



UNC Sports Medicine Institute 2022 YEAR IN REVIEW



The UNC Sports Medicine Institute (SMI) has continued to grow its team of providers and scientists as well as enhance patient care and implement innovative research. Over the past year, we have added multiple faculty and support personnel to help us achieve our mission of keeping active people active. We are enhancing the comprehensive care of our patients through improved clinical collaboration and expanded research efforts. We are serving our local communities through educational outreach, event coverage and development of improved health and activity resources.

In addition to adding 8 new team members, we focused our 2022 efforts on continued excellence in patient care, research and outreach.

Our Vision

To be the #1 destination for integrated research and life-long sports medicine care serving the physically active

Our Mission

To keep active people operating at peak performance by preventing and treating injuries and implementing innovative research

Our Values

Patient-focused Value-based, accessible, personalized care

Data-driven Innovation and research to develop best practices

Collaborative Interdisciplinary and comprehensive



Welcome New SMI Team Members!

Our team now includes 12 physicians and advanced practice providers, 11 research scientists, 6 research support personnel, and 25 physical therapists.



Shelby Baez, PhD, ATC
Assistant Professor of Exercise and Sport Science

Dr. Baez is informing our biopsychosocial approach to sports medicine care to address psychosocial factors that influence likelihood of returning to sport.



Natalia Favoreto, MS, CCRC
Clinical Research Coordinator

Ms. Favoreto is responsible for overseeing multiple longitudinal studies that seek to understand the development of post-traumatic knee arthritis.



Joe Hart, PhD, ATC
Professor and Vice Chair for Research for Orthopaedics

Dr. Hart has joined us with multiple funded research projects related to systematic testing after ACL reconstruction to inform care decisions and identify risk of future injury.



Carla Hill, PT, DPT
SMI Assistant Director

Dr. Hill has more than 20 years of experience in orthopedic physical therapy and began working for the SMI in October 2021. She splits her time between the SMI, patient care and knee osteoarthritis clinical trials.



Abbie Smith-Ryan, PhD
Professor of Exercise and Sport Science

Dr. Smith-Ryan is developing our nutrition resources to optimize recovery after injury and surgery, as well as helping to develop the women's health program.



Greg Summerville, MD
Assistant Professor of Orthopaedics

Dr. Summerville is an internal medicine trained non-operative provider who is overseeing Chatham County outreach.



Jill Sylvester, MD
Assistant Professor of Orthopaedics

Dr. Sylvester is a family medicine trained non-operative provider who is helping to develop the women's health program.



Samantha Tayne, MD, MBA
Assistant Professor of Orthopaedics

Dr. Tayne is an orthopaedic surgeon trained in sports medicine and pediatric orthopaedics who will focus on expanding the young hip program.



SMI Patient Care



- ◆ We are taking an evidence-based approach to update return to sport protocols for upper and lower extremity injuries to maximize the likelihood of an athlete's ability to return to play while minimizing future injury.
- ◆ We are developing patient education resources to help patients understand nutritional and mental health needs that accompany the recovery from injury and surgery.
- ◆ We are developing a women's health program to address the unique needs of female athletes across the lifespan.

SMI Outreach



- ◆ We provide sports medicine coverage for Chapel Hill and Chatham County high schools, UNC Athletics, local races, and for multiple NCAA regional and national events.
- ◆ We provide free physicals for high school athletes as well as community-based education to the general public and 1st responders.
- ◆ We present research and clinical education at local, regional, national, and international conferences.

SMI Research

\$10.5M

FUNDING FOR CURRENT
SMI RESEARCH

178

JOURNAL PUBLICATIONS
2021-2022

SHOULDER

- Total shoulder arthroplasty multi-center registry
- Effectiveness of hydrodilatation in treatment of adhesive capsulitis
- Outcomes after shoulder stabilization surgery

