

Joint Department of
**BIOMEDICAL
ENGINEERING**



152 MacNider Hall
Campus Box 7575
Chapel Hill, NC 27599
919.966.1175 • bme.unc.edu

4130 Engineering Building III
Campus Box 7115
Raleigh, NC 27695
919.515.5252 • bme.ncsu.edu

16 November 2018

To Whom It May Concern,

I have had the pleasure of partnering with the Health Science Academy (HSA) at Athens Drive Magnet High School in Raleigh, North Carolina three years. My lab, the Orthopaedic Mechanobiology Laboratory in the Joint Department of Biomedical Engineering at North Carolina State University and the University of North Carolina at Chapel Hill, has been lucky enough to host one of the HSA's most outstanding rising seniors for the last three consecutive summers. These students have proven to be a very valuable addition to our lab, helping with graduate students' research and also conducting their own independent research. Each one has far exceeded my expectations. The quality of their work has been above and beyond what I would have expected from an undergraduate student, and the fact that they are still in high school makes it even more exceptional. Furthermore, their maturity and desire to learn about laboratory research has been outstanding. I've had to go as far as to warn my students to not expect the level of responsibility and professionalism from other high school students that they see in those from the Health Science Academy, lest they think all high schoolers are that impressive.

Additionally, Ms. Hulseley is one of the original and most ardent supporters of National Biomechanics Day at NC State. National Biomechanics Day is held yearly in early April, with the first event being in 2016. That year, Ms. Hulseley brought her entire junior HSA class of nearly 50 students to our campus to learn more about biomechanics-related research and potential careers in the field. Since then, we have grown the event to include more schools, but we can always count on Athens Drive Health Science Academy and Ms. Hulseley to be among the first to sign up and for their students to be the most engaged with the activities and to ask great questions.

I truly don't know how Ms. Hulseley does everything that she does. She has created opportunities for her students that don't exist at any other school in the county, possibly the state. Many schools provide their students with connections for an internship, but Ms. Hulseley goes beyond that. She prepares her students for their internship academically, but also by teaching them "soft-skills" that are often neglected at all levels of education. Her students are professional, articulate, and responsible to a degree well beyond their peers. Additionally, she does not simply make a connection then hope for the best. She follows up with them and with us throughout the summer, and goes above and beyond to support her students.

In short, the Health Science Academy at Athens Drive Magnet High School is a truly unique opportunity for students in Wake County to make connections with professionals in their field and allow what they're learning to be put to use. Ms. Hulseley's drive and determination have transformed the program from a brief footnote in Athens' offerings to being its star player. Students from across the county

apply to Athens simply to participate in her program. They leave the program years ahead of their peers in terms of knowledge in their field and also in terms of personal growth. These advantages will no doubt provide them with unique opportunities that they would not otherwise have had without the Health Science Academy.

Sincerely,

A handwritten signature in black ink that reads "Jacqueline H. Cole". The signature is written in a cursive style with a large initial 'J'.

Jacqueline H. Cole, Ph.D.
Assistant Professor
UNC/NCSU Joint Department of Biomedical Engineering

October 10, 2018

To Whom it May Concern:

For the past two years, WakeMed has had the honor of partnering with the Athens Drive Magnet High School Health Science Academy students by providing several learning and volunteer opportunities at our hospitals. Our experience with these students has been exceptional. Each student has brought a great deal of maturity, commitment and intellect to their work. In return, our goal has been to offer them experiences that provide rigorous discipline and learning in preparation for their post-high school education.

In addition to numerous junior volunteers working at the WakeMed Raleigh Campus and Cary Hospital, we have had students complete more intensive learning programs. For example, 14 students developed and implemented a program to assist patients with signing up for MyChart, WakeMed's online patient portal. They provided education about the value of the portal and helped our patients complete the sign-up process with the use of iPads. Several students also completed intensive immersion programs with providers by spending eight weeks shadowing a cardiothoracic surgeon, thoracic surgeon, neonatal nurse practitioner and emergency medicine physicians to experience firsthand patient care practices.

Their work has even touched patients in a more holistic way. As a team-building service activity, the group made dozens of beautiful and vibrant paper flowers as a symbol of tranquility and healing. The flowers were distributed to patients throughout the hospital who didn't normally receive flowers or have a strong family support system – all to bring a little joy and comfort to their day.

We have been impressed not only with the quality of students we have had the good fortune to work with, but also with the enthusiasm and support of leadership from Athens Magnet High School. Health Science Academy Director Jennifer Hulsey's vision for the Health Science Academy and what it can offer students interested in the field of medicine has been amazing. While only two years old, we believe our partnership highlights the commitment between WakeMed and Athens Drive Magnet High School to align our goals for improving the health and wellbeing of our community.

