School Spotlight: Oakland University Physical Therapy Program

Oakland University’s doctor of physical therapy program is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE). The physical therapy doctorate is offered through the School of Health Sciences. Its mission is to provide an environment of collaboration, academia, and clinical learning that can transform students into leaders of the health care communities. The school only accepts applicants for the Fall semesters. The application process goes through the Physical Therapy Centralized Application Service (PTCAS). Along with an official transcript from a student’s undergraduate institution, students need to take the GRE. The minimum score accepted by OU is Verbal 144 and Quantitative 147, and a minimum of a 2.7 in all of their prerequisite courses. The prerequisite courses are mentioned below. Students also need to provide two reference letters and have observation hours in several different settings. The program has early decision and regular decision deadlines for Fall semesters only. The annual cost of attendance is $37,352. This is before financial aid, scholarship, or stipend program. Specific information about aid is given at the orientation program. Once admitted, students need to maintain good academic standing with a minimum of a 3.0 GPA for a semester and overall.

Prerequisite courses include introductory biology with one lab (lab could be for biology, human anatomy, or physiology), one anatomy course, and one physiology course. Chemistry and physics I and II with one semester of lab each are also required. Students also need to take exercise physiology, introductory statistics, and introductory psychology, also for one semester each. They also need to take developmental psychology — either childhood or lifespan psychology. The highest math requirement is precalculus. Application deadlines for Fall 2019 have already passed.
Career Corner with Brian Telfor

Be sure to check out Handshake for more career fairs, internships, and job opportunities.

You can schedule an appointment with Brian Telfor concerning internship and career resources through Handshake!  https://msu.joinhandshake.com/

Caregiver/CNA/MA 1st/2nd/3rd shift
This is a part-time caregiver opportunity in Lansing, MI. The goals are to provide comfort, safety and general supervision to residents by assisting them with activities of daily living and tending to their individual care needs while learning their unique preferences and personalities to assure a safe, protected, clean, and orderly environment. This is a great job for Pre-PA students looking to build up on their patient care hours.

Deadline: December 31st, 2018 @ 5:00PM
Job Code: 2103134

Rehabilitation Aide Technician
The Rehabilitation Aide position in various locations (Detroit, Chicago, etc) assists the Office Coordinator and clinicians by performing requested administrative and clinical duties. They will greet patients as they arrive to the clinic and work alongside the clinicians during therapy as applicable. This is a great job for students that are looking to gain patient care hours.

Deadline: January 1st, 2019 @ 1:00PM
Job Code: 1838919

Neuroscience Research Assistant | Maria Bykhovskaia Lab at Wayne State University
To conduct and analyze experiments designed to understand how the dysfunction of neurons in the brain produces epilepsy. A Bachelor degree is required, preferably in Neuroscience, including robust coursework in cellular and molecular biology. Some previous research experience is preferred but not required. This position is ideal for recent college graduates curious about brain research and want to spend a couple of years doing cutting edge Neuroscience before heading to graduate or medical school. Please send your CV and a copy of academic transcripts to mbykhovs@med.wayne.edu, and apply online to job posting 043763 at Wayne.

Deadline: December 31st, 2018 @ 3:35PM
Job Code: 831475

Medical Assistant
This opportunity is at Shores Urgent Care in St. Clair Shores. The MA will work under the direction of the doctor, PA, or nurse practitioner. Administrative duties may include documenting/maintaining medical records and calling in prescriptions. Clinical duties include taking and recording vital signs and medical histories, preparing patients for examination, IV/Blood draw, x-rays, and administering medications as directed by a supervisor. They are looking for reliable, hard working people! The position is contingent, and requires night and weekend availability.

