

Building for our future



Since opening in 1981, Fetzer Hall has housed the Department of Exercise and Sport Science, provided activity space for Lifetime Fitness courses and Campus Recreation activities, accommodated practice facilities for Carolina’s gymnastics and wrestling teams as well as clinical space for UNC Sports Medicine. Fetzer Hall also houses the majority of our department’s research laboratories, which allow for research intensive experiences to over 200 undergraduate and graduate students each year.

Over the past 20-years, as research in EXSS has expanded and our undergraduate and PhD student numbers have exponentially grown, the need for added office, meeting, and laboratory space has become a priority.

Plans to renovate the 37-year-old Fetzer Hall have been developing the past 3-years and took another step forward this past summer as a schematic design was approved for an initial phase of renovation.

Over the upcoming year we will begin renovation of the “basket room” area, which will result in over 1,000 ft² of new laboratory space, 6 new offices for faculty/staff, a new PhD student office suite, and a new conference room that can accommodate up to 30 people. The renovated space will help our faculty and students

further their research and teaching efforts by enhancing collaboration and innovative thinking.

“

The renovated space will help our faculty and students further their research and teaching efforts by enhancing collaboration and innovative thinking.

In support of our need to increase laboratory capacity, we completed the development of the “Gait Laboratory” during summer 2018. This is a ~400 ft² facility that contains a split-belt treadmill embedded with force plates, quantitative motion analysis, and ability for augmented feedback training during walking and running. The new Gait Lab will facilitate creative new approaches for studying and improving human motion with the aim of preventing musculoskeletal injury. **CONTINUED ON PAGE 6**



MESSAGE FROM THE CHAIR

Writing this annual update and greetings to our alumni and friends, I am reminded of the growth and success our department continues to experience. It is with great pride that I am able report on another tremendous year in Exercise and Sport Science.

Our undergraduate programs continue to flourish, as we remain a top 4 department in the College of Arts and Sciences with over 1,300 students declared as EXSS majors. In addition, our Athletic Training and Fitness Professional specialization graduates have all earned their professional credentials with a perfect first time passing rate on their certification examinations. We are also proud to report that nearly 100% of our masters program graduates have been placed in a job or graduate program since graduating in summer 2018. Overall, our students are realizing the value of their degree and moving on to make their impact on society.

I'm truly amazed at the quality and quantity of our department's research agendas. The work being done by our faculty and students is helping to identify solutions for a variety of important issues. You will learn more about a few of these projects, which range from optimizing concussion detection and care, to improving cancer outcomes through exercise, to legal research in sport. In addition to conducting impactful research, our faculty continue to push our department forward by securing external funds to support their research and graduate research assistants.

To continue our quest of being the leading Department of Exercise and Sport Science in the world, we developed an external advisory board during the 2017-18 academic year. The inaugural advisory board meeting was held in April 2018. During this meeting we were able to introduce our board members to faculty and students in EXSS and provide updates on our strategic plan and key initiatives. Our plan for the coming year is to expand the advisory board and hold 1-2 meetings as we map out key initiatives and projects for the future.

Moving forward, a particularly important task will be to identify fundraising strategies to support our department. While many

great things are occurring in EXSS, our ability to advance will depend on private funding as our needs exceed what state and federal funds are able to provide. Private funding will play a pivotal role in helping EXSS to capitalize on our many strengths and maintain the academic excellence for current and future students. We are appreciative of any gift, large or small.

A new fundraising initiative that we are initiating is the creation of the "Frederick O. Mueller Fund for Excellence" as an endowment to benefit our department. As our alumni know, Professor Emeritus Frederick O. Mueller had a storied career as a teacher-scholar, coach, and mentor and was instrumental in taking EXSS to its current level of national prominence. The distributions from the "Mueller Fund" will be used to recruit and retain superlative teacher-scholars and provide extraordinary learning and research opportunities to students in our department. More information about the Mueller Fund will be coming by email in the next few weeks or you may contact Chris Davis, associate director of development, at (919) 843-6058 or at christopher.davis@unc.edu.

I hope you enjoy this year's newsletter. When you visit Carolina, I invite you to visit us in Fetzer or Woollen as we would enjoy welcoming you home and share with you all that is ongoing in Exercise and Sport Science.