We consider ourselves very fortunate to have the opportunity to provide high-quality, work-based learning experiences to the Athens Drive students. We take great pride in knowing that we are helping shape tomorrow's caregivers.

Regards,



Denise W. Warren

Executive Vice President & Chief Operating Officer



Family Psychiatry & Psychology Associates, P.A.

Amanda S. Dorn, M.D.
Jennifer D. Siddle, M.D.
Sarah E. Joseph, M.D.

Seth E. Tabb, M.D.

Sheryll A. Daniel, Ph.D.
Daniel Sheras, Psy.D.
Shannon Erklin, Ph.D.

October 30, 2018

To Whom It May Concern:

As the Advisory Board Chairman for five of the last seven years, I have had a unique opportunity to participate in and observe the development, maturation and explosive growth of one of the most amazing educational opportunities for high school students anywhere in the country with the Health Sciences Academy at Athens Drive Magnet High School in Raleigh, North Carolina. I can think of no other educational institution that zealously meets and exceeds the current and future needs of its students, their community, and their environment, simultaneously.

Aiming to give Athens Drive High an unparalleled mark of distinction, new principal Dr. Jim Hedrick recognized and seized a tremendous opportunity when, in 2015, Wake County Public Schools converted Athens Drive to a Magnet School. Dr. Hedrick hired Jennifer Hulsey, RN, to transform and lead the Health Sciences Academy and together created the encompassing theme that would eventually become the namesake of the school: The Center for Medical Sciences and Global Health Initiatives.

Yet a namesake wasn't enough for Ms. Hulsey. Relentlessly, Ms. Hulsey helped to over-haul the entire curriculum within the school to encompass the magnet theme in all courses. Her professional enthusiasm and inspirational vision became infectious and soon the entire school administration and faculty supported her goals. The student body response was similarly passionate and soon there was a long and competitive waiting list to get into the academy.

Today, just a couple of years after its transformation, the academy is a resounding success in so many areas because of the solid foundations on which the academy was built. All students entering the academy must undergo so-called "soft skills" professional training and development. The direct attention to character development along with clearly defined expectations allows students to attend to, strengthen and expand upon their unique personality traits and coping strategies. In addition, students of the academy are required to participate in a series of courses that explain the basic infrastructure of healthcare, medicine, the health sciences and the community resources and administrations that populate all these communities. It is only after successful completion of these courses are students allowed to progress to an ever-growing selection of specialty courses in addition to participating in exciting multi-modal learning experiences. By marrying the academy to the surrounding community (which includes three major health centers, five universities, big pharma research and developmental, state health labs and resources, state-of-the-art biotechnology firms, a vet school, high-tech industries and public health departments), students at Athens Drive are exposed to truly unique opportunities while still in high school. Not only are these professionals in all these fields invited into the school for "lunch and learn" events, but students are given direct access to these fields through field trips, special projects, job

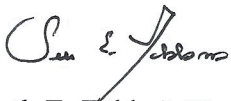
*1400 Crescent Green ♦ Suite 120 ♦ Cary, North Carolina 27518
Tel: 919-233-4131 ♦ Fax: 919-233-4168*

shadowing and internships. The 135-hour required internship has become the hallmark and competitive highlight of the high school experience in the academy. Students get real-world experience with a potential future career and a jump start on their aspirations. The internships have varied across a wide spectrum, including but not limited to, observing surgery in the operating room, assistance physicians in all specialties, working in the veterinarian school directly with animal patients, assisting in the state laboratories, assisting pharmacists, working with E.M.S. (including shifts on ambulances) and working in public health departments and clinics in foreign countries.

The Health Sciences Academy at Athens Drive Magnet High School has become the model for all education at the high school level. Not only does the academy have the eager support of students, parents, administration, teachers and the community, participants can earn certification in chosen specialty areas that allow students to become immediately employable within that field. This job-ready preparation motivates students to achieve at higher levels and, at the very minimum, allows students to earn an income in their chosen profession while continuing their education after high school. The Health Sciences Academy at Athens Drive Magnet High School has truly become the central nervous system of The Center for Medical Sciences and Global Health Initiatives, where all involved are integral to its success.

I am proud to be part of an academy that is the future of education in our country.

