this isn't just a celebration of our unique minds: it's a practical handbook, recently excerpted in *Wired* and *Psychology Today*, for building more creative companies and institutions. Essentially, it's about learning how we think—and learning how we can think differently.

"Innovation is energized by upsetting routine," Eagleman writes. So whether he's expounding on the careful balance—the sweet spot—between routine and novelty (the real reason to re-arrange your office!), or how leaders can embrace risk and disruption, he provides a vivid, inspiring guide to cultivating the right attitude for discovery. And for your organization, that means more excited partners, nimble processes, and faster, better ideas. Eagleman "really does make being a neuroscientist look like fun," writes *The New York*

Times. Often called the Carl Sagan of neuroscience, he's the scientific advisor on HBO's *Westworld* and a bestselling author. As the host of PBS' Emmy-nominated series *The Brain*, touted as a "whistle-stop tour into the inner cosmos," Eagleman stacked cups, swung baseballs, performed street experiments, and debunked illusions, proving the affable, charismatic tour guide through the most impressive series—in content and dazzling style—ever produced on neuroscience. A Guggenheim Fellow and winner of major awards—including the McGovern Award for Excellence in Biomedical Communication—he's also traded jokes with Stephen Colbert and been featured in Italy's *Style* magazine. That's the Eagleman enigma: a world-changer in *The New Yorker* who's also the Director of the Center of Science and Law; "the hottest thing in neuroscience," according to *The Times*, but also Vice-Chair on the World Economic Forum's Global Agenda Council, a Next Generation Texas Fellow, a board member of the Long Now Foundation, and a research fellow in the Institute for Ethics and Emerging Technologies. At Stanford University, he's an Adjunct Professor in the Department of Psychology and Behavioral Sciences—and, to the Society of Neuroscience, a Science Educator of the Year. But this doesn't stop him from founding companies (BrainCheck), advising for the TV drama *Perception*, or appearing on CNN's Next List.

These accolades—both popular and academic—prove Eagleman's rare ability to make advanced science relevant, immediate, and fun. Full of optimism and enthusiasm, he's also a fantastic keynote speaker. Regardless of audience, he can unpack the full range of applications (for memory, business, decision-making, education, the law, wearable technologies, and more) we get from a more nuanced understanding of the brain. His talk at TED2015 on creating new senses for humans—illustrated by his original invention, the VEST (or Versatile Extra-Sensory Transducer), which translates sounds into vibrations for deaf users—earned him a standing ovation on the main stage. His widely celebrated books include the New York Times bestseller *Incognito: The Secret Lives of the Brain* (which proposes "a grand new account of the relationship between consciousness and the brain," says *The New York Observer*) and *The Brain: The Story of You*, which Stephen Fry describes as such: "on every page there is a revelation so fantastic as to make one gasp." His short fiction collection *SUM* was named a Best Book of the Year by publications around the world, has been translated into 27 languages, and inspired U2 producer Brian Eno to write twelve new pieces of music, which he performed, with Eagleman, at the Sydney Opera House. A forthcoming book, *Livewired: How the Brain Rewrites Its Own Circuitry* (2018), presents a new theory of how the brain is actually a dynamic, adaptive system, able to reconfigure itself by using data absorbed from the outside world.

Dale Earnhardt Jr.

Professional Stock Car Driver

Dale Earnhardt Jr. is an American professional stock car driver, champion team owner, businessman and television analyst for NBC Sports Group. He began his racing career at 17 with his dad, Dale Earnhardt Sr. He won consecutive NASCAR Busch Series Championships in 1998 and 1999 and the Daytona 500 in 2004 and 2014. Dale lives in Mooresville, North Carolina, with his wife, Amy, and their daughter, Isla Rose.

Clare Edwards, MPH, CPH

Community Education and Initiatives Manager

Clare Edwards, MPH, CPH, graduated from the University of Pittsburgh's Graduate School of Public Health with a focus in behavioral and community health sciences. She has been vigorously involved in women's rights activism for several years with an academic background in neurotrauma. Her thesis work focused on brain injury among survivors of

domestic violence. She is currently a community education and initiatives manager based in central Ohio.

Emily Finn, PhD

Postdoctoral Fellow, Neuroscience and Human Neuroimaging
National Institute of Mental Health

Emily S. Finn, PhD, is a postdoctoral fellow in neuroscience and human neuroimaging at the National Institute of Mental Health. Her research uses functional magnetic resonance imaging (fMRI) to study the neurobiological basis of individuality. She discovered that each individual has a unique “fingerprint” of functional connections between brain regions, and that patterns in these fingerprints can be used to predict an individual’s level of fluid intelligence, among other cognitive abilities and personality traits. She holds a PhD in neuroscience from Yale University.

