John Boy Grant 555 S.W. 75th St. Gainesville, FL 32610 352-555-1212 boygrant@ufl.edu

Education

Bachelor of Science in Biology, Pre-Professional (May 2020) University of Florida, Gainesville, Florida Cumulative GPA: 3.87; Science GPA: 3.78

Research

Experience Type: Research/Lab

Experience Name: Student Research Assistant

Dates: 1/2018 – 5/2019 **Total Hours:** 2200

Contact Name and Title: Samuel Wickline, Director of USF Heart Institute

Contact Email: wickline@health.usf.edu

Contact Phone: 314-583-6840

Organization Name: University of South Florida Heart Institute City/State/County: Tampa / FL / United States of America (the)

Most Meaningful Experience: Yes

Experience Description: With a deep interest in innovation and research, I began a volunteer position at the USF Heart Institute, but after a few months had quickly transitioned into the role of a paid Student Research Assistant. The majority of the projects I spearheaded revolved around the department of novel, nanoparticle-based drug delivery systems to treat myocardial infarctions. While working on my own projects, I was simultaneously collaborating with Duke University on a project to analyze placenta trophoblast fusion. In the lab, I was responsible for a variety of procedures ranging from nanoparticle formulation and immunohistochemistry to murine myocardial infarction surgeries and echocardiograms.

Most Meaningful Experience Remarks: My time at the USF Heart Institute was perhaps one of the most challenging yet rewarding parts of my undergraduate career. There were times it felt like drinking from a firehose, the amount of information ever mounting. Despite this, a desire to push the field forward and fight for patients kept me grounded. While working at the Heart Institute, I was concurrently shadowing a cardiologist and would regularly talk to patients suffering from heart failure due to myocardial infarctions. The experiences of these patients inspire me in my research and are the reason I aspire to continue researching as a physician. In the lab, I started out working as an assistant on projects, jumping in wherever help was needed and absorbing all the knowledge I could. As my PI performed myocardial infarction or carotid artery reperfusion surgeries, I would watch every move, taking notes and asking questions along the way. Quickly, I worked my way up to performing these surgeries independently, and before long was training others on the procedures. Through research, I developed the ability to work on a team, think critically and adaptively when designing projects, and effectively bounce back from failure. Research has instilled in me a desire to advance the field of medicine and push boundaries in order to save lives.

Community Service/Volunteer – Medical/Clinical

Experience Type: Community Service/Volunteer – Not Medical/Clinical

Experience Name: Camp Kesem

Dates: 8/2017 – 8/2020 **Total Hours:** 400

Contact Name and Title: Jean-Luc Rivera, Regional Program Director

Contact Email: jean-luc@kesem.org Contact Phone: 925-433-3027

Organization Name: Camp Kesem at the University of South Florida **City/State/County:** Tampa / FL / United States of America (the)

Most Meaningful Experience: Yes

Experience Description: Camp Kesem is a national organization that provides a free summer camp for kids impacted by a parent's cancer. After learning about Camp Kesem from a colleague, I knew this was something the Tampa Bay community desperately needed. In late 2017, I gathered a team of passionate students and together we worked to set up a national campaign to start a chapter at our University. We recruited local hospitals, physicians, and community leaders to bolster our campaign and ultimately received the nomination. Currently, our chapter has raised over \$45,000 for the organization, has supported over 30 families, and is the fastest growing second year chapter.

Most Meaningful Experience Remarks: Cancer does not simply affect the individual who is diagnosed but has an impact on the family as a while. Through Kesem, I have learned the importance of taking a holistic approach to medicine and what it means to support families beyond initial diagnosis and treatment. Many Kesem kids grow up in the hospital, fighting alongside their parents through every test, scan, and biopsy. During my time with Kesem we've cared for a kid who was bullied because of his mother's hair loss, a family that was forced to live out of their van because of surging medical bills and countless other families whose lives have been forever altered by disease. The crippling nature of disease is evident and any hope, consolation, or support that I can provide is extremely humbling. Camp Kesem has also taught me the determination that is required to build an organization from the ground up. While there were certainly bumps along the way, I feel immensely proud of the work that we have done as a team to help these families. As a leader, I learned the importance of empowering others, leading with

empathy, and encouraging diverse ideas and solutions. Campaigning for and initiating Camp Kesem at USF has taught me how to nourish an idea into reality with the support of the community and passionate individuals.

Medical Study Abroad Semester

Experience Type: Other

Experience Name: Medical Study Abroad Semester

Dates: 6/2017 – 8/2017 **Total Hours:** 100

Contact Name and Title: Janna Merrick, USF Science in Florence Program Director

Contact Email: merrick@usf.edu Contact Phone: (941) 224-3805

Organization Name: University of South Florida Science in Florence

City/State/Country: Florence / Italy Most Meaningful Experience: Yes

Experience Description: For 6-weeks, I had the opportunity to study abroad in Italy through a highly competitive science concentrated program. During my time in the program, I was able to shadow physicians in numerous fields, observing the similarities and differences in healthcare delivery between the U.S. and Italy. I was also selected as the Clinical Observation Leader, responsible for the safe and timely travel of students to and from hospitals and communicating with hospital staff. Academically, I was enrolled in Organic Chemistry and as part of the physician-shadowing program, wrote a paper on Italian Medical Ethics that was later accepted at the Oxford International Health Conference.

