

## **Speaker Bios**

### **Robert C. Cantu, MD**

Director of the Dr. Robert C. Cantu Concussion Center at Emerson Hospital. Clinical professor of neurology and neurosurgery and co-founder of the CTE Center at Boston University School of Medicine. Senior Advisor, Brain Injury Center. Author of over 359 scientific publications, including 29 books on neurology and sports medicine, in addition to numerous book chapters, peer-reviewed papers, abstracts and free communications, and educational videos. He has served as associate editor of *Medicine and Science in Sports and Exercise* and *Exercise and Sports Science Review*, and on the editorial board of *The Physician and Sports Medicine*, *Clinical Journal of Sports Medicine*, and *Journal of Athletic Training*.

### **Terrie Enis, PT, MSPT**

Director of Ambulatory Services and Service Line Development. Terrie Enis is a seasoned health care leader with more than 25 years of experience in the rehabilitation field. She has expertise in orthopedic and spine rehabilitation that is highly related to sport-related injuries as well as interdisciplinary concussion care and prevention. Director Enis is the recipient of the New England Consortium of Academic Coordinators Clinical Education Instructor of Year, a significant recognition of the dedication in clinical education and service. She is an adjunct professor at The University of Massachusetts, Lowell where she teaches Healthcare Policy and Administration. Director Enis is active in civic affairs and is a member of the Westford Business Association as well as a member of the Central/South Middlesex Opioid Task Force. She serves as the Co-PI for the 3-year funded grant supported by the Oak Foundation to enhance the concussion recovery and to increase the awareness of concussion as well as to provide comprehensive concussion education to the school nurses, coaches, athletic trainers, students and their parents in the schools with >50% free or reduced lunch programs.

### **Barry Levin, MD:**

Dr. Levin is board certified by the American Academy of Neurology and Psychiatry. He is in private practice in Neurology at Emerson Hospital in Concord, MA. Dr. Levin has many years of experience caring for patients with concussion and general neurological problems. He is the Assistant Medical Director of the Dr. Robert C. Cantu Concussion Center.

### **Allen Sills, MD**

Dr. Sills is a Professor of Neurological Surgery at Vanderbilt Medical Center. Dr. Sills' clinical interests include brain tumors, sports neurosurgery, and general neurosurgery. Dr. Sills received his M.D. degree in 1990 from the Johns Hopkins University School of Medicine in Baltimore, Maryland. Dr. Sills completed his internship in General Surgery and residency training in Neurological Surgery at The Johns Hopkins Hospital in Baltimore, Maryland. He then went on to complete a two-year Neuro-Oncology Fellowship at the Johns Hopkins University School of Medicine. He was named as the chief medical officer by the National Football League in 2017.

### **Gerard A Gioia, PhD**

Dr. Gioia is the Division Chief of Pediatric Neuropsychology at Children's National Health System, where he directs the SCORE Concussion Program. He is Professor of Pediatrics and Psychiatry at the GWU School of Medicine. He has developed a number of post-concussion tools for children, and worked with the CDC on their "Heads Up" concussion educational toolkits. Dr. Gioia has participated in the International Concussion in Sport Group Consensus meetings, American Academy of Neurology Sports Concussion Guideline panel, and the CDC's mild TBI guideline development. He provided concussion management services to youth, high school, college and professional teams. He is the current President and Fellow of the Sports Neuropsychology Society.

**Erik E Swartz PhD, ATC, FNATA: Professor and Chair, Department of Physical Therapy and Kinesiology, University of Massachusetts Lowell.** Dr. Swartz's research interest focuses on the prevention and acute care of head and neck injuries in football. He has received grants from The NATA Foundation, NOCSAE, NFL Charities and was a winner of the NineSigma Head Health Challenge. He has published in journals such as The American Journal of Emergency Medicine, New England Journal of Medicine, Spine, and The American Journal of Sports Medicine. He served on the NFL Head Neck and Spine Committee's Subcommittee on Safety Equipment and Rules and as chair of the NATA Position Statement on the Acute Management of the Cervical Spine Injured Athlete. He serves on the Editorial Boards of the Journal of Athletic Training and the Athletic Training and Sports Health Care Journal. In 2011 he was honored with a Fellows designation in the National Athletic Trainers' Association and in 2015 received the Most Distinguished Athletic Trainer Award, also from the NATA. He received his PhD in Applied Biomechanics at the University of Toledo.

