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HES ALUMNI Newsletter

THE LINE OF SUCCESSION:

BRUBAKER NAMED 5TH HEALTH & EXERCISE SCIENCE CHAIR



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"The Line of Succession"



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THE LINE OF SUCCESSION:

BRUBAKER NAMED 5TH HES CHAIR



Current HES Chair: Perspectives on Being Chair Peter H. Brubaker, Ph.D., HES Chair

I have to admit, it's a little surreal to me that I am actually the Chair of the Health and Exercise Science Department, considering I was once upon a time (a mere 33 years ago !!) a graduate student in this department. Even more surreal is that several of my professors/mentors (Drs. Rejeski, Messier, Berry) are still here and going stronger than ever! Certainly never thought these early "role models" of mine would eventually become my peers and colleagues! It will take a little getting used to them coming to me with requests, approvals, etc. and for them to hear an occasional "no" from me!!

I had the good fortune to return to Wake in 1991 (after working a year at Duke and doing PhD at Temple) as Director of Cardiac Rehabilitation. This opportunity became available because my former advisor/mentor Dr. Ribisl was moving into the role as HES Department Chair. Several years later my position turned into a tenure-track line and I steadily climbed the faculty ranks from there. Hard to believe this is my 27th year on faculty at Wake. I have loved every minute of it and I can honestly say there has never been a dull moment with new challenges and opportunities presenting themselves every day!! During my time at Wake (including as a graduate student) I have had the good fortune of working with/for three outstanding department Chairs; Drs. Hottinger, Ribisl, and Berry. The many important lessons that I learned

from each of these individuals will definitely serve me well as I make this transition and hopefully become an effective department chair. Furthermore, I am very blessed to "inherit" an incredibly passionate and motivated faculty and staff. It is truly a pleasure to come to work every day and to be surrounded by such talented and positive



colleagues. The HES department continues to be recognized as one of the very best at this university (and beyond) because of our commitment to excellence in both teaching and scholarship. My first objective is to ensure that the HES Department continues to provide high-quality teaching and mentoring, as well as a high-level of research productivity. I also expect to invest my time and energy this year on a thorough curriculum review, for both graduate and undergraduate programs and develop a department specific fund-raising plan for the future. Needless to say, I am excited and honored to be given the opportunity to "steer" this amazing department for the foreseeable future and to help write the next chapter in the illustrious history of the Department of Health and Exercise Science!





HES Chair 2007-2017: Perspectives on Not Being Chair

Michael J. Berry, Ph.D., Professor

Well that ten years sure went by quickly. It seems as if it was just yesterday that the department faculty members were sitting in classroom 308 of the old Reynolds Gym deciding who would follow Dr. Paul Ribisl in the Chair's position beginning in the summer of 2007. Dr. Ribisl had served as Chair for 16 years, and prior to his tenure, Dr. William Hottinger had also served for 16 years. When I agreed to serve, I was pretty sure that I was not going to continue that 16-year tradition. I was also unsure if I could fill the running shoes of these past two leaders. Both had done a tremendous amount of work to transition the department

from one of preparing physical education teachers to a department recognized as one of the top health and exercise science departments in the nation. Fortunately, I had been a faculty member under both and learned a great deal about leadership from them. Even more fortunate was the fact that they had hired exceptional faculty with whom I would be working.

One of my first major tasks when I assumed the Chair's position was leading the departmental review that occurs every 7 to 10 years and produces a 100 plus page document. That document, which is produced by the department in consultation with external and internal reviewers, details strengths and weaknesses of the department and culminates with a Memorandum of Understanding (MoU) between the department and upper administration. The MoU serves to guide the department until the next review. One recommendation from this review and previous reviews was the department should be moved into dedicated academic space. At the end of my



second term as chair, it appeared that a plan to move the department from Reynolds Gym to a dedicated academic building was coming to fruition. That was the incentive I needed to serve a third term. With the help of campus administrators and the Health and Exercise Science faculty and staff, the department moved into our new space in Worrell Professional

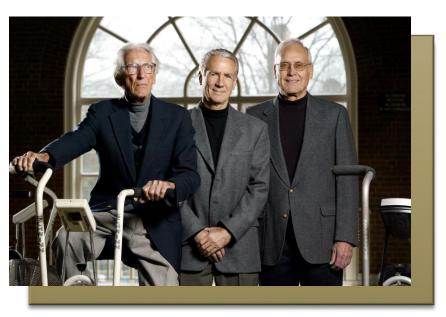
Center in the winter of 2015/2016.

Other changes to the department resulting from that review included a curriculum review and a greater emphasis on the HES 100 – Lifestyle and Health and 101 – Exercise for Health classes which are required of all freshman. The department now has 3.5 full time faculty members helping with the teaching and administration of those classes. In addition, the department also hired two new tenure track faculty members in addition to retaining existing faculty members to help teach an increasing number of majors. And while there have been no major changes to the Health and Exercise Science curriculum resulted from that review, we have continued to make slight changes to meet student needs.

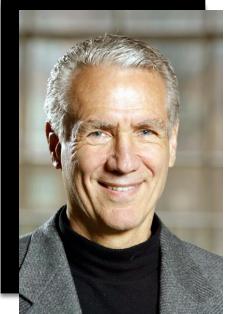
The MoU also noted the high quality and productivity of research, publications, and grant funding by the Health and Exercise Science faculty. Over the past ten years, the department has maintained its excellence in this area. Faculty members continue to publish in high impact journals, and we are consistently one of the top three departments in the University when it comes to external research funding.