Sincerely,

A handwritten signature in black ink, appearing to read "Darin A. Padua". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Darin A. Padua, PhD, ATC
Chair of the Department of Exercise and Sport Science

CLINICAL AND BEHAVIORAL SCIENCE:

Improving concussion detection and care for athletes of all ages



JOHNA REGISTER-MIHALIK

Over 50% of concussions are not identified and subsequently not cared for, leading to other potential injuries and negative outcomes. Additionally, now more than ever, there are options for actively managing and treating concussion.

Concussion is a complex brain injury, that first needs appropriate detection, followed by active clinical management prior to return to learn and sport. Our team at UNC-CH is on the forefront of concussion prevention and care among athletes of all ages, from time of injury through treatment and return to play. Our convergent scientific team includes athletic trainers, epidemiologist, behavioral scientists, military medicine experts, neuroscientists, sports psychologists, physicians, and communications specialists.

Our team helped define the current assessment paradigm that has improved concussion management in athletes of all ages by supporting use of a clinical exam and symptom, motor/balance, and cognitive assessments in the evaluation of concussion. This early work in the assessment of concussion also highlighted the gross under-reporting of concussion in athletes of all ages.



Funding from the NFL Charities, the NCAA-DOD Mind Matters Research Challenge, and the Centers for Disease Control allowed us to explore reasons for this lack of reporting, as well as interventions that may improve reporting and identification. Previously our team was one of the first to provide data that attitudes and other behavioral factors are more closely associated with concussion disclosure behaviors than knowledge. These findings led to key changes in concussion education, as knowledge alone will likely not improve behaviors around concussion. Additionally, our current work supports the need for organizational and social support that models and encourages concussion reporting and disclosure in all levels of sport.



Through this work, the lack of evidence-based treatment options for acute and sub-acute concussion became apparent. Student-athletes of all ages may choose to not report their injury not only because they are afraid of the consequences (eg not being able to play, losing status on team), but because they may feel there is no way to make it better. Additionally, clinicians have been frustrated by the lack of guidance for concussion treatments beyond a rest-and-wait approach. We are currently conducting a multisite, international study in collaboration with the Medical College of Wisconsin, to evaluate the current return to sport progression and to understand the effects of active rehabilitation following concussion (Funding Source: National Football League). The current study expands on our previous work to better define paradigms for intervention immediately following concussion and throughout the return to play process.

Over the next 5–10 years, we hope to develop additional community and organizational interventions that not only support better detection of concussion, but also care and treatment. The undergraduate and graduate students, and faculty in Exercise and Sport Science, as well as the Matthew Gfeller Sport-Related Traumatic Brain Injury Research Center will continue to lead the way in advancing prevention and care for concussion in athletes of all ages.

EXERCISE ONCOLOGY:

Improving cancer care outcomes



CLAUDIO BATTAGLINI

During the past 14 years, Dr. Battaglini has been able to develop from the ground up, two nationally and internationally recognized exercise oncology programs: The Get REAL & HEEL Breast Cancer Research Program (GR&H) and the EQUAL Project (Exercise and Quality of Life in Leukemia & Lymphoma Patients) in collaboration with EXSS faculty, physicians, scientists from the Lineberger Comprehensive Cancer center, nurses and physician assistants from the NC Cancer Hospitals, many other faculties from different Departments at UNC, and with the help of his undergraduate and graduate students. The GR&H program is in its 12th year, and over 2000 patients have been served. The EQUAL project was launched in 2006 and produced the first evidence in the US (first scientific publication in the US) that exercise could be beneficial for in-hospital acute Leukemia patients for the alleviation of treatment-related symptoms and potentially improve outcomes associated with long-term prognosis. The EQUAL project has changed the culture of hematology units around the country, and today, leukemia patients are advised to exercise while in treatment.



The goal of Dr. Battaglini’s research agenda is to improve the care of cancer patients by providing exercise interventions aimed to improve overall health, clinical, and quality of life outcomes.

For the past year, Dr. Battaglini and his doctoral students Jordan Lee and Chad Wagoner and master students Stephanie Sullivan and Andrew Borrer have worked on a multi-disciplinary study where 120 breast cancer patients are currently being recruited to participate in The ReHeRS (“rehearse”) trial. This breast cancer and exercise clinical trial involves a group of oncology physicians, cardiologists, cardiovascular physiologists, immunologists, experts in cognitive function, patient reported outcomes, and exercise physiologists; all from UNC. The trial has the goal to examine the efficacy of the current community-based GR&H exercise program on multiple health and clinical outcomes, with emphasis on cardiovascular health outcomes.