Her research has been published in *Nature Neuroscience*, *Nature Communications* and *Biological Psychiatry*, among other journals, and she serves on the editorial boards of *NeuroImage* and *Network Neuroscience*. She has given international lectures at the Society for Neuroscience, Organization for Human Brain Mapping and South by Southwest as well as many other forums on topics such as mapping functional connections in the brain, individual differences in brain function and predicting intelligence and other cognitive abilities from signatures of brain function. She has been interviewed on BBC, NBC, PBS and CBS, as well as in *The New York Times*, *Newsweek*, *Discover*, *Wired* and *Scientific American*.

Anna Goodale

Olympic Gold Medalist
Assistant Coach, Rowing
The Ohio State University

Anna Goodale is an Olympic gold medalist and four-time world rowing champion. She competed with National U.S. Rowing from 2005 to 2010. Anna started rowing at Syracuse University in 2001 as a walk-on.

After the 2010 World Championship, Anna decided to retire from rowing competitively and explore other opportunities. She worked in Wanaka, New Zealand, at Rippon Winery for a harvest before moving to Cuenca, Ecuador. She started her coaching career in 2014 at Gonzaga University, where she helped lead the team to their best finish in school history – 17th at NCAAs. She transitioned to her current position as the novice rowing coach at The Ohio State University in 2015. In the past three seasons, Ohio State has won three Big Ten championships, culminating in 2018 with winning all events for the first time in conference history. Anna is a mom to two young boys: Avery, age 6, and Owen, age 1.5.

Steve Graef, PhD

Sport and Performance Psychologist
The Ohio State University

Steve Graef, PhD, is a counseling, sport and performance psychologist at The Ohio State University Wexner Medical Center. He is the owner of Mindurance, an online private practice, and works as a sport psychologist for The Ohio State University Athletics. A former Buckeye football player, Dr. Graef has dedicated his professional work to helping athletes and other performers navigate the ups and downs of sport, performance and life. He enjoys reducing the stigma of mental illness by sharing his knowledge using passion, enthusiasm and a sense

of humor. Join him in this educational and entertaining discussion about navigating the variety of mental health related concerns in today's athletes and performers.

Jasmeet P. Hayes, PhD

Assistant Professor of Psychology, The Ohio State University

Dr. Hayes is currently Assistant Professor in Psychology and core faculty in the Chronic Brain Injury Discovery Theme at the Ohio State University. Her research focuses on the long-term effects of traumatic brain injury and chronic stress on the brain and cognition. Her work examines multiple levels of analysis, including neuroscience methods and genetics, to study vulnerability for accelerated brain atrophy, neurodegenerative disease, and cognitive difficulty after exposure to these conditions. Dr. Hayes graduated with High Honors from the University of California, Berkeley. She completed her Ph.D. in Clinical Psychology (specialization in Neuropsychology) at the University of Arizona. She recently received the Early Career Investigator Award from the International Brain Injury Association. As a licensed clinical psychologist, Dr. Hayes' clinical interests include neuropsychological assessment of TBI and PTSD.

Kevin Hill, MD, MHS

Beth Israel Deaconess Medical Center Addiction Psychiatry Director

Kevin Hill, MD, MHS, is the director of addiction psychiatry at Beth Israel Deaconess Medical Center (BIDMC) and an assistant professor of psychiatry at Harvard Medical School. He earned a master's in health science at the Robert Wood Johnson Clinical Scholars Program at the Yale School of Medicine. He most commonly treats patients who have problems with alcohol, cannabis or opioids. The author of Marijuana: The Unbiased Truth about the World's Most Popular Weed, Dr. Hill's research interests include the development of medications to treat cannabis use disorder as well as cannabis policy, and he has published widely on these topics in such journals as JAMA, JAMA Internal Medicine and Lancet Psychiatry. He was recently awarded a grant to summarize the research on the therapeutic use of cannabis, and he presented his findings to the World Health Organization's Expert Committee on Drug Dependence in Geneva, Switzerland, in June 2018. He serves on the editorial boards of Lancet Psychiatry, Cannabis and Cannabinoid Research and American Journal on Addictions. Dr. Hill has become a nationally recognized speaker on addiction topics due to his ability to connect with audiences and make complex concepts understandable. He gives balanced, evidence-based talks on cannabis, opioids and alcohol to a wide variety of audiences.