In a 2003 article in the Wake Forest magazine (http://archive.magazine.wfu.edu/archive/wfm.2003.06.pdf),

Dr. Ribisl acknowledged the work of previous department chairs and noted, "Each of us inherited a solid department from our predecessor and then worked to improve on an already successful department. One always hopes to leave a department in good shape to a successor and each of them did that—but hopefully we have continued to make it even better." Hopefully, I fulfilled that expectation. I anticipate that our new chair Dr. Brubaker will strive for the same, and, hopefully, he will think the same of me as I do of my predecessors in 16 years.



Dr. Harold Borrow, Dr. Paul Ribisl and Dr. William Hottinger



HES Chair 1991-2007:

Paul M. Ribisl, Ph.D., Emeritus Professor of Health and Exercise Science

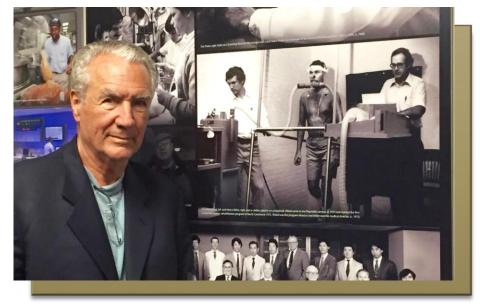
I am honored to be invited to participate in this edition of the Health & Exercise Science Alumni Newsletter.

I was asked to reflect on my experiences at Wake Forest and to share them with our alumni. It is a challenge to consolidate a 40year career in a brief piece in a newsletter, but I will try. I came to Wake Forest in 1973 to take the place of my good friend and colleague, Michael Pollock, who left Wake to take a research position as director of research at the Institute for Aerobics Research in Dallas. Mike and I were classmates at the University of Illinois from 1962-1967. Dr. Henry S. Miller and Mike started

our department's connection to the Medical Center, and in 1975, Dr. Miller and I landed a \$1 million grant from the American Heart Association to start the first outpatient cardiac rehabilitation program in North Carolina. The initial grant was for 3 years and was to develop a model multi-disciplinary cardiac rehabilitation program in the first year and then disseminate it to other sites in the remaining years. Over the next decade, we were instrumental in helping develop over 50 new cardiac rehabilitation programs throughout North and South Carolina and Virginia.

When I arrived at Wake Forest in 1973, we were designated as the Physical Education Department and half our faculty were also athletic coaches. Only three of us had the doctorate. With our increasing interest in the science behind exercise and health, and our expanding connection with the medical center, we began to focus our direction towards the role of exercise and healthful behaviors in the management of chronic disease. As we moved in that direction, our coaches left the department to become full-time in the Athletic Department and we began to

hire PhDs as Assistant Professors. We changed the name of the department to Health and Sport Science and eventually to Health and Exercise Science and were possibly the first in the nation to adopt that name. Our first new PhD hires were Dr. W. Jack Rejeski, Dr. Stephen P. Messier, and Dr. Michael J. Berry. These three individuals formed the nucleus of our multidisciplinary research team and led the University in external





funding for the next decade, successfully landing several multimillion dollar grants from the National Institutes of Health and other agencies. My own history with the department coupled teaching with administration and research. I was the director of the Wake Forest Cardiac Rehabilitation Program from 1975 until 1991, when I turned the directorship over to Dr. Peter H. Brubaker, who continued to run the program until he was named Chair of HES, in Fall 2017. In 1991 I took over as

chair of HES from Dr. William H. Hottinger, who had also been a classmate of mine and Mike Pollock at the University of Illinois. I then chaired the department from 1991 until 2007, when Dr. Michael J. Berry became chair, a position he held until Fall 2017, when he was succeeded by Dr. Brubaker. When I retired, I continued to teach First Year Seminars and conduct research in the area of obesity and Type 2 Diabetes Mellitus. And, at the request of the Administration, I served one semester as interim Dean of the College and another three semesters in the Office of the Dean of the College as Associate Dean for Academic Planning. After 40 years, I retired in July 2013 as Emeritus Professor of Health and Exercise Science.

In reflection, I believe that over those 40 years, I had the best academic job in the nation. The support I received from the Administration was unparalleled; my colleagues, both within the department and within the College were exceptional, the students in our major and in our classes were gifted and talented. At each step along the way, Patty Kennedy, our administrative assistant, was a key to my success and that of the department. While I was recruited by other universities to join their faculty, I was never tempted to leave since I knew there was no grass greener than that of the Wake Forest campus. I happily retired after 40 years knowing that the

department was in extraordinarily capable hands and that the faculty would continue the fine tradition of teaching, scholarship, and service in the coming years and decades. In closing, let me also tell you why I think Wake Forest University remains unique among universities across the nation. At Wake Forest, the "Teacher Scholar Ideal" was adopted after a major programmatic revision called "The





Plan for the Class of 2000." I was fortunate to be the Vice Chair of that committee, and in addition to expressly adopting the Teacher Scholar Ideal, we were the first university in the nation to provide every freshman with a laptop computer. Also, we expanded our overseas programs and now rank #6 nationwide in Study Abroad Programs. Another key goal of the