Deadline: December 31st, 2018 @ 5:00PM
Job Code: 1136613

2018-2019 Campus Internship-Orgnaic Chemistry-Research & Development
Corteva AgriscienceTM, Agricultural Division of DowDuPontTM, seeks students for full-time internships for research and development organization in Indianapolis, Indiana. Internships are lab-based science positions, and students will work closely with a senior scientist in an industrial setting. Students should have past experience in a laboratory research environment, generating data, as well as relevant computer skills. Students are encouraged to be creative and take initiative, where appropriate, and will be granted certain freedoms within guidelines established by their supervisor. Good interpersonal, communication, organizational, teamwork, and time management skills are essential!

Deadline: January 16th, 2019 8:45PM
Job Code: 2058489

Pharmacy Tech Intern
Frontizo is committed to improving the health and well-being of patients by providing the highest quality, patient centered health care services delivered in hospital, community, and in-home settings, and to advancing medicine through clinical education and research. Responsibilities include: delivering MTM services, assisting with managing medication costs, following-up with patients, assess prescribed medication therapy, and communicating with prescribers and care teams to offer the best services.

Deadline: December 31st at 2:15 pm
Job Code: 2056987
Faculty Spotlight: Dr. Elizabeth Tinsley Johnson—NSC 495: Capstone in Human Biology

Q: Where did you attend school and what did you study?
I went to Carleton College in Northfield, Minnesota, where I majored in Psychology and minored in Spanish. I was interested in the relationship between cognition, hormones, and behavior, which led me to my Ph.D. research at the University of Michigan in Biological Anthropology. My dissertation research focused on how and why female geladas monkeys in Ethiopia invest in social relationships, how this investment affects fitness, and the social function of the gelada contact call (a very common vocalization used in many different social contexts).

Q: What made you decide to teach the Human Biology Capstone?
I’ve always been interested in writing and communication, and I think both are essential skills for anyone going into science or medicine. My mom worked with researchers to write college textbooks and I’d often hear about how much the researchers struggled to communicate their ideas in a way a general audience could understand. Her job was to help translate what they were trying to say. From my mom I learned that writing is a skill that requires work and patience (people aren’t naturally good writers!) and I learned that writing is a process where feedback and revision is critical (and giving good feedback is also a skill we need to learn!).

In graduate school, I did everything I could to not only improve my own writing but to also learn how to teach writing skills to my students. I realized many students are asked to write formal scientific papers, but instructors rarely provide much guidance on what that means. Being a good science communicator requires knowing your audience – are you speaking to your colleagues in a scientific paper? Or are you speaking to your patients and their families? How does that change how you present your information? It also requires understanding the conventions of the genre you are writing in – for example, are you writing an empirical paper or a popular science article? Scientists and health professionals spend a lot of time mastering their topics, but learning to communicate is also a skill that needs to be practiced in order to succeed in our fields.

Q: Think back to your favorite professor, what made them great?
I’ve been fortunate to have had a number of really great professors and mentors. When I was an undergraduate interested in field primatology, I emailed professors with field sites to ask what I needed to do to get involved in that kind of research. A few went out of their way to meet with me, even though I wasn’t their student. One of these professors, John Mitani, wound up being on my dissertation committee years later. He really introduced me to the field of biological anthropology, and throughout graduate school I continued to learn from him. He is a great story-teller and his lectures were always entertaining – watching him made me realize how teaching is its own genre of communication, one that requires artistry and practice.
**Faculty Spotlight: Dr. Elizabeth Tinsley Johnson Cont.**

Q: **What is an interesting fact about yourself that people may not know?**
I lived in Costa Rica for a year before coming to graduate school, where I worked as a field assistant on a capuchin research project. It was such a great experience that my next research project involves starting a brand-new capuchin research site in Costa Rica, called Capuchinos de Taboga (https://sites.lsa.umich.edu/capuchin/). My colleagues and I started habituating our first groups over the summer of 2017 and we currently have 5 field assistants on our team. Two of our assistants trained me when I was a field assistant, and it’s been really nice reconnecting with them. We have a range of research interests, from hormones and cognition to conservation and biodiversity. I’m hoping to start bringing students from MSU down soon!