Currently, in collaboration with oncology orthopedic surgeons from UNC and Duke, Dr. Battaglini will be examining the effects of exercise on patients diagnosed with soft tissue sarcomas. This project will examine the role of exercise concomitant with radiation treatment on increasing blood flow (oxygen) to tumor sites as a mean to maximize the radiation treatment efficacy on tumor eradication. This novel approach in treating sarcoma tumors aim to minimize post-treatment complications while improving overall treatment outcomes.



When you really think we covered it all, Dr. Battaglini in collaboration with Dr. David Penn from the UNC Psychology Department are the PIs on a recently awarded 3 years NIH R34 grant to study the effects of group walk exercise training on individuals with schizophrenia. This is a novel approach where patients will exercise in groups at the UNC psychology clinic with the goal of improving overall health as well disease specific clinical outcomes. This scalable intervention approach has the potential to help improve the care of patients diagnosed with schizophrenia.

Understanding the law; connecting it to the sport industry



BARBARA OSBORNE

Applied legal research helps sport practitioners understand the law and use this information to improve operational practices and avoid liability. Current research examines the unique interplay between the FBI and the NCAA and the connection between criminal law and NCAA rules violations.

On September 25, 2017, the college basketball world was rocked when federal prosecutors in the United States District Court, Southern District New York issued complaints against ten men for various organized crimes (US v. Evans, 2017; US v. Gatto, 2017; US v. Person, 2017). Apparently, Adidas executives, financial advisors, and NCAA coaches were engaged in bribery schemes to direct recruits to certain university basketball teams and then to direct those players to designated advisors. Some of you may not have been surprised by allegations of bribery and corruption given the billions of dollars that flow through NCAA Division I college basketball, but many people have questioned how a violation of NCAA rules can be a federal crime.

In 2016, Louis Martin “Marty” Blazer III (the sports agent who was responsible for improper payment to UNC football players) was charged by the Securities and Exchange Commission with wire fraud and accused of siphoning \$2.35 million from the accounts of several professional athletes. As a condition of his plea agreement, Blazer became a cooperating witness for the FBI helping the Department of Justice uncover a 14-year wire fraud scheme.

The first scandal (Coach Bribery scheme) involves college coaches who took cash bribes from athletic advisors. The coaches were paid to influence college players and pressure the players and their families to retain the services of the advisors paying the bribes. The coaches are charged with bribery, solicitation of bribes, honest services fraud, conspiracy to commit wire fraud and Travel Act conspiracy. Each of the four assistant coaches face a maximum of 80 years if convicted.



The second scandal (Company 1 scheme) implicates Adidas for funneling bribe payments to high school players and their families to secure those players commitments to attend universities sponsored by that company. Some of the payments are more than \$100,000. Three adidas executives are charged with wire fraud, bribery, Travel Act violations, money laundering and/or conspiracy offenses and each faces a maximum of 80 years in prison if convicted. This scandal led to the administrative dismissal of coach Rick Pitino and athletics director Tom Jurich from the University of Louisville.

While it is clear that bribing coaches and recruits is a violation of NCAA rules, many in sports media (and several of the defendants) have questioned how breaking NCAA rules becomes a crime. This legal research examined a little known statute, 18 U.S.C. §1346 (1988) which expressly provides that violation of the mail and wire fraud statutes includes a scheme to deprive another of the intangible right of honest services”. The elements of an honest services fraud claim include: 1) A breach of duty with harm to a person whom a duty is owed; 2) Economic harm caused by the conduct is actual or reasonably foreseeable; and 3) Omission or misrepresentation was material. Under the statute, as long as the organization would suffer considerable losses, including financial loss or damage to reputation, federal prosecutors have wide discretion to criminalize conduct in private industry that may not otherwise be illegal.

While the media and general public expect the NCAA to control every aspect of college sport, it is actually quite limited in its ability to investigate allegations of rules violations. Unlike the government, which has subpoena power and can compel witnesses to testify, the NCAA relies on its members to follow the rules, to report when they have broken the rules, and to cooperate in infractions investigations. Penalties have a huge impact on the institution, but sometimes little impact on the rules violators who are long gone. Criminal prosecution for honest services fraud may be a way to deter cheaters from violating NCAA rules and provide recourse for the institutions that are harmed by their behavior.