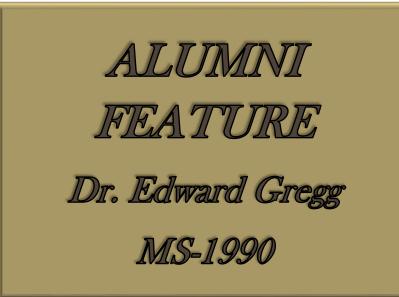
Plan for Class of 2000 was an expansion of faculty and improvement of the Faculty/Student ratio. The wisdom of these goals becomes readily important when one considers that we now rank #5 in undergraduate teaching nationwide. We are a full-fledged university and HES is a department that has Full Professors teaching all students, including freshmen. All of our tenured/tenure-track faculty teach as well as conduct research – thus no one can opt out of teaching to be a researcher exclusively, and thus we actualize the teacher scholar ideal. HES has consistently ranked among the top departments in generating external funding in the College, and indeed for years HES was *the* leading department, despite not having a PhD program or doctoral students. In closing, I note that HES is exceptionally well positioned to build upon its already impressive history towards a very bright future, powered by intelligent, dedicated students who are

excelling in further graduate study and careers in the health professions. I have wonderful memories of my 40-year career and am proud to have been associated with our students over those decades.



"Each of us inherited a solid department from our predecessor and then worked to improve on an already successful department."

~Dr. Paul Ribisl





Dr. Edward Gregg has served as an epidemiologist at the Centers for Disease Control and Prevention (CDC) in Atlanta, GA where he leads a multi-disciplinary public health unit of epidemiologists, statisticians, and economists to guide policies of prevention for diabetes and its complications. Ed came to the Wake Forest Health and Sports Science M.S. program in 1990 right after finishing a B.S. in psychology and physical education at the College of William and Mary. While at Wake Ed worked with Dr. Jack Rejeski and the Wake Forest Cardiac Rehabilitation Program.

"When I was at Wake Forest I did my thesis with Dr. Jack Rejeski on the impact of exogenous testosterone on behavior in monkeys and was the graduate student leader of the Cardiac Fitness program of the WFU Cardiac Rehabilitation program. After graduating, I moved to Raleigh and worked as an exercise specialist and as a diabetes educator at Raleigh community hospital. That work, combined with my experience at Wake Forest, got me excited about epidemiology, population-level prevention, and led me back to school to obtain a PhD in Epidemiology at the University of Pittsburgh School of Health, where I also got exposed to large multi-center cohort studies and effectiveness trials."

Shortly thereafter Ed started work at the CDC and combined these experiences, focusing on studies of the impact of physical activity and lifestyle interventions on the risk for diabetes complications and disability. Later, he led multi-center studies at the CDC on diabetes care, including the TRIAD study (Translating Research into Action for Diabetes).

"In 2007 I was appointed to lead the epidemiology and statistics branch in the diabetes division which I helped develop into a multi-disciplinary science unit designed to oversee national diabetes surveillance and guide prevention policies for diabetes and related chronic conditions. My team has gained notoriety in recent years for publishing landmark studies describing population-wide successes in reducing diabetes complications as well as the recent changes in national diabetes prevalence and incidence." Ed has also become involved in prevention studies in different areas of the world, including the Da Qing Diabetes Prevention Follow-up Study, the first long-term follow-up study of the impact of lifestyle interventions on diabetes and complications. He is also now serving as co-chair of a Lancet Commission that will serve as an international call to action to promote political, community, and system-level changes to reduce diabetes around the world.

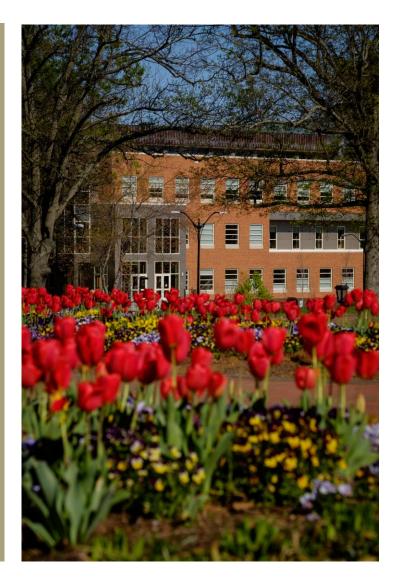
In addition to Ed's many professional accomplishments, he still finds time for his family and various hobbies that he enjoys.

"I still spend a lot of my spare time with sports, mostly cycling, running, basketball and now backpacking. I spend the rest of my time following my three kids, including son Aaron, a Washington Post reporter, daughter Abby (an artist and master's degree student in San Francisco) and Ben, soon to be a student at the University of Oregon."



If you are an alumnus of the Department of Health and Exercise Science at Wake Forest University and would like to share your story and be featured in one of the upcoming issues, please contact Dr. Steve Messier at:

messier@wfu.edu





CJ grew up in Oakdale, NY on Long Island. He graduated from Wake Forest University with the class of 1992. When asked why he chose to study Health & Exercsie Science, CJ said;



"Oh boy, I'm having flashbacks to a similar question that was published my freshman year...why I chose Wake Forest to play collegiate soccer? I put the climate. Not in the cerebral sense of academic excellence, but the literal sense of the weather. It was cold in NY and I enjoyed playing soccer in warmer weather. Needless to say my coaches and anyone in the athletic department who read the interview were less than impressed with my answer so I'll try to do better this time..."

CJ had a pretty good idea he wanted to get into healthcare, as his oldest brother was a physical therapist at the time, but there were several things / experiences that led to his decision to study HES at Wake Forest. His first exposure to the program was on his recruiting trip in 1987.