Q: **What is one piece of advice you have for Pre-Professional students?**
Stay curious. It can be easy to focus on all the different requirements Pre-Professional students need for the next step, but don’t forget what drew you to the field of human health/biology in the first place. College is one of the few opportunities we have to explore and try new things, simply because they interest us. Allowing yourself time to explore, or simply recognizing that the courses you are taking are also interesting – even if they are required for the major – helps keep you engaged and might lead you to other interests you weren’t expecting. The path for Pre-Professional students can be difficult, so make sure you are engaged with what you are doing!

**Course Spotlight: PSY 333—The Neurobiology of Food Intake and Overeating**

PSY 333 is a three credit course that can be used for Psychology majors to help fulfill one of the Psychology elective requirements, and may be able to fulfill a Human Biology selective requirement as well (talk with your advisor). It is interdepartmental with Neuroscience, and as such can be coded as NEU 333. The class meets twice a week for an hour and twenty minutes. Only PSY 101 is required before taking this course, but PSY 209 is recommended. I did not take PSY 209 before this course, and was still able to follow along and succeed in class. This course is taught by Dr. Alex Johnson, who received his PhD in Neuroscience at Cardiff University in 2006, and has done research for Johns Hopkins. I took PSY 333 in Fall 2018 to complete my remaining elective requirements for my Human Biology and Psychology majors, and I can tell you that I genuinely enjoyed this class. Dr. Johnson is a very engaging professor who provides students with both the biological and psychological frameworks of how obesity works and what makes us susceptible to overeating. We have discussed different hormones and signals going awry, the role of stress, motivation, and reward in food consumption, the evolution and genetic components of overeating, the impact of advertisements and the food industry, and a variety of other topics. Students are provided with a ton of interesting research findings, and are encouraged to participate in class discussions and to ask questions. Dr. Johnson breaks a lot of misconceptions people have about the obesity epidemic and obese people, and shows us that there are multiple facets at play that make it both hard to lose weight and hard to maintain that weight loss afterwards. If you’re like me, then you will enjoy how the course integrates biology and psychology into a cohesive theme. I think this course is beneficial for all pre-health students—rates of obesity are not slowing down, so it is important to have background knowledge of this subject to properly and accurately inform your patients of what steps they can take to become healthier.

By: Anna Risukhina
Q: What made you choose Dentistry as a career goal?
When I was young, I had a prognathic bite (Protruded Jaw). Not only did it look bad, but it contributed to my speech impediment in which I couldn’t pronounce the letter ‘R’ correctly. By 10 years old, I had orthodontic work to correct my bite. This included sets of rubber bands to pull my jaw backwards. After about a year with the braces on, my bite felt natural, I had a lot more confidence, and I was starting to overcome my speech impediment. That story was my early exposure to the field of Dentistry. As time went on, I learned so much more about what Dentistry had to offer. What I think many people don’t understand is that Dentistry isn’t just cleanings and fillings. There are opportunities in research, outreach, specialties, and academics. The profession allows the Dentist to be on his/her feet doing procedures throughout the day. Another plus is the connections that you make with your patients.

Q: How are you involved at MSU and in the community?
I have been heavily involved with the MSU Pre-Dental Club over the past 4 years. The organization gave me valuable information to pursue my career into Dentistry. The people in it are kind, intelligent, and extremely enjoyable to be around. I couldn’t have been in my position if it hadn’t been for this club. In spring of 2017, I rushed the Alpha Chi Sigma Professional Chemistry fraternity. It is a diverse group of students ranging from Chemistry to BLD majors whose main goal is to advance the field of Chemistry and provide a sense of brotherhood. The frat organizes social, outreach, and professional development events. Between these two organizations, I have volunteered with the Pre-Health Council, Lansing Food Bank, Adopt a Family, and so much more. Staying involved on campus has given me the opportunity to give back and make great friends along the way.