Gail Hogan

Founder, GMH Media. Ltd.

Broadcast Journalist

Gail Hogan is an Emmy award-winning broadcast journalist who has worked in TV and radio for over 30 years in Columbus, Ohio. Gail retired from TV news in September 2014. Gail has worked as a TV news reporter, news anchor, news magazine co-host, radio morning show personality, media trainer and, most recently, as the founder of her own business, GMH Media, Ltd. A few years ago, Gail founded, produced and hosted her own weekly TV talk show, Showcase Columbus. That weekly show was the foundation for the daily live program Daytime Columbus, where she acted as host and executive producer for seven years until retirement.

Gail also has a career as freelance talent. Her expertise includes on-camera and voiceover talent work. She spent most of her TV and radio years in Columbus, Ohio, working at WSYX-

TV, WCMH-TV, 610/TVN Radio and WLWQ-FM. Currently, Gail is partnering with The Ohio State University Wexner Medical Center's Richard M. Ross Heart Hospital on wellness and community health projects promoting heart health. Gail is a heart disease survivor and has spent more than 25 years working for the central Ohio Chapter of the American Heart Association. Her work with the organization is extensive. Gail was part of the Columbus Women's Heart Health initiative to bring attention to women's heart issues. That local project in part led to the national Go Red for Women campaign, now a nationwide American Heart Association program.

Matthew Kortes, MD

Director of Neurotherapeutics

The Ohio State University

Matthew Kortes, MD, is an assistant professor of clinical medicine and director of Neurotherapeutics within Physical Medicine and Rehabilitation at The Ohio State University Wexner Medical Center. Kortes is board certified in physical medicine and rehabilitation and treats complex medical conditions after orthopedic or neurologic injury. He also provides interventional spine procedures for pain reduction.

His research has focused on using ultrasound to diagnose musculoskeletal and peripheral nerve disorders, and using transcranial direct current stimulation to treat symptoms associated with fibromyalgia and to treat visual field loss.

Vibhor Krishna, MBBS

Associate Professor, Neurosurgery

The Ohio State University

As a neurosurgeon at The Ohio State University Wexner Medical Center, Vibhor Krishna, MBBS, specializes in neuromodulation and functional neurosurgery. When it comes to patient care, empathy is fundamental to Dr. Krishna's approach and interaction with patients. And as a clinician-scientist, he's involved in patient-centered research to improve and advance our care. He's very passionate about discovering new treatments for conditions that were originally thought to have no cure.

In this emerging field, Dr. Krishna improves patients' quality of life by applying electrical stimulation to the brain, spinal cord and nerves. This is based on the recognition that neurological disorders result from a dysfunction of the brain's networks. Dr. Krishna focuses on reversing these network dysfunctions to improve patients' symptoms.

Kurt Kroenke, MD, MACP

Professor of Medicine

Indiana University

Kurt Kroenke, MD, MACP, is a professor of medicine at Indiana University and a research scientist in the Regenstrief Institute. Dr. Kroenke is a past president of the Society of General Internal Medicine and a past president of the Association for Clinical Research Training. He recently chaired an American Academy of Pain Medicine Foundation Workgroup on Implementing the CDC Guidelines on Opioid Prescribing, as well as a VA Pain Measures Work Group charged with recommending core outcome measures in pain research.

Dr. Kroenke's research focuses on physical and psychological symptoms in medical patients, including pain, depression, anxiety and somatization. He has conducted more than a dozen

clinical trials funded by the NIH, VA, PCORI and other sponsors to improve the care of patients with common symptoms. These trials have used collaborative care models and, more recently, telecare interventions. He has also developed the PHQ-9 depression scale, GAD-7 anxiety scale, PEG pain scale and other brief patient-reported outcome measures that are widely used in clinical practice.

James Laurinaitis

Former OSU and NFL Linebacker

James Laurinaitis was inducted into the Ohio State Athletics Hall of Fame in September 2018 as the most decorated linebacker in Ohio State football history. A three-time consensus All-American who played on four Big Ten Conference championship teams, Laurinaitis made two appearances in a BCS championship game, setting a championship game record in 2008 with 18 tackles.

He won the Bronko Nagurski Award as the nation's most outstanding defensive player as a sophomore, took home the Butkus Award as America's top linebacker as a junior and became Ohio State's first winner of both the Lott IMPACT Trophy and the Lowe's Senior CLASS Award as a senior. He was a finalist 12 times for national awards during that three-year period. Leading Ohio State in tackles as a sophomore, junior and senior, Laurinaitis finished his career with 375 total tackles, the seventh-best in Buckeyes history. He was a two-time team captain for a defensive unit that led the nation in total defense in 2007 and was among the Top 15 defenses nationally every year he played.