"The professor I met that day ended up being one of my mentors and we are friends to this day. Reynolds Gym was the home for many things back then to include the soccer team's locker room, equipment room and Athletic Training room. Pre-season - freshman year, I spent a lot of time in that building which created several impressionable observations of many HES professors...outside of their academic endeavors. I would often see them exercising...usually running in groups at lunch. It's August, oppressive heat and humidity and I'm clearly questioning my "climate" decision, but off they would go...with usually some good banter egging each other on. Nice, I thought...real people, competitive people, who were able to have a laugh and work hard at the same time. But for sure, from a course of study standpoint, the HES curriculum was very interesting to me...especially the idea of taking human gross anatomy with a true cadaver lab."



One of CJ's fondest memories of Wake Forest and within the HES department was the relationship he had and continues to have with fellow students, professors, coaches, staff and teammates.

"I could tell you funny stories about being Dr. Messier's TA in the anatomy lab...transporting the

cadavers back to Bowman-Gray School of Medicine, post-grad working in the PARIS study with Dr. Brubaker, Dr. Berry...just being Dr. Berry, but it's not necessarily the story that sticks out, it's the person or people within the stories. Great people."

CJ is a Physician Assistant in Orthopedic Surgery and has been employed by the same group in Wilmington, NC since graduating from the Bowman-Gray School of Medicine's PA program in 1996.

I have been fortunate to work with several outstanding surgeons over that time that were/are sub-specialized in sports medicine, upper extremity, total joint arthroplasty and lower extremity respectively. I am not going to say I've done it all (except for spine), but I consider myself very fortunate to have a lot of experience in many areas. At the present time, I mostly deal with patients of all ages with lower extremity issues. I have also been on the sport's medicine staff (volunteer) for the United States Soccer Federation for many years...which means I travel with youth national teams for international competitions and training camps. I'm almost embarrassed (and wonder how I'm still married) with all of the trips I've made supporting the USSF as the "team doc" ...as they call me. Locally, I continue to do a lot of sport's medicine for UNC-W student athletes and the Wilmington Hammerheads FC (soccer club)."

All the way thru undergrad CJ was preparing to go to PT school as his brother did, but before graduation was offered a position within the HES program to work in the FAST study followed by the PARIS study. During this same time, his coach invited him to join the Wake Forest Men's Soccer coaching staff.

"Those 2 years probably shaped who I am now more than anything. It was thru PARIS (Prospective Aerobic Reconditioning Intervention Study for patients with congestive heart failure) that I was first introduced to a PA...I never heard of one before. Needless to say, I was impressed enough to apply to PA school (which is where I met my wife). But, my experiences as a coach (under Walt Chyzowych and Jay Vidovich) were equally inspiring. After PA school, I continued my coaching education and now I maintain a USSF "A" license...which means nothing to those outside of soccer (and to some in soccer), but I'm proud of it...and certainly remain very passionate about it."

When asked what advice he would have for fellow alumni or current HES students, CJ suggest;

"Life is a team sport....certainly in medicine and definitely as a PA. You can go at it alone and think you are smarter than everyone else and perhaps be successful, but you will probably be miserable...and less successful than you could have been if you were able to work well with others. Be open to learn from others. When you don't know the answer, be willing and able to ask questions. Develop relationships in your academic endeavors and in your professional lives. It will serve you very well with whatever you decide to do with your HES degree. In your personal life, I recommend pruning ©...staying close and engaged with family and loved ones."

"If you go into healthcare as a provider, get really good at listening to your patients as they will most likely tell you what is wrong with them (they will give you the diagnosis). But, you have to give them more than 10 seconds to talk and actually listen to what they are saying. As a PA, you have to work well with others (at a minimum with your MD), and to find happiness, you have to have a professional relationship with your physician based on mutual respect. **If you don't work well within a team**, don't apply to PA school; and if you apply to medical school instead, you probably should not hire a PA...unless you enjoy high turnover of staff and chaos."

CJ is not all work and no play and strongly believes you have to have passions outside of your profession to be happy...and he has several.

"Being a father is by far my #1 now with coaching soccer being a close second, but certainly being outside and taking advantage of living on the coast is a part of my

fabric...as it has been throughout my childhood growing up on Long Island. I have an amazing wife Mollie (pictured above) who allows me to pursue my passions (most times); and, two equally amazing children: daughters Reilly (13) and Sophia (12)...and my dog Brogan (7). We are not perfect, but we love each other and get it right most times.







Cindy Yost Perret has been an ACSM Certified Clinical Exercise Physiologist for the last 28 years. She graduated from Wake Forest University with the class of 1975 as a Physical Education major before getting her Master's Degree in Physical Education at the University of Florida.

"When it came time to declare a major at Wake Forest, I wasn't sure what to do. After a lot of reflecting, I decided to major in Physical Education. Studying anatomy, biomechanics and exercise physiology was fascinating. I loved learning all about the human body and the effects of exercise and training. Wake Forest offered an excellent program, and studying under Dr. Paul Ribisl, Dr. Tommy Boone, and Dr. William Hottinger was a wonderful experience. My only regret was that I did not get the opportunity to work with the cardiac rehab program

that Dr. Ribisl, Dr. Miller, and Dr. Pollock had started. Cardiac Rehab was in its infancy in those days, and I would have loved to have been a part of it."

After getting her Master's Degree in Physical Education, Cindy was hired at Newcomb College in New Orleans, Louisiana where she taught swimming, exercise and conditioning. Cindy also coached the synchronized swimming club there. However, after teaching at the college, high school and PK-12 level, Cindy started to feel that her Master's Degree was going to waste so she found a job in cardiac rehabilitation as a Clinical Exercise Physiologist. She spent 12 years at New Orleans' Baptist Memorial Hospital and then the past 20 years at East Jefferson General Hospital in Metairie, LA.