**Kevin E. Houston, O.D., M.Sc., FFAO**

Dr. Kevin E. Houston is a vision rehabilitation specialist with Massachusetts Eye and Ear Infirmary and Spaulding Rehabilitation Network, and a research scientist at Schepens Eye Research Institute. His research is currently centered on the development of visual aids and therapies for neurological visual impairments. Dr. Houston earned his Doctor of Optometry from Indiana University in 2003 and Masters in Visual science from the New England College of Optometry in 2014. He received additional research training through the *Harvard Clinician Scientist Development Program*.

**Lee E. Goldstein, M.D., Ph.D.**

Dr. Goldstein's research focuses on degenerative diseases of the aging brain and eye. He received his BA from Columbia and MD-PhD (PhD, Neuroscience) from Yale. He completed clinical and research fellowships at Massachusetts General Hospital, Harvard Medical School. In 2001, he joined the Harvard faculty. While at Harvard, he discovered Alzheimer's disease A $\beta$  pathology in the lens of the eye (Lancet, 2003), the first evidence of the disease outside the brain. In 2008, he was recruited to Boston University where his team discovered CTE in the first case series of blast-exposed military veterans and the mechanisms underpinning blast neurotrauma and CTE (Science Translational Medicine, 2012). Recently, his team uncovered key mechanisms leading to sports-related CTE and showed that hits, not concussion, cause the disease (Tagge et al., Brain, 2018). In the same study, his team uncovered key mechanical features that trigger concussion. Dr. Goldstein is inventor on numerous patents, founding scientist at Neuroptix (now Cognoptix), and co-developer of the first ophthalmic drug-device product approved by the FDA.

## **Thanasis Panorgias**

Thanasis Panorgias Ph.D. research conducted at the University of Manchester focused on the processing of color vision in the peripheral retina using psychophysics and electroretinography (ERGs) in normal subjects. At Dr. J.S. Werner's Vision Science and Advanced Retinal Imaging lab at the University of California, Davis, he gained substantial experience working with a clinical population. During his postdoctoral training, he employed electrophysiological (multi-focal ERGs) and advanced-imaging techniques (AO-OCT) to study the aging of the retina as well as disease processes focusing on age-related macular degeneration in particular. In January of 2014, he started as an assistant professor of vision science at the New England College of Optometry, assuming teaching and research responsibilities. He is now working towards establishing his own psychophysical and electrophysiological lab, and working with graduate students on projects that will help build an independent research program.

## **Ray Ciancaglini**

Ray Ciancaglini, a native of Geneva, New York, is a former professional boxer, award winning concussion awareness activist and established key note speaker. His personal life story was featured nationally by ABC News which has been the subject of two New York Associated Press and New York News Publishers award winning stories.

He was instrumental in getting passed into New York State Law, The Concussion Management Awareness Act, for which he was honored with the New York Executive Chamber Award and the Rochester Hickok Hero Award. Ciancaglini founded the Second Impact Concussion Awareness Program ([www.thesecondimpact.com](http://www.thesecondimpact.com)) and tours nationally at high schools, colleges, universities, NFL player development camps, youth organizations and medical seminars-all free of charge with his message, lecturing athletes about the possible ramifications of not addressing concussions properly. The New York State Athletic Trainers' Association has endorsed Ray's Second Impact presentations.

A member of the Rochester, NY Boxing Hall of Fame and the Geneva, NY Sports Hall of Fame, Ciancaglini's boxing career was layered with many accolades, most notably, the Golden Glove Heart Award and The Jerry Flynn Courage Award. He fought from 1966-74. Other notable awards include the Brain Injury Association of New York State Public Policy Award, Camp Good Days Courage Award and the Rotary Club Paul Harris Award and his contributions were instrumental in getting passed into federal law the 1996 Professional Boxing Safety Act.