Laurinaitis, a 2009 Ohio State graduate with a degree in communications, was drafted by the NFL's St. Louis Rams in 2009. He spent seven seasons with the Rams and was the organization's all-time leading tackler after seven seasons with the club. He also played one season with the New Orleans Saints. In April 2017, Laurinaitis announced his retirement from football. He now serves as a college football analyst for the Big Ten Network, co-host of radio network 97.1 The Fan's "Bishop and Laurinaitis" and an announcer on FOX Sports.

Russell Lonser, MD

Professor and Chair, Neurosurgery
The Ohio State University

Russell Lonser, MD, is a professor at The Ohio State University and the chair of The Ohio State University Wexner Medical Center's Department of Neurological Surgery. His research interests include neoplasia syndromes, direct nervous system drug delivery and tumor biology.

Dr. Lonser is studying the development of direct nervous system drug delivery paradigms for targeted therapy treatment of primary, brain stem and spinal cord tumors. He's also investigating tumor pathogenesis and the biology of familial neoplasia syndromes.

Joseph Maroon, MD

Vice Chairman, Neurological Surgery
University of Pittsburgh Medical Center

Joseph C. Maroon, MD, FACS, is clinical professor and vice chairman of the Department of Neurological Surgery and Heindl Scholar in Neuroscience at the University of Pittsburgh Medical Center. In addition to being a renowned neurosurgeon, he is a sports medicine expert, health and nutrition expert and Ironman triathlete. Dr. Maroon is regarded as a

premiere specialist in the surgical treatment of injuries and diseases of the brain and spine, specializing in minimally invasive procedures.

He obtained his medical and neurosurgical training at Indiana University, Georgetown University, Oxford University in England and the University of Vermont. He conducted extensive research into neurotrauma, brain tumors and diseases of the spine, which has led to many innovative techniques for diagnosing and treating these disorders. His research efforts garnered him numerous awards from various national and international neurological societies. Dr. Maroon has been the team neurosurgeon for the Pittsburgh Steelers since 1981 and is medical director of the World Wrestling Entertainment (WWE). He has successfully performed surgery on numerous professional football players and other elite athletes with potentially career-ending neck and spine injuries. Notably, he safely returned most to their high level of athletic performance.

Dr. Maroon is highly invested in the prevention and treatment of concussions in high school, college and professional sports, specifically football. While working with the Steelers in the early 1990s, he noted a lack of an objective, reliable instrument to evaluate concussion symptoms. To fill this void, he and Dr. Mark Lovell developed ImPACT™ (Immediate Post-Concussion Assessment and Cognitive Testing), an easy-to-administer, 20-minute-long test to assess presence and severity of concussion symptoms. ImPACT™ has become the worldwide standard tool to assess sports-related concussions and has been used in over 4.5 million athletes. In 1994, Dr. Maroon joined the National Football League's mild Traumatic Brain Injury Committee as concussion expert. This committee, which in 2007 was renamed National Football League's Head, Neck and Spine Committee, is still in place.

Tom McAllister, MD

Chairman, Indiana University School of Medicine Department of Psychiatry

Thomas W. McAllister, M.D., is the Albert Eugene Sterne Professor and Chairman, Indiana University School of Medicine Department of Psychiatry. Dr. McAllister has been working in the field of brain injury recovery for over 25 years. He has written widely on the neuropsychiatric sequelae of TBI, and has been the principal investigator of several grants focused on the biomechanical basis of concussion, and effects of concussion on brain structure and function in contact sport athletes. He is one of three Principal Investigators of the NCAA and Department of Defense funded Concussion Assessment, Research, and Education (CARE) Consortium, and leads the Administrative and Operations Core for that initiative.

Jennifer Miller, PhD

Assistant Professor, Medical Ethics

Yale School of Medicine

Founder and President of Bioethics International

Jennifer E. Miller, PhD, is an assistant professor at Yale School of Medicine, president of Bioethics International (a nonprofit dedicated to raising the bar on ethics and patient-centricity in healthcare innovation) and founder of the Good Pharma Scorecard (an index ranking new drugs and pharmaceutical companies on their ethics). Dr. Miller is also a member of The World Economic Forum, participating on the Biotechnology Future's Council, human enhancement working group and personalized medicine initiative. Previously, she was based at the NYU School of Medicine, Duke University and Harvard University, serving on NYU's Pharmacy and Therapeutics Committee, Stem Cell Research IRB and

Compassionate-Use Advisory Committee. She has also served on the CDC Task Force for Pediatric Emergency Mass Critical Care, AMA Advanced Disaster Life Support Education consortium, as a consultant to the UN Economic and Social Council and in the PCORI-NIH Collaboratory working groups on pragmatic clinical trials. Dr. Miller's current work explores the ethics and governance of how medicines, biologics and health technologies are researched, developed, marketed and made accessible to patients, as well as the ethics of big data, AI and machine learning in health care.