"Working in Cardiac Rehab has been an amazing experience. I love teaching and working with people; I love seeing people get stronger and healthier; I love learning more about the heart, diabetes, arrhythmias, and medical stuff in general. It's funny that I am now the age of the "older people" who were in cardiac rehab when I started in this profession. Now many of our patients are younger than I am!"

Cindy has served as President, Vice-President and Webmaster for Louisiana Association of Exercise Physiologist for the past six years. On a personal note, she has been married for 35 years and has one step-son, daughter-in-law, and two beautiful granddaughters.

"I am still playing soccer (women's and coed) in the local leagues. I referee high school and youth soccer. I am a triathlete and train with the GNOTRI, Steel MagNOLAs, and Guido Sportif groups."



WFU offered an excellent program, and studying under Dr. Paul Ribisl, Dr. Tommy Boone and Dr. William Hottinger was a wonderful experience.



FACULTY FEATURE

Dr. Shannon Mihalko (BS-1992)

Dr. Shannon Mihalko has a long history at Wake Forest University being both an alum and faculty member; however, her ties to Wake Forest go much deeper. Dr. Mihalko's parents met at Wake Forest as undergraduates and as a child she has fond memories of spending Saturday afternoons during the fall watching her dad play football for Wake Forest where he was an ACC all-academic defensive back. After her parents graduated, the family moved back to her father's home state of New



Hampshire, where she grew up in what she affectionately refers to as "the big city of ManchVegas".

With so many family trips back to Winston-Salem over the years, it was no surprise when Dr. Mihalko decided to head back South to dear old Wake Forest. When asked about her decision to study Health and Exercise Science, Dr. Mihalko replied,

"I started my first year in Biology, but was also working with the athletics department in the strength training program—it was really my interest in promoting physical function that brought me to Health and Exercise Science."

So how did Dr. Mihalko become interested in psychology with a background in exercise science? It, in fact, stemmed from an undergraduate research project where she worked with Dr. Jack Rejeski. It was this connection that led Dr. Mihalko to pursue her Master's and PhD degrees at the University of Illinois Urbana-Champaign where she focused on women's health—specifically physical activity and strength training for older women. Wake Forest lured her back, though, to complete the trifecta—legacy, alum, and now faculty. "What brought me to Wake as an 18-year old, is what brought be back as a faculty member in 1999. The feel of a small school, small classes and the opportunity to collaborate directly with my students on research projects."

Dr. Mihalko strives to "promote and celebrate" mentored scholarship through the Undergraduate Research and Creative Activities Center (URECA) and HES Honor's Program. Developed from her own undergrad research experience, her passion for promoting research at all levels of education is clear through her commitment to her students. When asked what she thought had changed the most about Wake Forest and the HES Department since her time as a student she responded,

"The department [has remained] dedicated to working with students both in and out of the classroom. However, the opportunities for students to work with faculty in their research has grown since I was here.... Our students get to play larger roles in research projects as a result of the collaborations on studies conducted both in our facilities and at the medical center in clinical settings."

Dr. Mihalko's own work within the department focuses on the behavioral aspects of physical activity, weight management, and quality of life for older adults with chronic diseases such as osteoarthritis and breast cancer. Her collaborative efforts are reflected in her research, as she works with most all faculty in the department in addition to her own projects.

As inspiring as Dr. Mihalko is as a faculty member, her life is not without balance. One of the



things she values most about her position at Wake Forest is the ability to keep her family as a priority. Dr. Mihalko married Ryan, a Notre Dame graduate, and they have two children: Cooper (12) and Carson (10). Since Notre Dame has joined the ACC Conference, the Mihalko's have become a "house divided" when it comes to sports. Not to worry, though, they are united when it comes to their new love, lacrosse—which both kids play, and their white Labrador Retriever, Snow. When asked what she would be most remembered for throughout her *three* times at Wake Forest, she responded reluctantly,

"My hazelnut coffee... and my expense account at the Deacon Shop. No, really, it's the relationships that matter—they stay with you for a lifetime."

FACULTY FEATURE

Dr. Gary Miller



Dr. Gary Miller grew up in a small farming suburb in Kansas outside of Wichita, with a population of less than 3,000 people. Because it was only a 20-minute drive to downtown Wichita, the largest city in Kansas, his hometown was very quiet with few businesses.

"Growing up in a small town, everyone knew everybody and you went to school from kindergarten through high school with the u friends and never leave the

same group of people. I thought I would be like most of my friends and never leave the area."

How wrong he was though, as he pursued his college education moving from coast-to-coast. He has now been at Wake Forest for nearly as long as the 27 years he spent in Kansas.

In college and graduate school, Dr. Miller loved learning how the body worked, both at rest and how it responded to stimuli. In the noble pursuit of knowledge, he enrolled in classes such as pharmacology, exercise physiology, and nutrition.

"The more classes I took in the area, the more I marveled at the way the body works."

Dr. Miller has a strong passion for both nutrition and exercise physiology and enjoys being able to teach and conduct research in these areas. His favorite part of his job is the student interaction, both with graduate and undergraduate students, in and out of the classroom.