Most Meaningful Experience Remarks: The time I spend in the "Science in Florence" program has broadened by horizons when it comes to how I view both healthcare and culture. Prior to my experience in this program, I had a very narrow view of healthcare, confined by the conventional boundaries of the status quo. Through this program I was able to critically analyze the differences between Italian and U.S. healthcare, allowing me to get a firsthand look at the pros and cons of each. As the Observation Leader, I was tasked with serving as the primary point of contact between the students and the physician. I loved the fast-paced nature of the hospital, observing ophthalmology procedures, robotic surgeries, orthopedic outpatient visits and more. I learned the importance of extensive teamwork, and watched as the doctors, nurses, and students worked together to treat each patient with respect and dignity. Upon digesting all the information conveyed by the physicians and conducting additional research, I wrote a comparative analysis of Italian and U.S. medical ethics. The paper focused on issues like stem cell research, patient empowerment, and informed consent. This program gave me insight into how culture is pivotal in the development of healthcare and the role that physicians play in protecting the lives and rights of their patients.

Publications

Experience Type: Publications

Experience Name: Science Advances/Methods in Molecular Biology

Dates: 5/2020

Contact Name and Title: Samuel Wickline, Director of USF Heart Institute

Contact Email: wickline@health.usf.edu

Contact Phone: 314-583-6840

Organization Name: University of South Florida Heart Institute City/State/County: Tampa / FL / United States of America (the)

Most Meaningful Experience: No

Experience Description: Zhang Y, Le T, Grabau R, et al. TMEM16F phospholipid scramblase mediates trophoblast fusion and placental development. Sci Adv. 2020; 6(19):eaba0310. https://pubmed.ncbi.nlm.nih.gov/32494719/ (3rd Author) Wilson AJ, Zhou Q, Vargas I, Palekar R, Grabau R, Pan H, Wickline SA. Formulation and Characterization of Antithrombin Perfluorocarbon Nanoparticles. Methods Mol Biol. 2020; 2118:111-120. https://www.ncbi.nlm.nih.gov/pubmed/32152974 (5th Author).

Physician Shadowing/Clinical Observation

Experience Type: Physician Shadowing/Clinical Observation

Experience Name: Physician Shadowing

Dates: 8/2016 – 7/2020

Contact Name and Title: Janna Merrick, USF Science in Florence Program Director

Contact Email: merrick@usf.edu Contact Phone: (941) 224-3805

Organization Name: University of South Florida

City/State/County: Tampa / FL / United States of America (the)

Most Meaningful Experience: No

Experience Description: (70 Hours) Dr. Janna Merrick, Program Director, Physician Shadowing in Italy. Observed physicians in Sports Medicine, Orthopedics, Dermatology, Robotic surgery and Ophthalmology. (48 hours) Dr. Melinda Murphy, MD. Pediatrics, Tampa General Hospital, (813) 997-0935, mshiver@health.usf.edu. Shadowed the pediatric hospital team, which consisted of physicians, nurses, and students. (30 hours) Dr. Christiano Caldeira, MD. Cardiothoracic Surgery Division Chief, Tampa General Hospital, (813) 323-0827, ccaldeira@factsurgery.com. Observed aortic valve replacement, coronary artery bypass grafts, and insertion of an intra-aortic balloon pump.

Additional Notes:

- The pre-health resume uses the CAS application 'Experience' section format and headings (see below).
- Include complete sentences.
- No bullet points (since professional schools do not want bullet points in the application).
- Write in first person.
- References: not needed for your pre-health resume. Recommenders are listed in the CAS application, not the pre-health resume.

Headings by Profession

Categories	Medical – Allopathic (M.D.)	Medical – Osteopathic (D.O.)	Dental	Physician Assistant	Veterinary	Pharmacy	Physical Therapist	Occupational Therapist
Artistic Endeavors	х		x					
Community Service – Volunteer Medical/Clinical	х	х	Dental	Direct Patient Care	Animal – Vet Supervised	Pharmacy related	PT Observation Hours	ОТ
Community Service - Volunteer Not Medical/Clinical	х	x	Non-Dental	х	Animal Related – No Vet Supervisions	Non-Pharmacy Related	Non PT	Non-OT
Conferences Attended	х	x	x		x			
Extra-Curricular Activities	х	x	x	x	x	x	x	x
Hobbies	х		x					
Honors/Awards/Recognitions	х	×	х	x	х		х	x
Intercollegiate Athletics	х	x	×					
Leadership – Not otherwise listed	х			x				x
Military Service	х							
Other	х	×	x	Licenses/certifications	х			InternshipsMD
Paid Employment – Medical/Clinical	х	x	Dental	Direct Patient Care & Non-direct	X Vet Supervised	Pharmacy Related	PT Hours	ОТ
Paid Employment – Not Medical/Clinical	х	x	Non-Dental	х	Not Vet Supervised	Non-pharmacy related	Non-PT	Non-OT
Shadowing – Clinical Observation	х	x	×	х		х	х	х
Presentations/Posters	х	x	x					
Publications	х	x	x	x				
Research / Lab	х	x	x	x	x			
Teaching/Tutoring/Teaching Assistant	х	х	х		х			x