Prince Moody

Student-Athlete Development Manager

The Ohio State University

Prince Moody currently serves as the student-athlete development manager of Diversity & Health Initiative Programs at The Ohio State University in the Student-Athlete Support Services Office (SASSO). Prior to coming to The Ohio State University, Prince worked at the University of Wisconsin-Madison for several years. While at Wisconsin, Prince worked in the Office of Academic Services and, later, assisted in the creation of the Office of Student-Athlete Development and served as the coordinator of the Beyond the Game Program. As a former football student-athlete at the University of Wisconsin, Prince was a letterman and earned Academic All-Big Ten honors, was recognized twice as a Big Ten Distinguished Scholar and was a recipient of the NCAA Ethnic Minority and Women's Enhancement Postgraduate Scholarship for Careers in Athletics. Prince is also a published author and has contributed to several research projects—most recently with a chapter in the book *Black Males and Intercollegiate Athletics: An Exploration of Problems and Solutions*. Prince has his Masters of Science degree in educational leadership and policy analysis and a bachelor's degree from the University of Wisconsin-Madison.

Jose Moreno, PhD

Assistant Clinical Professor, Psychology

The Ohio State University

Jose L. Moreno, PhD, is an assistant professor and licensed clinical psychologist at The Ohio State University Wexner Medical Center in the Department of Psychiatry and Behavioral Health. He earned his master's degree in psychology at the Catholic University of America and doctoral degree in clinical psychology with a health emphasis at the University of Missouri–Kansas City. In his current work, he specializes in the treatment of chronic pain through psychotherapeutic interventions, primarily with the use of cognitive behavioral therapy and third-wave approaches. He works primarily with patients in the Comprehensive Spine Center at the Ohio State Wexner Medical Center and helps assess and treat chronic pain and comorbid mental health conditions. With the Department of Psychiatry and Behavioral Health, he is also involved with teaching and supervision of clinical psychology doctoral interns as well as medical residents. Dr. Moreno's research interests include the development of interventions to improve the conceptualization and management of chronic pain conditions in patients with comorbid psychiatric conditions such as post-traumatic stress disorder (PTSD), depression and substance use disorders. He has been published in topics such as tobacco cessation, motivational interviewing, treatment adherence, chronic pain and suicide risk prevention. He is currently working toward identifying psychological diagnosis and treatment factors that influence neuromodulation outcomes to improve interdisciplinary pain treatment plans in the hopes of opioid use disorder prevention and treatment.

Julianna Nemeth, PhD

Assistant Professor, Public Health
The Ohio State University

Julianna Nemeth, PhD, is a health behavior and health promotion scientist dedicated to conducting the scientific work needed to improve health and reduce disparities for those affected by violence and other traumatic exposures. Her research examines the social and contextual contributors to the disparate health behavior and health outcome consequences evidenced in adolescent and adult populations with a high prevalence of gender-based violence exposure. Dr. Nemeth holds special interest in optimizing behavioral change interventions to best meet the unique needs of gender-based violence survivors in order to prevent disease onset and progression within the population. Informed by nearly two decades of community work in sexual and intimate partner gender-based violence prevention and crisis response, and trained as a feminist theorist, she brings gender, culture, justice and community-practice lenses to the study of health behavior and the promotion of health equity.

Dr. Nemeth is currently an assistant Professor at The Ohio State University College of Public Health. She is the co-founder of the Ohio Alliance to End Sexual Violence, a 501(c)3 organization recognized by the Centers for Disease Control and Prevention and the Office on Violence Against Women as Ohio's coalition addressing sexual violence response and its prevention. Dr. Nemeth serves as the evaluator on an NIJ-funded demonstration grant (2016-2019) awarded to the Ohio Domestic Violence Network; this work focuses on the creation, implementation and evaluation of the C.A.R.E. model, designed by ODVN to increase organizational capacity of domestic violence (DV) service agencies in Ohio to better accommodate survivors with disability resulting from mental health or brain injury. Dr. Nemeth was also awarded a K07 Career Development Grant (2017-2022) from the National Cancer Institute to develop a smoking cessation intervention for homeless youth using novel, optimization methodology (Multiphase Optimization Strategy).