Ciancaglini has been battling Parkinson's Syndrome and Dementia Pugilistica (Chronic Traumatic Encephalopathy) for many years as a direct result of numerous untreated concussions he suffered during his boxing career. Ciancaglini has been participating in several CTE Research studies at the Boston University School of Medicine (Study of Chronic Traumatic Encephalopathy) where he has donated his brain, upon his death.

Ray also speaks at Traumatic Brain Injury Centers and Children's Special Needs Facilities about the importance of keeping a positive attitude and never giving up and gives inspirational lectures to sports teams and organizations about being a champion in athletics and in life. Ray's greatest reward, however, is knowing that he is resonating and making a difference in the lives of many athletes and survivors of brain injury.

**Chris Nowinski, Ph.D.**

Mr. Nowinski is a social entrepreneur leading a global conversation on concussions, CTE, and the future of sports. An All-Ivy Harvard football player-turned WWE professional wrestler-turned neuroscientist, he discovered the sports concussion crisis after a 2003 kick to the chin in a WWE tag-team match caused career-ending post-concussion syndrome. Dr. Nowinski wrote the expose *Head Games: Football's Concussion Crisis* in 2006 and soon after co-founded the non-profit Concussion Legacy Foundation (CLF), where he serves as CEO. Dr. Nowinski also co-founded Boston University (BU) CTE Center and VA-BU-CLF Brain Bank, where he serves as the Outreach, Recruitment, Education, and Public Policy Leader. Dr. Nowinski earned his Ph.D. in Behavioral Neuroscience from Boston University School of Medicine and has authored over 25 scientific publications. VICE Sports called Dr. Nowinski "the man most responsible for making CTE part of the national conversation," and Sports Illustrated said, "it is Nowinski's figure which looms behind the doctors and the headlines and the debate roiling over sports' newfound commitment to minimizing head trauma."

**Ted Johnson**

Ted Curtiss Johnson is a retired NFL linebacker who played from 1995-2004. As a 2<sup>nd</sup> round NFL Draft pick in 1995, he went on to a 10 year, highly successful career with the New England Patriots and became a celebrated 3 time Superbowl champ. Ted's pride in being named the New England Patriots Team Captain for the 1996, 1997, 1998, 2003 and 2004 seasons, the Captain of the Defense as well as the Signal Caller every year of his playing career demonstrates his passion for work ethic, leadership and team.

Upon retirement from the New England Patriots organization in 2005, Ted worked at CBS Boston doing both pre- and post- game shows. In 2008-2009, he worked for NESN doing Patriots programming and then co-hosted two national CBS Sports Radio shows during 2013-2014- Split Decision with Nick & Ted and The Josh & Ted Show. In February 2017, he was asked to do a nightly live television broadcast during Superbowl LI. Graduating with a degree in Communications from CU, he developed a love for teaching and mentoring and as such served as adjunct professor at Suffolk University in 2009-2010 teaching courses in Leadership.

As an advocate for both current and retired NFL players, he is vigilant in his long-standing support of the Concussion Legacy Foundation.

**Katelynn Cataldo MS, NP**

Senior Nurse Practitioner is a board-certified adult-gerontology primary care nurse practitioner and holds a master's degree from the University of Massachusetts, Worcester. She is also certified by the American Nurses Credentialing Center and is a credentialed IMPACT consultant with a focus on post-injury care.

**Ellen McKinnon, MS, NP**

Ms. McKinnon is a Family Nurse Practitioner, board-certified with the American Academy of Nurse Practitioners and holds a Master's degree from Regis College. She also earned a Bachelor of Science degree in biology from University of Connecticut. She first worked as a Nurse Practitioner at a community walk-in clinic in the metrowest area for three years seeing patients with various injuries and

illnesses as well as providing preventative care. She is now caring for patients with concussions and post-concussion syndrome at the Dr. Robert Cantu Concussion Center. Ms. McKinnon treats both the pediatric and adult population by providing education in symptom management, medications, imaging and referrals to appropriate services.