"I feel I have a dream job in that I get to work with students, teach, and do research in both nutrition and exercise physiology. I also love to take students abroad and expose them to sites and adventures they would have never had. I want to take them out of their comfort zone and let them recognize their full potential." When offering advice to new college graduates, Dr. Miller recommends that they pursue their passion and not settle for something they may not like because it seems to make financial sense. According to Dr. Miller, there is always plenty of time to work, so taking a year or two, or even more than that, after graduation to explore before settling down is okay—even he took an unconventional route to being a professor.

"There are many roads to reach your destination. If detours come up, make the most of the situation. Life is all about experiences and relationships."

When asked who in history he respected the most, Dr. Miller shared his admiration for Alexander von Humboldt, a highly accomplished scientist who explored many different science disciplines.

"Alexander von Humboldt also loved to travel and go to places at a time most thought these societies were barbaric with uncivilized people living there. Those areas were to be avoided."

Looking ahead, Dr. Miller would like to continue to provide the best learning experience for students here at Wake Forest through research and teaching. He is currently fascinated with how the gut microbiome influence us, both in health and disease, and would like to learn and conduct research in this area.

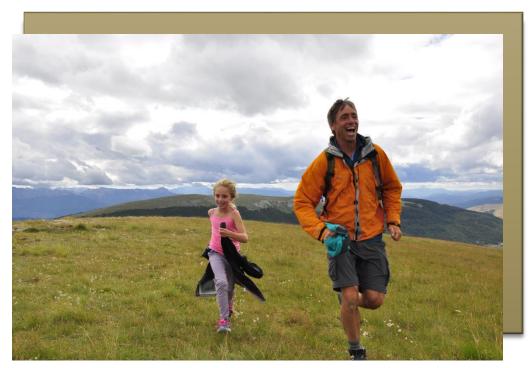
In addition to Dr. Miller's many professional accomplishments, he is most proud of his family. He and his wife, Jill, have two children together, Kelton (18) and Channing (8). When asked what Dr. Miller would most like to be remember for, he replied,

"I want to be remembered as a good dad, husband, and friend."

Dr. Miller's own dad had a significant influence on who he is today, providing many valuable lessons along the way that he hopes to pass on to his own children. While his father has been

self-employed for almost 50 years, he claims that even at 85 years old he enjoys it so much he doesn't consider a full day of hard labor to be work at all. When asked what one quality he felt best describes him, Dr. Miller responded,

"Definitely fashionable. No, not really. Maybe open-minded."



UNDERGRADUATE EXPERIENCES IN HES Mary Caroline Austin, Sr. HES Major



The Department of Health and Exercise Science has become more than just a major, it has become a gateway for students to enter into the world of health-related professions. The diversity of classes which this major offers allows students great flexibility to pursue a variety of careers. Undergraduates in HES, who total 140 juniors and seniors this current academic year, have plans to attend medical school, PT/OT school, PA school, nursing, and public health.

While the most talked about class is still anatomy, students find themselves in a love/hate relationship during its course. There is so much to learn in so little time, but the ability to get hands on experience with three human cadavers is something they would never trade. It is guaranteed that you will never forget the first time you touch a real bone or muscle in the human body as it is staring at you

from the steel table prompting you to learn. One senior that is graduating in May, Allie Torrence, explained it as "an unforgettable class and I honestly miss it-- something I thought I would never say. Now I get the chance to be a teacher's assistant for Drs. Eaves and Messier in the spring and prepare the cadavers before each class; I couldn't be more excited."

While the common thought is that being a science major makes it impossible to go abroad, this has proven to be quite the opposite in the HES department. Dr. Gary Miller has taken many students on a thrilling study abroad adventure in the summer which combines the roles of foods and exercise in adventures overseas. The first two weeks are spent in the classroom while the remaining three weeks are split hiking and biking in Spain, France, and Switzerland. Not only does this give the students an educational experience, but it also allows them to incorporate the things they learn into real life experiences—especially experiences in a foreign country! Not only do we get to learn about the human body in Winston-Salem, but we get to expand our horizons across the ocean!

Another opportunity student's in the HES department can take advantage of to broaden their experience is to be an athletic student aide to Wake Forest Sports Medicine. Students are able to begin their experience in the training room with the objective to observe and interact with student athletes and staff to become acquainted with the set procedures. These individuals are chosen because of their strong work ethic and motivation and are incorporated into the

professional environment where they work closely with physicians, certified athletic trainers, and physical therapists in preparation for graduate school. They get the opportunity to be on the sideline during home games to assist in rehydration of the players and work alongside the trainers, therapists, and physicians in assessing and treating injuries.

Finally, one of the greatest opportunities that the HES department provides for undergraduates is the HES honors program led by Dr. Shannon Mihalko. This is something that must be applied for by rising seniors and is highly competitive. It embodies the opportunity to work closely with a professor on his/her own research project that they are currently conducting. Not only does this provide students with hands on experience with study participants, but also provides a platform for students to better their writing skills as they will write their own thesis by the end of the year. Working side by side with professional researchers and clinicians, writing a scientific paper, and presenting your research to the Wake Forest academic community are invaluable experiences afforded by this program.

The HES major is a wise choice for students interested in health-related professions. The department continues to enhance the educational experiences of its undergraduate majors who could not be more thankful for such a unique opportunity.

About the Author: Mary Caroline Austin is a senior at Wake Forest University majoring in both Health and Exercise Science and Spanish. She is involved with the Kappa Delta sorority and is president and captain of the Women's Club Soccer team. She is also a member of the Big Brother/ Big Sister program which mentor's children of low-income families. Mary Caroline plans to attend PA school after graduating.