Joshua Perry

Former OSU and NFL Linebacker

Joshua Perry played as a linebacker with the Ohio State Buckeyes football team from 2012 to 2015, including during the Buckeyes' 2015 College Football Playoff National Championship. In 2016, the two-time All-Big Ten performer was drafted by the San Diego Chargers and became a leading tackler on special teams as a rookie. He was signed to the Indianapolis Colts in 2017.

In July 2018, Perry announced his retirement from football, citing six documented concussions. "The last thing I want to do is put the health of my brain and my future well-being in jeopardy over a game and a paycheck," he said in his announcement. Perry, a central Ohio native, is now a realtor and philanthropist who works closely with the Autism Speaks organization and recently unveiled the Joshua Perry Family Foundation to inspire youth to recognize and utilize their gifts to maximize their potential through education and arts initiatives, athletics, community service projects and fundraising activities for those with developmental disabilities.

Ruchika Prakash, PhD

Associate Professor, Psychology
The Ohio State University

Ruchika Prakash, PhD, is a recently tenured faculty member in The Ohio State University's Department of Psychology. She received her doctoral training in clinical psychology in 2009 at University of Illinois at Urbana-Champaign. Her laboratory has been taking the lead in examining the effect of mindfulness meditation as a cognitive and emotional rehabilitation tool for the elderly. In her short academic career, she has published at least 60 peer-reviewed journal articles, with many of her papers published in top tier psychology and neuroscience journals, such as Psychology and Aging, Proceedings of the National Academy of Sciences, NeuroImage, Cerebral Cortex and Developmental Psychology. She received the "Rising Star Designation" from the Association for Psychological Science in 2013 and an early career award in 2016 from Division 20 of the American Psychological Association.

Katherine Price Snedaker, LCSW

Executive Director and Founder, Pink Concussions

Katherine Price Snedaker, LCSW, is the executive director and founder of PINK Concussions, an international non-profit focused on female injury from sport, domestic violence/assault, accidents and military service. PINK Concussion's mission is to improve the care and recovery of women and girls by educating patients and medical professionals on sex differences in brain injury. PINK Concussion's mission is to educate the general public as well as civilian and military medical professionals on the sex/gender differences in brain injury in order to improve the pre-injury education and post-injury care and support for women and girls. Originally PINK Concussions was a website Katherine built in 2015 to publicize little-known, existing research on female brain injury. But now, PINK Concussions has grown to an international organization with medical summits and group members across the world.

Katherine has presented to patient and medical groups from the U.S. Army at Landstuhl Regional Medical Center (Germany) to the International Brain Injury Association's World Brain Injury Congress at the Hague. PINK Concussions and Katherine have been featured in such publications as Scientific American, Marie Claire, US News and World Report, The Washington Post, HEALTH magazine, STAT, Outdoor Magazine, The Associated Press, FiveThirtyEight, and Neurology Advisor. Katherine has appeared on "Good Morning America," NBC-CT, ESPN's "Outside the Lines" and Al Jazeera.

Kiran Rajneesh, MBBS

Neurologist and Pain Physician, The Ohio State University

Dr. Kiran Rajneesh is a board certified neurologist and pain physician at The Ohio State University Wexner Medical Center. His dual expertise, in both neurology and pain medicine, is relatively rare in physicians. He is director of Ohio State's Neurological Pain Division and assistant professor in the Departments of Neurology and Neurosurgery at the Ohio State Wexner Medical Center.

Rachel Ramirez

Training Director, Ohio Domestic Violence Network

Rachel Ramirez has worked with the Ohio Domestic Violence Network for 12 years and is currently its training director. Rachel oversees ODVN training initiatives and directs the implementation of a three-year, national demonstration grant focusing on developing best practice responses for domestic violence programs working with survivors who experience possible brain injuries and mental health challenges. Prior to this, Ramirez led a multi-year, statewide program on trauma-informed approaches. She has presented to hundreds of groups on multiple topics related to domestic violence and trauma, both in Ohio and across

the country, and co-authored Trauma-Informed Approaches: Promising Practices and Protocols for Ohio's Domestic Violence Programs.

Ramirez has over 15 years of experience in direct service provision, program planning and coordination, project management, research, training and program support. She is a bilingual licensed independent social worker with graduate degrees in Latin American studies and social work and is a registered advocate with senior standing in Ohio.