**Neal McGrath, PhD.**

Mr. McGrath is a clinical neuropsychologist who has practiced in the Boston area for over 30 years, specializing in the evaluation and rehabilitation of traumatic brain injuries. He is the Clinical Director and founder of *Sports Concussion New England*, through which he and his colleagues have provided neuropsychological consultation to dozens of schools and individual student athletes from many high schools, colleges, elementary schools, and youth sports programs in New England, and through which they now provide neuropsychological and psychotherapy services at the Cantu Concussion Center. Dr. McGrath also maintains a general practice in neuropsychological evaluation of adolescents, adults, and children in Brookline, MA. He and his colleagues see patients with a variety of acquired brain injuries, including returning military veterans, as well as for evaluation of learning disabilities and Attention Deficit Disorder.

**Herbert Gilmore, MD**

Dr. Gilmore earned his medical degree from the University of Graz in Austria. He completed his pediatric residency at Baystate Medical Center in Springfield and his pediatric neurology residency at the Floating Hospital for Children in Boston. Dr. Gilmore is board-certified in pediatric neurology. He has practiced in Massachusetts for 35 years, most recently as chief of pediatric neurology at Baystate Medical Center, Springfield MA. He was previously on staff at the Floating Hospital for Children, Boston.

**Julie Lorden, PT, DPT**

Julie Lorden graduated from the University of Massachusetts Lowell with a doctorate in physical therapy. Her undergraduate degree is in exercise physiology. Ms. Lorden specializes in neurological and vestibular rehabilitation and is certified in LSVT BIG and PWR! — evidence-based treatment programs for people with Parkinson's — as well as an MDS Allied Health Team attendee. Ms. Lorden also has further training in concussion management and oncology rehabilitation, and is active with the Dr. Robert C. Cantu Concussion Center and Be Strong Cancer program. Ms. Lorden also assisted in the development of the Fitness for PWP exercise program. Ms. Lorden is a member of the neurological, oncology, concussion and pediatric care teams at Emerson's Center for Rehabilitative and Sports Therapies.

**Alina Carter, MS, CCC-SLP:**

Ms. Carter is a certified and licensed speech-language pathologist who evaluates and treats adult patients with language, cognitive and speech deficits secondary to neurodegenerative processes, stroke, brain tumors, chemobrain and mild traumatic brain injury. She strives to provide a combination of restorative and functional compensatory treatment to help maximize each individual's overall quality of life. In 2015, Ms. Carter published an interdisciplinary study entitled "Modified Berg Balance Scale:

Making assessment appropriate for people with aphasia” in Topics of Stroke Rehabilitation. Previously, she worked as an outpatient speech language pathologist at Massachusetts General Hospital (MGH). Ms. Carter has presented at local and national level on the topic of mild cognitive impairment, cognitive rehabilitation treatment, and aphasia research. She holds a master’s degree in speech language pathology from the MGH Institute of Health Professions in Boston, MA

**Carey Bellino, MA, CCC-SLP:**

Ms. Bellino is a certified and licensed speech-language pathologist who evaluates and treats conditions that impact cognition, speech, language, and swallowing skills. She works with adolescents and adults who have sustained concussions and brain injuries, who are undergoing treatment for head and neck cancer, as well as those experiencing other neurodegenerative concerns. Prior to joining Emerson’s team, Ms. Bellino worked at Spaulding Rehabilitation Hospital with post-acute brain injury and stroke populations, as well as at Emerson College, where she provided clinical instruction to graduate student clinicians and guest lectured on topics of clinical interest. She holds both a bachelor’s degree in communication disorders and a master’s in speech language pathology from the University of Massachusetts Amherst. Ms. Bellino began her career at the Centre for Neuro Skills in California, working in an outpatient rehabilitation setting with adults who sustained traumatic brain injuries. She returned to Massachusetts to work at the Ivy Street School, treating adolescents and young adults with acquired and traumatic brain injuries. There, she was a founding member of a transition services classroom targeting executive functioning and social-cognitive skills in naturally occurring contexts. Ms. Bellino has presented at local, state and national levels on the topic of innovative programming for the transition from adolescence to young adulthood and cognitive retraining. Last year, Ms. Bellino joined colleagues Alina Carter and Brenda Lovette to present High Level Cognitive Retraining techniques at Emerson Hospital’s Concussion Conference. They recently presented a workshop on the inter-relatedness of cognitive domains at the ASHA Convention 2018 in Boston, MA.