HES Alumni Homecoming Reception 2017



"It was fantastic getting to catch up with Dr. Brubaker, Dr. Miller, Dr. Messier and Dr. Rejeski...after 20 years they all look the same. Obviously they practice what they preach! I am thankful for the education and mentoring I received from them. It was exciting to tour the new HES facilities...an anatomy lab with windows overlooking the beautiful Wake Forest campus!?! I've taken anatomy at three different medical institutions, and never had a window...we were always down in some dark basement!"

~ Thornwell "Tripp" Parker, MD (Class of '97)

"It was great to be back to see fellow alumni and faculty. In addition, it was great to see the new facilities. The HES group has long deserved this wonderful working space. For decades, they have quietly become national leaders in Exercise Science, Health of our aging population and have accumulated millions of dollars of grant funding. This new building shows the great recognition that makes me proud to be an HES alumnus."

> ~ Bryan Collier, DO (Class of '92)

"Visiting the Health & Exercise Science Alumni Reception was like going back in time. It was great reconnecting with the department and seeing all the growth that has occurred over the years. Despite changes, it was refreshing to see that the faculty and staff are still the same great scholars and great people that I remember. I loved seeing my fellow grads and hearing all the amazing, and diverse things they are doing in the field. It felt like we picked up where we left off in graduate school as we ran down memory lane! Overall, the reception reminded me of why I chose HES and Wake Forest in the first place; the sense of purpose and community. I am looking forward to visiting again in the years to come!"

> ~ Seth Chirstopher (Class of '15)



HES SOCIAL BUZZ

Join the **WFU Health & Exercise Science Community** and don't miss out on events, news and more! In hopes of capturing the attention of a wider audience base, the *Health and Exercise Science* department will be creating quite the "social buzz" through our social media **Facebook** page. Our goal is to broadcast our faculty, staff, students, alumni and community members, highlighting current events, research, soliciting advice to potential HES majors and more. We'd love to have you along

for the journey!

Please communicate events, needs and requests via email to LeAndra Brown at brownlr@wfu.edu or via Facebook message by visiting our page at <u>facebook.com/WFU.HES</u> Stay tuned!





LeAndra Brown is an Assistant Professor of the Practice in Health & Exercise Science and comes to Wake Forest University from Virginia Commonwealth University Community Memorial Hospital where she was the Cancer Rehabilitation Coordinator and Exercise Physiologist in their Cardiac Rehab Program. She earned her Bachelor's Degree in Kinesiology from Indiana University Purdue University at Indianapolis and her Master's Degree in Kinesiology with a concentration in Clinical Exercise Physiology from UNC Charlotte. LeAndra has presented on a number of topics involving body mechanics and exercise is medicine, served on a cancer committee team presenting on quality of care improvements in cancer patients as well as taught four semesters of an undergraduate

course called "The Issues of Health and Quality of Life". She is a Registered Clinical Exercise Physiologist through the American College of Sports Medicine and is excited to be a part of the Health & Exercise Science Department.



Faculty Research News



Dr. Kristen Beavers

Kristen Beavers Authors Winning Paper

An original manuscript led by Kristen Beavers, Assistant Professor of Health and Exercise Science, was selected to be presented at a winning paper symposium on October 31st, 2017 at The Obesity Society Annual Scientific Meeting. Wake Forest University affiliated co-authors include Drs. Anthony Marsh and Jack Rejeski, and Ms. Beverly Nesbit. The paper details the effect of exercise modality during weight loss on body composition in older adults, and will be featured in a special section of the November 2017 issue of the journal Obesity.

Dr. Michael Berry

Rehab in the ICU – A Moving TARGETT

TARGETT (Trial with Acute Respiratory Failure Patients: Feasibility of Graded Exercise Training) was a single-center randomized clinical trial designed to compare standardized rehabilitation therapy which included strength training exercises to usual ICU care in acute respiratory failure patients. Results from this study (http://jamanetwork.com/journals/jama/fullarticle/2530536) showed that such a program did not affect the primary outcome of the trial, hospital length of stay. Interestingly, however, six month's post-hospital discharge, those patients randomized to the rehabilitation group showed improved physical function when compared to the usual care group. Since impaired physical function is a significant problem in survivors of an ICU stay, these results provide evidence that the decline in physical function seen following an ICU stay can be attenuated by incorporating exercise into a patient's therapy. We are now conducting a follow-up study (ASPIRE - A Study Promoting Critical Illness Recovery in the Elderly) to determine if the timing of the intervention has an effect in older adults. In the TARGETT study, patients did not receive exercise until they were fully conscious. In ASPIRE, we will be using an electronically paced bike to exercise patients prior to when they have regained full consciousness. The bike, known as a MOTOMED, will allow for both passive and active cycling. In addition, we will be targeting older adults as they have worse outcomes when it comes to an ICU stay. Hopefully, the results of this study along with those from TARGET will help us to better prescribe exercise to patients in the ICU.

Dr. Peter Brubaker

What's the SECRET in Heart Failure Research ??