Joe Rogowski

Director of Sports Medicine and Research
National Basketball Players Association

Joe Rogowski is entering his third year consulting for the National Basketball Players Association. Prior to his role with the players association, he worked for 10 years in the NBA as a director of performance and as a certified athletic trainer. During that period, he worked with the Orlando Magic and the Houston Rockets and served as president of the strength coaches association. Currently, Rogowski advises the union and its members on research-driven medical and performance outcomes as well as preserving the health and safety of the athletes. In addition, he has been appointed to the NBA wearables committee, a first-of-its-kind for professional sports.

During the offseason, Rogowski presents on several sports medicine topics at various conferences, both nationally and internationally. He is a published author who co-wrote several articles for both The Journal of Strength & Conditioning and The Journal of Athletic Training. In 2013, he co-authored the book Conditioning and Strength for Human Performance. The NCAA had appointed Rogowski to its cardiac task force because of his unique research in the area of athlete cardiac physiology and preventive screening. Rogowski also participated in the 2012 London Olympics as Performance Director for Great Britain Basketball. Rogowski, originally from Chicago, graduated from DePauw University with a degree in sports medicine and athletic training. He earned his master's degree from the University of Central Florida in the field of exercise physiology. He is certified in both ATC/L and CSCS. Before working with the NBA, he worked with several other sports organizations, including the NFL's Buffalo Bills, MLS's Chicago Fire and Athletico Physical Therapy.

Riley Ross

Assistant Performance Coach, Wrestling, The Ohio State University

Riley Ross is an assistant performance coach and the director of Wrestling Sports Science & Development for the Ohio State University wrestling team. Ross, who is responsible for integrating analytics, technology and strength and condition strategies for Ohio State Wrestling, formerly was a tactical strength and conditioning specialist with 7th Special Operations Forces soldiers from an anti-terrorism task force in Florida. As an athlete, Ross was a two-time NCAA D-II All-American at Nebraska-Kearney.

Adam Russell, PhD

Program Manager, Defense Advanced Research Projects Agency (DARPA)

Adam H. Russell, PhD, joined the Defense Advanced Research Projects Agency (DARPA) as a program manager in July 2015. He is interested in new experimental platforms and tools to

facilitate discovery, quantification and "big validation" of fundamental measures in social science, behavioral science and human performance.

Dr. Russell has broad technical and management experience across a number of disciplines, ranging from cognitive neuroscience and physiology to cultural psychology and social anthropology. Before joining DARPA, he was a program manager at the Intelligence Advanced Research Projects Activity (IARPA), where he developed and managed a number of high-risk, high-payoff research projects for the Office of the Director of National Intelligence. Prior to IARPA, Dr. Russell was in industry, where he was a senior scientist and principal investigator on a wide range of human performance and social science research projects and strategic assessments for a number of different government organizations.

Dr. Russell holds a Bachelor of Arts in cultural anthropology from Duke University and an M.Phil. and a D.Phil. in social anthropology from Oxford University, where he was a Rhodes Scholar.

Per Sederberg, PhD

Associate Professor, Psychology

University of Virginia

Per B. Sederberg is an associate professor in the Department of Psychology at the University of Virginia. Prior to his position at UVA, he received his PhD in neuroscience from the University of Pennsylvania, where he studied the electrophysiological correlates of memory formation and retrieval in both clinical and general populations. He then spent four years as a postdoctoral fellow at Princeton University, studying computational modeling and machine learning applied to neural data.

Dr. Sederberg then worked as a professor in the Department of Psychology at The Ohio State University for seven years, where he was also an associate director of the Center for Cognitive and Brain Sciences and Chief Scientist in the Ross Center for Brain Health and Performance. He has been at UVA since 2017. As director of the UVA Computational Memory Lab, Dr. Sederberg combines computational modeling, neuroimaging, eyetracking, life-logging, virtual reality, and behavioral assessments with the goal of gaining a comprehensive mechanistic understanding of cognitive processing across the lifespan in clinical, high-performance, and general populations. Some of his recent work has focused on taking the study of memory and cognition from the lab to the real world, including the development of rapid cognitive assessment techniques that harness model-based approaches to quantify uncertainty in cognitive state and map performance to specific latent cognitive processes. His research has been supported by the Air Force Research Laboratory, the National Science Foundation, the Rudi Schulte Research Institute, and other public and private institutions.