While these initial renovations will make an immediate positive impact on our faculty and student, a more extensive renovation of Fetzer Hall is needed to further advance our academic and research programs. The Exercise and Sport Science department is one of the largest (3rd) and fastest growing undergraduate majors in all of the College of Arts and Sciences. In addition, our research grant funding has grown by more than 350% over the past 5 years.

To meet these needs, we are developing a more extensive master plan for renovating the main classroom and office areas. Initial schematics have been developed, which will transform Fetzer Hall into a modern and state-of-the-art facility.

In combination with our department's master plan, Campus Recreation is developing plans to completely reimagine the Student Recreation Center that is adjacent to Fetzer Hall. The combined renovation of Fetzer Hall and the Student Recreation Center will transform the experience of not only EXSS undergraduate/graduate students, but literally every student on UNC's campus. Our goal is to finalize plans and begin fundraising within the coming year so that we can make these plans a reality for our students in the next 5 years.



CONGRATULATIONS

TO OUR 2018 PHD AND MASTER'S PROGRAM GRADUATES ON THEIR NEW POSITIONS!

PHD PROGRAM

FJ Goodwin *Elon University*

Laura Pietrosimone *Duke University*

MASTER'S PROGRAM

Katie Burger *UNC-Chapel Hill Athletics*

Simon Carcagno *UNC-Chapel Hill*

Jackson Carver *Healthtrax Fitness & Wellness*

Cori Coleman *Stanford University*

Tara Condon *Grand Canyon University*

Phil Gagnon-Joseph *Philadelphia Eagles*

Emily Guadango *Carolina Family Practice Clinic*

Victoria Hawley *Duke University*

Brendan Heitz *Duke University*

Jarrod James *Kansas City Chiefs*

Alex Kimura *University of Colorado*

Katie Lee *Mt. Union College*

Rachel Leeke *Columbia University*

Cassie Perrella *Jacksonville Jaguars*

Clay Pfeifler *Collegiate Sports Associates*

Kelsey Rankin *Duke Vision Center*

Jacob Spreyer *US House of Representatives*

Sarah Tuohy *Boston College*

Josh Valentine *Duke University*

Carl White *Wake Forest*

Johanna White *Hough High School*



2017-18

Faculty Awards & Recognitions



Jonathan Jensen

- Paper of the Year in Sport Marketing Award
- Emerging Scholar in Sport Marketing Award

AMERICAN MARKETING ASSOCIATION (AMA) – SPORT & SPONSORSHIP –
LINKED MARKETING SPECIAL INTEREST GROUP



Zachery Kerr

- New Investigator Award

AMERICAN COLLEGE OF SPORTS MEDICINE (ACSM)



Johna Register-Mihalik

- New Investigator Award

NATIONAL ATHLETIC TRAINERS' ASSOCIATION (NATA) –
RESEARCH & EDUCATION FOUNDATION



Meredith Petschauer

- Excellence in Undergraduate Teaching Award

DEPARTMENT OF EXERCISE AND SPORT SCIENCE (EXSS)



Nels Popp

- President of Association

SPORT MARKETING ASSOCIATION (SMA)



Eric Ryan

- Fellow Status

NATIONAL STRENGTH AND CONDITIONING ASSOCIATION (NSCA)



WELCOME

New Faculty

Candice Goerger M.S.

ROLES

Assistant Program Director for the Center for the Study of Retired Athletes (CSRA) and the Matthew Gfeller Traumatic Brain Injury Research Center

EXPERTISE

Candice Goerger brings over 10 years of research coordination and grants management experience to the department. She has both pre-award and post-award experience working with multi-million dollar grants from a variety of funding sources. She most recently served as the Assistant Program Director in the Department of Psychology at Georgia State University.

Tammy Piner B.A.

ROLE

Accounting Technician

EXPERTISE

Tammy Piner has 17 years in the UNC system, starting out as a part-time employee directing the after-school program and substitute teaching for 3 years at the elementary school where her son was enrolled. Tammy credits her work history over the past 20 years as inspiring a multitude of interest for her while providing a strong foundation in the financial, research, technical and service aspects of the academic area. Tammy has worked the last 4 years here at UNC-Chapel Hill as an accounting technician.