Q: What are your plans after graduation?
After I graduate, I hope to enjoy the last few months before I am in dental school. It takes 4 years to earn a DMD or DDS degree and there are plenty of opportunities to further your education after getting this degree. I am looking to specialize in either Oral/Maxillofacial surgery or Periodontics. The first step is to choose a dental school and I plan to do that in the upcoming weeks.

Q: What has been your favorite class at MSU thus far?
My favorite class has been Physiology. I hadn’t known very much about how the human body functions before I took the class. During the class, I found everything that we learned fascinating. Dr. Denison organized the class to make it easy to manage. Even though I took the class two years ago, I can still recall information that I learned then. The class also gave me a great foundation for other classes such as anatomy, immunology, pharmacology, etc.

Q: What advice do you have for other pre-professional students that you wished you had known before?
Definitely have a plan! I remember when I was a Freshman and the nerves got to me. The class load, DAT, applications, everything! What calmed me down was to take a few hours to sit down and plan it out. Eventually everything became easier. First, before you make a plan, know what you want to do. Go shadow a professional, call one, research their field, and ask yourself if that is what you want to put yourself through over the next 4+ years after you graduate. Once you know what you want to be, strive for a great GPA and be a proactive student. Something I wish I knew right away going into undergrad, know your limitations. I am not perfect. It gets tough juggling your school life, work life, and social life. I have tried to join as many clubs as possible and gunned it in my classes. Doing those things stretches you out thin. Make sure you strive for the grade you want, only get involved in organizations you enjoy, and don’t try to be a person you’re not. Some people think they can take on everything but it’s not realistic. So with every opportunity, make sure you are not overbearing yourself because it can make life miserable.

Q: What is an interesting fact about yourself that people may not know?
I don’t tell this to a lot of people, but I love classical music. When I was in high school, I used to listen to the symphony orchestra radio station on the way to school. I have a 200 song playlist on Spotify of my favorite classical songs. I am not as avid a listener as I used to be but, I can still recognize a lot of songs by title and composer being played in public.
Experiences are invaluable to professional programs, and can often be the deciding factor for admissions committees on whether or not to move you further along the application process. Duration and commitment to your experiences is also vital—so get involved early.

1. **Volunteering in a clinical setting**: This means out-patient clinics, in-patient clinics, hospitals, and hospices. You want to show your schools that you have been exposed to your future profession, and that you understand how departments run, and what fundamental roles all of the staff play in helping patients. Thankfully, MSU has partnerships with both McLaren and Sparrow, so if you haven’t already, consider signing up to volunteer with them at www.servelearnengage.msu.edu.

2. **Volunteering in a non-clinical setting**: Non-clinical community service is just as important as clinical setting volunteering, and includes things like volunteering in a homeless shelter, boys & girls clubs, food banks, and alternative breaks (such as Alternative Spartan Break). Schools like to see you giving back to the community.

3. **Job shadowing**: For several professional programs, this will be a requirement. It is important to job shadow so that you get specific exposure to the field(s) you’re looking at. Job shadowing provides you with a better grasp of where you want to go—do you want to be a physician assistant, or a pharmacist? It can also help you decide on subcategories in your field of interest, like dermatology versus orthopedics.

4. **Research**: If you are interested in research, definitely find some research to get involved in. This research does not have to be in the sciences, or related to your major in any way (unless you want it to be). Whether you’re doing research in psychology or biology, on a fundamental level you are learning similar lessons: how to create a research question, establish an experiment, test your hypothesis, and analyze data.

5. **Work**: It is always good to have work experience under your belt, whether that is as a CNA or at Sparty’s. Work allows you to gain life experiences and interact with people of various backgrounds that you otherwise would not know. It is also a great way to gain leadership experience, and having money is nice, too.