ANKLE

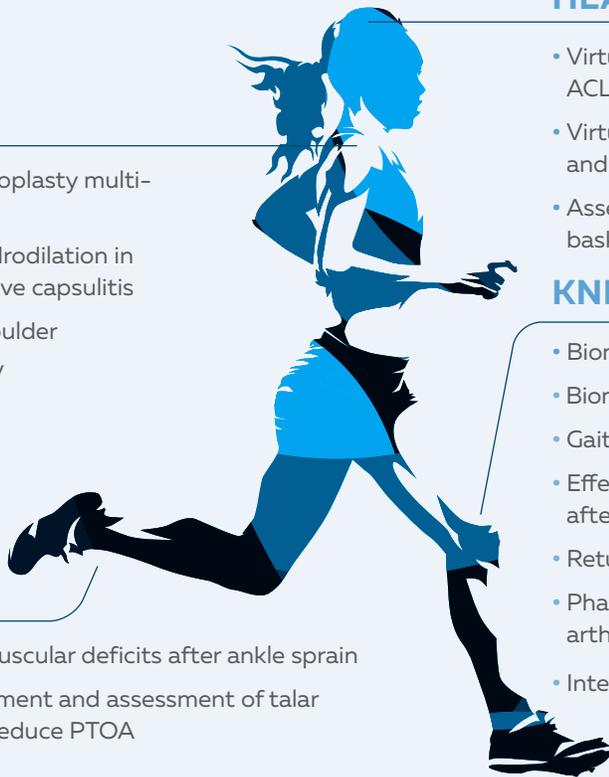
- Addressing neuromuscular deficits after ankle sprain
- Advancing management and assessment of talar cartilage health to reduce PTOA

HEAD

- Virtual reality mindfulness meditation after ACL reconstruction
- Virtual reality based assessments of running and cutting maneuvers
- Assessment of quiet eye in football and basketball players

KNEE

- Biomechanical changes following ACL injury
- Biomarkers for posttraumatic osteoarthritis (PTOA)
- Gait retraining to prevent PTOA
- Effects of vibration on indicators of joint health after ACL reconstruction
- Return to activity testing after surgery
- Phase 2 drug trial for the treatment of knee arthritis
- Interventional trial for symptomatic knee arthritis



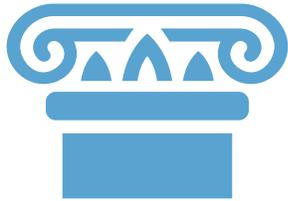
SPOTLIGHT ON NEW TEAM MEMBERS' RESEARCH

Dr. Joe Hart is Vice Chair for Research for Orthopaedics. He launched a point-of-care testing center at the Carolina Pointe II Orthopaedic clinic for patients after ACL reconstruction. Patients will participate in testing in conjunction with post-operative surgical visits to provide objective measures of strength and function that inform care and return to sport decisions.

Dr. Shelby Baez is Director of the Psychology of Sport Injury Laboratory. Her research examines the impact of psychosocial factors on health outcomes after sport-related injury, with a focus on patients after ACL reconstruction. Her lab examines the impact of psychosocial factors on biological outcomes (such as neurocognitive function, biomechanical alterations, and secondary injury risk) and seeks to identify clinically feasible psychosocial interventions to improve health outcomes.

Fundraising

Our development goal is \$12.8M to fully realize the SMI goals. This includes funding for the personnel, facilities, and outreach initiatives.



PILLAR 1 BUILDINGS AND EQUIPMENT

Co-location of clinical care
and research space

Collaborative spaces

Cutting-edge research
equipment

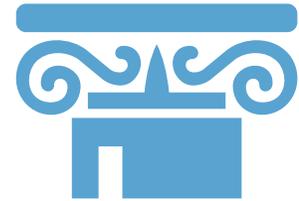


PILLAR 2 PEOPLE AND PROGRAMS

Endowed
professor position

Student and
staff support

Holistic care such as
nutrition, mental health,
and women's health



PILLAR 3 COMMUNITY IMPACT

Elite athlete
medical clinic

Community education

Injury prevention
program

Innovation funding

Our first annual conference was a great success!

We hosted more than **150 sports medicine providers and researchers** for a full day of education sessions on improving knee injury outcomes.

- ◆ Presentations covered the topics of knee injury prevention, surgical and non-surgical interventions and outcomes, rehabilitation and recovery approaches, and team work
- ◆ **Coach Roy Williams** was the keynote speaker at our SMI kick-off reception the evening before the conference
- ◆ Five international experts provided keynote lectures for the conference: **Robert Arciero, MD, Bernard Bach, MD, Anthony Beutler, MD, Kevin Ford, PhD, and Lynn Snyder-Mackler, PT, ScD, ATC**
- ◆ **8 UNC SMI faculty presentations**
- ◆ **Supported by 11 corporate exhibitors**



Mailing Address

UNC Sports Medicine Institute
UNC Department of Orthopaedics
CB# 7055
Chapel Hill, NC 27599-7055

Administrative Offices

3141 Bioinformatics Building
130 Mason Farm Road
Chapel Hill, NC 27514

Phone: 919-966-9166

Email: uncsmi@med.unc.edu



med.unc.edu/uncsportsmedicineinstitute



@unc_smi



@uncsportsmedicineinstitute



@unc_smi



@uncsportsmedicineinstitute



SCHOOL OF MEDICINE
Sports Medicine Institute