Danielle Smith MBA

ROLE

Teaching Assistant Professor

EXPERTISE

Danielle Smith's focus will be on assisting the undergraduate program through teaching Intro to Sport Administration, Events and Facilities, Sport Marketing, and managing the internship program. Bringing 13 years of sport and entertainment industry experience, Danielle will also spearhead industry relations and continue to build alumni connections for the SpAd department. Most recently, Danielle served as Vice President with Wasserman, a global sports marketing agency.



2017-18

Department Statistics

RESEARCH NUMBERS



\$2,308,963 in **research funding** by EXSS principal investigators



18 **grant awards** to EXSS faculty members as the principal investigator

STUDENT NUMBERS



1,324 **undergraduate majors** in the fall semester



4 **doctoral candidates** mentored by EXSS faculty earned their Ph.D. in Human Movement Science



119 undergraduate students completing an **internship, practicum,** and/or **research experience** in EXSS



FACULTY NUMBERS

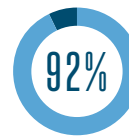
6

faculty members recognized with university or national level **awards or recognitions**



302

undergraduate students earned their **B.A. degree** in EXSS



completed their degree in **4 years**



27

master students earned their **M.A. degree** in EXSS



completed their degree in **2 years**



ALUMNI SPOTLIGHT

Brian Beckman



I never meant to start a nonprofit.

A year after graduating from UNC, I was working on a medical study in a hospital. As my contract was up, a group of people called me and asked “Do you want to go to Africa for two months?” I quit my job and went to Rwanda and then Uganda. At the time, I was in a very dark place in my life, but something started to change on the trip. I deeply experienced love and grace that accepted me where I was, and called me to become the best person I could be. It moved within me until I realized I wanted to live the rest of my life to be even a taste of that love to at-risk children in Rwanda. I decided to use what I knew best and what they passionately loved: sports.

From that moment a decade ago, the Kefa Project was launched as a partnership of Americans and Rwandans. We fight child

homelessness in Rwanda with soccer as the conduit. Our programs are built on the fact that every child, no matter their background or what they have done in their lives, is valuable and deserves a safe place to grow.

We run community soccer teams for 500 at-risk boys and girls. In addition to running trainings, their Rwandan coaches do home visits, help kids work through problems, and encourage kids to stay in school. We have had kids return to school, return home from living on the streets, and launch businesses to provide for their families.

We also run a boarding soccer academy for kids who were homeless and could not be reconciled back home. These are kids who come from abuse, prostitution, and extreme poverty. Kefa Academy provides

education, soccer training, medical care, and daily needs. We have 35 kids in our academy system. When one of our kids first came to the academy, he was too sick to eat. Now he runs a bakery in his community. Others who have gone through our programs are now studying computer science in university. Some have gone on to play professional soccer.

We also run a co-op with the mothers of our academy students. They they learn job skills for financial independence, as well as skills in parenting classes. Our hope is to partner with families to stop intergenerational poverty.

The EXSS program taught me to embrace new opportunities and challenges. I had a host of professors who encouraged me to look beyond the course work and learn how to use it to pursue my passions;



whether it was a SURF grant that pushed me to set up my own research or a professor who offered words of encouragement about what I could become.

To do this day I have professors from the EXSS department who are encouraging me, advising me, and working alongside me. We are empowering kids who are going to change the world far greater than we ever could have alone.



It's easy to make a gift!

Visit us at exss.unc.edu/make-a-gift

We are very grateful to all our alumni, friends and donors for their generosity. Private gifts play a critical role in the current and future success of our department. Thank you for your support!

Gifts by check may be payable to **Arts and Sciences Foundation, Inc.** with **Department of Exercise and Sport Science (101496)** in the memo line mailed to: The Arts and Sciences Foundation, Attn: Chris Davis
523 East Franklin Street, Chapel Hill, NC 27514.

For more information about giving to the Department of Exercise and Sport Science, please contact the Arts and Sciences Foundation at **919-962-0108**.

f UNC EXSS UNITE!

t @UNCXSS

Q exss.unc.edu

Department of Exercise and Sport Science
The University of North Carolina at Chapel Hill

209 Fetzer Hall, Campus Box 8700
Chapel Hill, NC 27599



THANK YOU FROM THE EXSS IMPACT TEAM!