**Brenda Lovette, MS, CCC- SLP, RYT-500**

Ms. Lovette is a speech language pathologist with a specialty in concussion management. Ms. Lovette earned her master’s degree at UNC Chapel Hill and has over 10 years of experience working with individuals with brain injury across the spectrum of severity, from minimally conscious to TBI with concussion. She is also a registered yoga instructor and recently completed an advanced yoga teacher training in Brookline, MA. Ms. Lovette has specialized training in meditation, mindfulness, and holistic health including a Certificate of Holistic Health Coaching through the Institute of Integrative Nutrition in New York City. She has presented locally and nationally on the topic of Meditation and Mindfulness for health care professionals.

**Mary Alexis Iaccarino, MD**

Dr. Iaccarino is an Instructor in the Department of Physical Medicine and Rehabilitation at Harvard Medical School and attending physician in the MGH for Children Youth Concussion program, the MGH/Red Sox Foundation Home Base program for veterans with mild traumatic brain injury, and the Harvard Brain and Body Program for retired NFL football players. While caring for patients with all severities of brain injuries, Dr. Iaccarino’s clinical interest is in sport concussion and blast related mild traumatic brain injury. Dr. Iaccarino’s current research focuses on novel approaches to the rehabilitation of mild TBI .

**Alexandra V. Jackson, Psy.D.**

Ms. Jackson received her doctorate in Clinical Psychology from the American School of Professional Psychology in Washington, D.C. She completed her internship and post-doctoral fellowship at WestSide NeuroRehabilitation Services in Lewiston, Maine in 2011, where she evaluated and treated individuals with acquired brain injury. Her work at WestSide also involved scientific research on brain injury and she has presented her findings at several international neuropsychological conferences.

Dr. Jackson specializes in the neuropsychological evaluation and management of sports-related concussion injuries. She provides a full complement of services including consultation to individual student-athletes, comprehensive neuropsychological evaluations, and individual therapy for individuals recovering from concussion. Dr. Jackson is particularly interested in the gender differences in concussion injuries and has presented a poster symposium entitled "Concussions in Female Collegiate Athletes: Examination of Gender Differences" at the International Neuropsychological Society's annual meeting in Boston in 2011. Dr. Jackson is also a Consulting Neuropsychologist for the NeuroRestorative Acquired Brain Injury Program, the Massachusetts Statewide Head Injury Program, and the Massachusetts Rehabilitation Commission. She also works in private practice in neuropsychological evaluation and treatment of adolescents, adults, and children in Brookline, MA. She and her colleagues see patients with a variety of acquired brain injuries, including returning military veterans, as well as for evaluation of learning disabilities and Attention Deficit Disorder. Dr. Jackson provides individual therapy for these individuals, specifically focusing on adjustment and acceptance.

**Mary Ann Williams-Butler, MA, CCC-SLP, CBIS**

Ms. Williams-Butler is supervisor for the speech-language pathology department at Emerson Hospital and the Dr. Robert Cantu Concussion Center. She served as a subject matter expert for the ASHA Practice Portal on Pediatric Traumatic Brain Injury. She is a certified brain injury specialist with over 35 years experience evaluating and treating children and adults with various degrees of traumatic brain injury. She developed the cognitive retraining program currently used by the SLPs at Emerson Hospital and the Cantu Concussion Center. Ms. Williams-Butler has presented internationally and nationally on the topic of TBI with concussion.