6. **Hobbies**: Schools know that, in part, you’re volunteering and shadowing to look good as an applicant. Participating in a sport or some other activity that you do strictly because you enjoy it is a great way to set yourself apart. Your schools want to see that you’re more than just an applicant checking off boxes of experiences that will help you get into their programs. People have hobbies because they are fun and relaxing. Having things you do simply for your personal enjoyment and relaxation shows professional programs that 1. you’re a human being, and 2. that you have stress coping mechanisms in place.

7. **Study Abroad**: Not everyone has the financial means to study abroad, even with scholarships and financial aid. That being said, if you are interested in exploring a new country—go for it! Professional programs want to see students who are culturally and socially aware, and study abroad opportunities are a great way for you to showcase your willingness to adapt to foreign places and be open to new experiences.

So, what else is there to consider? While internships for most pre-professional programs are rare, if you find one that you are interested in, it can definitely set you apart from other applicants. Make sure you are engaging in activities that you feel passionate about! Seek opportunities that allow you to grow as a leader, that challenge your views, and that mature you.

*By: Anna Risukhina*
Q: Where did you attend school and what did you study?
I went to MSU for both my degrees. I studied Medical Technology within Lyman Briggs (now the Biomedical Laboratory Science major) for my Bachelor’s. My Master’s is in Clinical Laboratory Science. I had a graduate teaching assistantship during my Master’s, which sparked my love of working with students within higher ed.

Q: What aspects of advising do you enjoy the most?
It might sound odd, but I enjoy when a student has no idea what they want to do either as a major or after graduation. I am a people-person by nature, and I love to hear about their life experiences that led up to now. The process of listening to their interests and skill sets, and then teasing out the connections between the two that can lead to a sense of direction for them, that might not have been there when they walk in my office, is so exciting.

Q: What is an interesting fact about you that your students may not know?
I’m a Hufflepuff, and not ashamed to say so!

Q: What are some common questions students ask you during a meeting?
Many are interested in finding undergraduate research opportunities, which is one of the best resources we have for our undergraduate students here on campus. It’s such a great way to learn, build confidence, and form lasting relationships with faculty.

Q: What is one of your favorite things about Michigan State University?
I really enjoy walking on campus. Every season highlights a different aspect of the beauty of both the architecture and the gardens everywhere on campus.

Q: What piece of advice do you have for all pre professional/graduate students?
Life does not work in straight lines. Often our path takes twists and turns, but it doesn’t mean that the end point changes, it just means that your path has a different shape than you had mapped out.
Student Organization Spotlight: Charles Drew Student Organization

The Charles Drew Student Organization, or DSO, is a student-run organization that runs alongside of the Charles Drew Science Scholars program. The organization has a goal to strengthen the bond between scholars and students, participate in community service in the East Lansing area, and promote academics. Some of the events we host are vision board events, bi-weekly study nights, cider mill trips, and game nights. These events allow us to foster a sense of community within our members as well as promoting academics and study groups. For community service, every year we participate in Trunk or Treat at Haven House in East Lansing. Also, we have recently begun taking groups more frequently to Ronald McDonald House and Haven House. In addition to all of these wonderful opportunities, DSO helps promote opportunities that can be found through the Charles Drew Science Scholars program, such as medical student panels, academic advising, peer mentoring, and mock medical school interviews.

Check Us Out on the Web!

Facebook, Twitter and Blogs:

NatSci4U Blog
https://natsci.msu.edu/students/blog/

MSU PreHealth Facebook
http://facebook.com/MSUPreHealth

NatSci Facebook
https://www.facebook.com/MSUCNS

Twitter for MSU Pre-professional Students
http://twitter.com/msu_preprof

Twitter for NatSci Students
http://twitter.com/msu_natsci

Additional Resources:

Pre-professional Student Website
https://natsci.msu.edu/students/preprofessional/

Undergraduate Student Resources
https://natsci.msu.edu/academics/undergraduate/degree-programs/

Career Exploration
https://natsci.msu.edu/current-students/college-career-services/

Study Abroad
https://natsci.msu.edu/academics/undergraduate/study-abroad/