The Study of Caloric Restriction and Exercise Training (SECRET I) was the first randomized controlled trial to evaluate the effect of aerobic exercise training (AT) and/or caloric restriction (CR) in older overweight patients with heart failure and a preserved ejection fraction (HFpEF). The results of this study (see JAMA 2016, 315(1): 36-46) determined that both AT and/or CR improve exercise capacity and health-related quality of life (HRQOL) and these interventions are synergistic. Despite these positive findings, we

observed that 35% of the weight loss in both the CR only and CR+AT groups was muscle mass. Consequently, we obtained funding and are about half-way though the SECRET II study. The primary aim of SECRET II is to conduct a randomized, single-blinded 24-week intervention trial of resistance training (RT) added to caloric restriction (CR) + aerobic exercise training (AT) in 100 overweight/obese (BMI > 28), heart failure with preserved ejection fraction (HFpEF) patients age >60 years to test the hypotheses that addition of resistance training to AT during CR will improve exercise capacity (peak VO₂) and increase muscle mass. A secondary, mechanistic aim will determine if the addition of RT to CR+AT improves muscle mitochondrial function.

Dr. Jeff Katula

"Dr. Katula recently received a 3-year contract from Omada, Inc. The purpose of this study is to establish the efficacy of a digital health program to improve glucose control, weight status, and intermediate chronic disease risk factors compared to current standard care for prediabetes. This study involves a partnership between Wake Forest University, Wake Forest School of Medicine, the University of Nebraska Medical Center, and Omada Health, Inc. Dr. Katula is leading a team that will conduct the data management, analyses, and quality control."

Dr. Tony Marsh

Tony Marsh, Professor of Health and Exercise Science, is a co-investigator on "Molecular Transducers of Physical Activity in Humans Program" (MoTrPAC), a study designed to develop a comprehensive map of the molecular changes in the human body that occur in response to physical activity. The study, supported by the NIH Common Fund, will support 19 grants to collect various biological specimens from people of different races, ethnic groups, sex, ages, and fitness levels prior to, during, and following aerobic and resistance training. Dr. Marsh is part of the Clinical Coordinating Center which will play a major role in managing the seven clinical sites that will be recruiting and training participants.

Dr. Stephen Messier

The Strength Training and Arthritis Trial (START) has been completed and the research team is in the process of analyzing the data. The Weight loss and Exercise in Communities with Arthritis in North Carolina (WE CAN) trial is beginning its third year and includes clinical sites in Forsyth, Johnston, and Haywood Counties. These studies are funded by the National Institute of Arthritis, Musculoskeletal and Skin Diseases. The Strength Training in Runners Study (STARS), funded by the US Army, is in its second year. In addition, the John Ben Snow Memorial Trust that funded the biomechanics lab in Reynolds Gymnasium has committed to fund the biomechanics lab in our new building.

Dr. Shannon Mihalko

Time to THRIVE

The Taking Health Realization into Valued Eating and Exercise (THRIVE) Study was a single-arm physical activity and weight management intervention for women diagnosed with breast cancer undergoing chemotherapy. This study was just completed with 28 women attending nutrition and physical activity sessions over the course of their medical treatment. Participants successfully maintained their physical activity levels, body mass index, and percent body fat during the six-month study with no significant weight gain as a result of their treatment regimen. This study has important clinical implications for the inclusion of weight management programs during the active treatment for breast cancer.

Dr. Gary Miller

Gary Miller lead a group of 13 Wake Forest students on a summer study abroad program during July. The class focused on Global Perspectives in Food, Activity, and Health. They traveled to 3 countries (Spain, France, and Switzerland) and participated in cooking classes in Barcelona, Spain and Provence area of France. They went on a 5-day backpacking hike in Switzerland, biked in France, kayaked in the Mediterranean, and went on a glacier hike in Chamonix, France. They also went hang-gliding over the alps in Switzerland. Although the course counts towards HES credit, a number of students on the program are outside the major. This was the second time the course has been offered and the plan is to offer the class again in Summer 2018.

Dr. Pat Nixon

Dr. Nixon recently completed her second five-year follow-up study of persons born prematurely with very low birth weight. She and her colleagues studied this group at 14 years of age and again as young adults. They are finding that their participants are more likely to have cardiometabolic abnormalities such as higher blood pressure, lower fitness, and glucose intolerance than their term-born peers. She will be traveling to Greece this fall to present some of the study results.

Dr. Jack Rejeski

Empowered with Movement to Prevent Obesity and Weight Regain: (EMPOWER)

EMPOWER will be an 18-month trial in 180 obese (BMI=30-45 kg/m2) older (65-85 years) adults randomized to one of three treatment arms, all with a caloric restriction intervention for weight loss (WL) plus: 1) moderate-intensity aerobic exercise (WL+EX); 2) an intervention that intervenes on sedentary behavior (WL+SitLess); or 3) (WL+EX+SitLess). Participants will undergo a 9-month weight loss intervention involving a 6-month intensive phase with decreasing contact from months 7 to 9, and a minimal contact, self-managed, 9-month follow-up phase.

Jim Ross

Professor Ross added to his summer teaching load in 2017 by adding a summer immersion opportunity for area high school students through the Northwest Area Health and Education Center (AHEC). Classes in Anatomy, Physiology, and Health Assessments were offered during the 5 days of lectures and labs attended by 12 area high school students. Graduate students Lindsey Hanson and Neil McMillan assisted during the lab sessions held in the Health and Exercise Science building during the week of June 19th.

Newsletter Editor: Andrea Cox

Andrea Cox has worked in the Department of Health & Exercise Science since 1992. She is currently the Administrative Assistant/Program Coordinator for the Healthy Exercise & Lifestyle ProgramS (HELPS). She is married with one son and enjoys spending time outdoors. She also loves animals and has three dogs and two cats. Andrea has enjoyed collaborating with Dr. Messier and the HES faculty/staff this year as the editor of the HES Alumni Newsletter.



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