**Naseem Chatiwala, PT, DPT, MS, NCS**

Naseem Chatiwala is a board certified neuro clinical specialist and a certified vestibular clinical specialist who has 20+ years of experience as Physical therapist. Naseem has been instrumental in developing the concussion program at The Clough family center for rehabilitative and sports therapies and has helped develop guidelines for vestibular screening, baseline testing, return to play and graded exs protocols. She is adjunct faculty at MGH-IHP and UMass Lowell PT program and a course developer and instructor through Summit education where she teaches continuing education courses on Stroke Rehab and Vestibular Rehab. Naseem has presented at various conferences and recently was awarded best poster presentation (co-presented) at the APTA of MA conference, Fall 2018.

**Karen Veilleux PT, DPT**

Karen graduated from the University of Massachusetts Amherst with a Bachelors of Science in Kinesiology and from Simmons College with her Doctorate in Physical Therapy. Karen specializes in pediatric therapy. Prior to working at Emerson Hospital she had clinical experience at an outpatient

pediatric center in the Boston area as well as a clinical affiliation with Texas Children's Hospital in Houston. She enjoys working with children of all ages and abilities and has worked at adaptive sports camps in the Boston area. She is a member of the American Physical Therapy Association Pediatric and Aquatic Section. Her clinical interests include pediatric vestibular rehabilitation, pediatric concussion rehabilitation, pediatric neuro-development, and aquatic therapy.

#### **Hollie Elwood, PT, DPT**

Mrs. Elwood graduated from the University of Massachusetts Lowell with a bachelor's degree in exercise physiology and a doctorate degree in physical therapy. Prior to joining the Emerson staff, she completed doctoral internships at several facilities throughout the New England area, in both inpatient and outpatient settings. Hollie is certified in the Schroth Method — a scoliosis-specific exercise program. She also treats orthopedic and sports injuries, and she has created a dance rehabilitation program at Emerson as well as community outreach for dance injury prevention education. She also treats neurological conditions, and is PWR! (Parkinson's Wellness Recovery) certified to treat people with Parkinson's disease. In addition, she treats vestibular, concussion, and balance disorders, and is a member of the neurological and concussion care teams here at Emerson. Certifications: Schroth Method, Parkinson's Wellness Recovery (PWR!). Clinical Interests: Scoliosis, dance medicine/rehabilitation, orthopedic and sports rehabilitation, neurological rehabilitation, vestibular rehabilitation, post-surgical rehabilitation, balance, concussion management, community wellness

#### **Kate Evans, PT, DPT**

Mrs. Evans graduated magna cum laude from the University of Massachusetts Lowell, earning a bachelor's in exercise physiology and a doctorate in physical therapy. Mrs. Evans has experience treating a wide variety of orthopedic, sports related, vestibular, balance, concussion and post-surgical diagnoses. She is part of the concussion care team through the Cantu Concussion Center here at Emerson. She also has a special interest in vestibular disorders and has completed numerous post-graduate courses in vestibular rehabilitation. Clinical Interests: Orthopedics, post-surgical, vestibular rehab, balance disorders, concussion management

#### **Marnie Deardorff MS, OTR/L**

Ms. Deardorff graduated from Boston University College of Health and Rehabilitative Sciences with a master's degree in occupational therapy in 2002. Her undergraduate degree is in human development and health sciences from Penn State University. Prior to joining the outpatient therapy team at Emerson, she had 15 years of experience working in acute inpatient rehabilitation hospitals and skilled nursing facilities, where she specialized in the treatment of patients impacted with stroke, brain injury, neurological disorders and multi-trauma orthopedic injuries. Ms. Deardorff is certified in the Neuro-IFRAH® (Integrative Functional Rehabilitation and Habilitation) treatment approach for the management of adults with hemiplegia and has completed further coursework for advanced hand function and fine motor control within this framework.