Appreciatively,



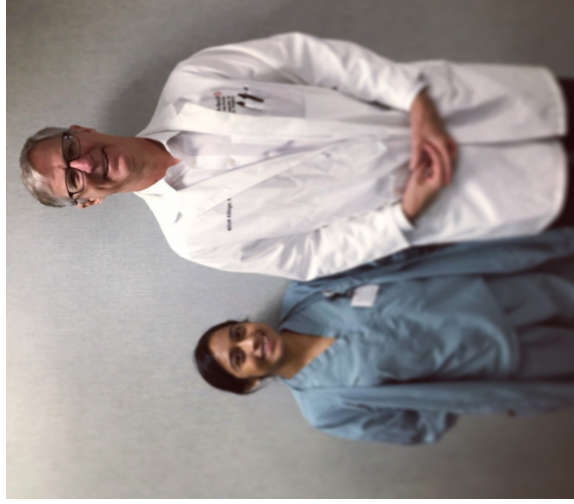
Seth E. Tabb, MD

Child, Adolescent & Adult Psychiatry

Medical Director, Family Psychiatry & Psychology Associates

2011-2016, Chair, Health Sciences Academy, Athens Drive Magnet High School

2005-2009, Wake County Board of Directors, Human & Environmental Services



WakeMed WakeMed Health & Hospitals

(4) 18" x 12" Printed Magnets • Rounded Corners



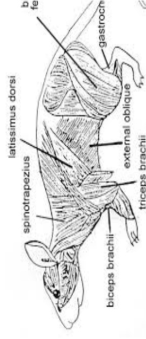
WakeMed Health & Hospitals
AthensHS-Magnets @AthensHSMagnets · 26 Oct 2016
Athens Drive Health Science Academy students complete their Medical IT MyChart orientation today! @ADHS_HSA



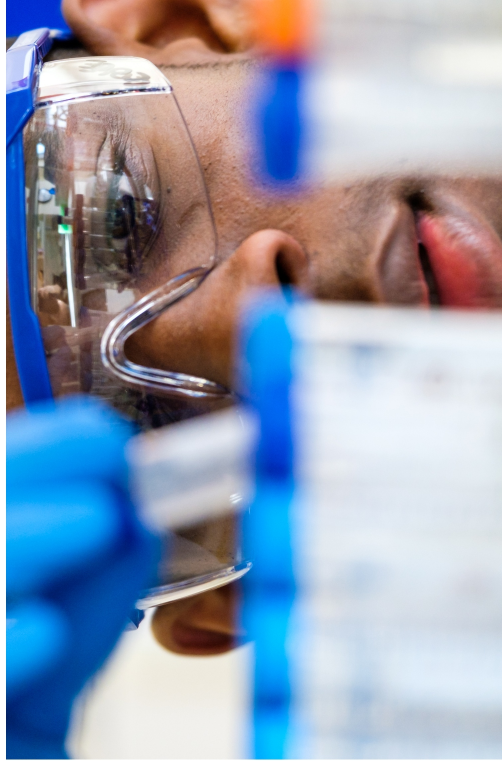
NBPI in Rats

Procedures in the Lab:

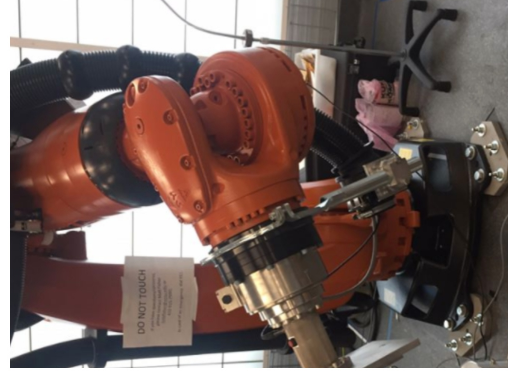
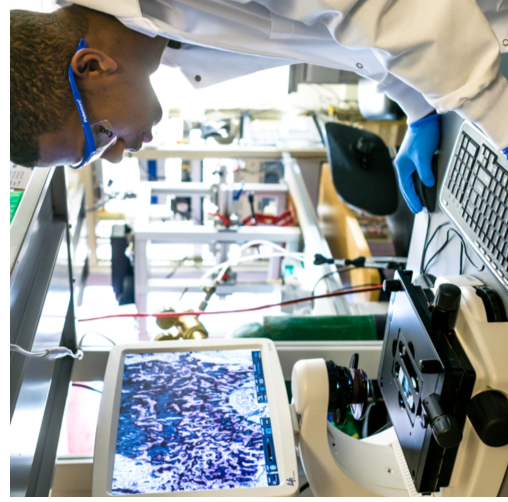
- Anesthetize rats
- Place rat on goniometer to test range of motion
- Dissect supraspinatus and biceps



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