Sara Timms, MEd, EdS

School Psychologist

Columbus City Schools

Sara Timms, MEd, EdS, received her bachelor's degree in psychology at Ohio University, then completed her graduate work in school psychology at Kent State University. She holds an MEd and EdS in school psychology. Timms received the School Psychologist of the Year Award in 2012 and has served on the School Psychologists of Central Ohio Board as well as the TBI Statewide Educators Network. She is currently part of CIAG (the Child Injury Action

Group Injury Prevention Coalition) and contributes to the TBI Sports and Recreation Sub-Committee.

She has worked as a school psychologist in the public school setting for 23 years, the majority of those being with Columbus City Schools. She has also been an intern and practicum supervisor for over 10 years. For the past 12 years, she has coordinated the Columbus City Schools Traumatic Brain Injury Project and Ohio Return to Learn School-Based Concussion Management Program. As the lead for the Columbus City Schools TBI Project and RTL Program, she's presented on the topic of brain injury and concussion and how schools can be better prepared to work with these students. She's also written articles about TBI and concussion in the schools, as well as reviewed and contributed to other publications.

Melissa Tornero-Bold, MD

Associate Professor, Anesthesiology Pain Management
The Ohio State University

As an anesthesiologist and pain medicine physician at The Ohio State University Wexner Medical Center, Melissa Tornero-Bold, MD, specializes in anesthesiology, pain medicine and neuromodulation. She's also credentialed in acupuncture. Dr. Tornero-Bold strongly believes in patient education, and her approach to patient care involves educating each of her patients so that they work together to create individualized care plans. Dr. Tornero-Bold is passionate about her career mainly because pain has the potential to cause so much disability. She works with patients to help them through this process in order for them to achieve the fullest life possible. When not working, Dr. Tornero-Bold likes spending time with her family and enjoying the outdoors.

Jayesh C. Vallabh, MD, MBA

Spine Physiatrist and Interventional Pain Management Physician, The Ohio State University

Jayesh C. Vallabh, MD, MBA, is a spine physiatrist and interventional pain management physician within The Ohio State University Wexner Medical Center's Comprehensive Spine Center and an assistant professor of clinical medicine in Physical Medicine & Rehabilitation at The Ohio State University. His research focuses include pain relief using high-dose spinal cord stimulation.

Catherine Quatman Yates, PhD

Assistant Professor, Health and Rehabilitation Sciences
The Ohio State University

As a physical therapist and researcher, Catherine Quatman Yates' greatest passion is helping others engage in safe and physically active lifestyles. She's inquisitive by nature, greatly enjoys the processes of data-driven knowledge discovery and dissemination, and she aspires to leverage physical therapy services and research efforts to cultivate measurable, positive change in the lives of patients and our healthcare systems in meaningful, scalable ways.

Broadly, her clinical expertise is in outpatient rehabilitation for sports injuries, orthopedic injuries and conditions, and mild traumatic brain injuries (mTBI)/concussions. Dr. Quatman Yates is diversely trained in the philosophies and methods for a variety of inquiry paradigms ranging from qualitative/naturalistic studies to more classical experimental and quasi-experimental research designs to complexity/system science approaches. My focused areas

of scholarship include physical therapy interventions for mTBI-related impairments and health services research (HSR).

Lori Walker-Hock

Head Coach, Women's Soccer
The Ohio State University

Lori Walker-Hock is a three-time Big Ten Coach of the Year, 2002 Big Ten Tournament Outstanding Coach and 2009 NSCAA Great Lakes Region Coach of the Year. She's now entering her 22nd season as the head coach for Ohio State University women's soccer. In addition to guiding the Buckeyes to 12 NCAA Tournament appearances and myriad other on-field successes, Walker-Hock heads a team that thrives in the classroom. For eight of the past nine years, the Buckeyes have earned the NSCAA College Women's Team Academic Award, earning a minimum GPA of 3.0. Also active in the development of youth soccer, Walker-Hock has served as a Region II Staff Coach for the U.S. Soccer Federation Olympic Development Program since 1996.

Kevin Weber, MD

Associate Professor, Neurology
The Ohio State University

As a neurologist at The Ohio State University Wexner Medical Center, Kevin Weber, MD, specializes in treating patients with sports concussions and migraines. Dr. Weber gets migraines himself and has always been interested in treating athletes with neurologic conditions. When seeing patients, Dr. Weber emphasizes tailoring evidence-based treatments that are specific to each person's individual needs, goals and expectations. When not working, Dr. Weber spends free time reading, keeping up on the news, traveling and watching the Buckeyes! He also loves tasting new craft beers and visiting sports stadiums he's never been to.