#### **Laura Lizotte, MS, OTR/L**

Mrs. Lizotte graduated from Springfield College with a master's degree in occupational therapy in 2005. Her undergraduate degree is in psychology from the University of Massachusetts. Prior to joining the Emerson team she worked in acute rehabilitation hospitals, where she specialized in treating spinal cord, stroke, traumatic brain and multi-trauma orthopedic injuries. She also has experience working in home care and skilled nursing facilities.

**Lauren Mazel, OTD, OTR/L**

Ms. Mazel graduated with a master's in occupational therapy from Boston University, where she later completed her post-professional occupational therapy doctorate in September 2017. She received her undergraduate degree in psychology from Tufts University. She is a Language Acquisition through Motor Planning (LAMP) certified professional since May 2018 and is passionate about an interprofessional approach to AAC. Prior to joining the Emerson staff, Ms. Mazel worked in outpatient pediatrics in the Washington, D.C. area where she specialized in treating children and adolescents with a wide range of impairments and disabilities. She has experience through clinical affiliations with children with multiple, severe disabilities in school and home settings. She participates annually in the International Immersion Experience and Volunteer partnership program between Boston University and St. Catherine University in Minnesota, supervising students at therapeutic sites in Quito, Ecuador, to facilitate understanding of cultural context, reflection on cultural biases, and foster strong clinical reflective skills. She is a member of the American Occupational Therapy Association.

**Kara Robinson, MS, OTR/L**

Mrs. Robinson graduated from the University of New Hampshire with a master's in occupational therapy. Her undergraduate degree is in occupational science also from UNH. Prior to joining the Emerson team, she worked in a hospital-based adult outpatient setting focused on stroke rehabilitation and other neurological conditions with the use of assistive technology. Ms. Santos is trained in the following technologies: Dynavision D2, Bioness Integrated Therapy System, Bioness H200 hand rehabilitation system, RT300 Functional Electrical Stimulation Bike, and ReoTherapy ReoGo for upper extremity rehabilitation. She is also proficient in the use of Kinesio taping as well as rigid taping for shoulder subluxation and pain management. She also has experience in acute inpatient rehabilitation.

**Nicholas Schumacher, PT, DPT, OCS, CSCS**

Nick is a staff physical therapist at Emerson Hospital and the founder/CEO of Schumacher PT & Performance, which developed the RehabKit and RehabPal iOS Apps. Nick graduated from Boston University as a doctor of physical therapy in 2016. Immediately following the completion of his doctorate, Nick enrolled in the Orthopedic Physical Therapy Residency Program at the MGH Institute of Health Professions, where he received extensive training in manual therapy and the management of orthopedic injuries. He achieved board certification as a clinical specialist in orthopedic physical therapy (OCS) through the APTA in 2018. Nick also earned certification as a strength and conditioning specialist (CSCS) through the NSCA in 2014. In addition to his time in the clinic, Nick assists with running-related research at UMass Lowell and lab instructs at the MGH Institute of Health Professions. Nick has a particular interest in treating runners, tactical athletes, and individuals post-concussion. He has extensive experience with treating athletes post-concussion, and he was the co-developer of the Dr. Robert C. Cantu Concussion Center Return-to-Play Assessments.

**Chris Iby, PT, DPT, OCS, CSCS**

Chris is a senior physical therapist at Emerson Hospital. He graduated from the University of Massachusetts Lowell with a doctorate of physical therapy in 2012. In 2014, he became a Certified Strength and Conditioning Specialist (CSCS) through the National Strength and Conditioning Association. And in 2016 he earned a board certification from the American Physical Therapy Association as a Clinical Specialist in Orthopedics (OCS). Chris strives to apply evidence-based physical therapy techniques from a strength and conditioning perspective to maximize the health and performance of adolescent and adult

athletes. He is also an adjunct faculty member in the physical therapy program at the University of Massachusetts. While at Emerson, Chris has become active in our spine and concussion rehab programs. He was the co-developer of the Dr. Robert C. Cantu Concussion Center Return-to-Play Assessments. And he enjoys working with active individuals of all levels, helping them restore pain-free movement and return to sport.