

MY JOURNEY TO THE MOON: A STUDENT'S GUIDE FOR PRE-PROFESSIONAL STUDENTS AT UVU

KARALEEN ANDERSON

UTAH VALLEY UNIVERSITY

Early on in undergraduate life, pre-professional students must learn how to juggle many responsibilities and commitments. As the expectations of professional schools continue to grow and competition for seats increases, students must find ways to go above and beyond the minimum requirements in order to stand out. Challenging course work, volunteer activities, patient exposure, and research experience must all be crammed into a brief 4-year period. Add in the GRE, MCAT, DAT, or other graduate-level tests, and you have a recipe for the perfect undergraduate stress storm. The purpose of this essay is not to debate the requirements expected of pre-professional students. Instead, it is an in-depth look at how students can move beyond that stress, overcome the difficulties, and step outside the box in order to become not just passive participants, but engaged and effective leaders in their undergraduate experiences. As a large, open enrollment institution, Utah Valley University offers students a unique opportunity to engage in a way that is not always possible at large research Universities. This essay will detail my journey at UVU, from a pre-medical box checker to a student research leader, adjunct instructor, and to my eventual acceptance to the University of Utah Medical School. Because the requirements and expectations placed on the shoulders of pre-professional students can be overwhelming at times, I offer this essay as a map or a guide to the future students of UVU, in a hope that my experiences can help more students dare to dream and become leaders themselves.

INTRODUCTION:

It wasn't until my senior year at UVU that I finally began telling people that I wanted to go to medical school. Up until that point, my own fear of failure had mixed viciously with the never-ending inquiries on when I would have time to have children, what my husband thought of my "lofty goals," and why it mattered if I was going to drop out in order to raise a family anyway. Growing up in a rural town in central Utah, I didn't deny that my goals were, as so many called them, ambitious. In fact, I was more convinced than anyone that they would never become a reality.

In many ways the journey through college can be compared to a rocketship preparing to go to the moon. The students are the rocketship itself, and the moon represents graduate, medical, dental, or other professional schools. Like so many beginnings, the expedition may start off on uneven ground. Just like gravity, feelings of doubt, uncertainty, and failure are incredible forces to overcome. But with the right preparation and the perfect equipment, rockets and students can and do make it to the moon.

It is in a misaligned and unbalanced state where many pre-professional students begin. Ambitious and excited, their trajectory is mapped all the way to the stars and back. But all too soon, as they begin their first attempts to lift off, the failure-to-launch sign begins to flash. The timidity of the freshman year begins. Information overload starts with pre-health conferences, counselors, checklists, and older students handing out well-meaning advice. Eventually, as the year presses on, a few manage the impossible and gently lift off the ground. Now, they are moving on toward the overwhelming weight of the sophomore and junior year. Here, the gravity of their decisions begins to have far reaching and sometimes life altering consequences. Any lack of preparation while on the ground can leave them sputtering and falling aimlessly back toward the earth. Many do indeed fall in these years. As the pressure builds, it becomes too much for some of the more poorly prepared shuttles. Others decide to become airplanes and, instead of falling, simply change their course altogether.

For those who do make it, however, there is the last leg of the journey to worry about. As seniors the weight has lifted somewhat, but they are now hurtling at an alarming pace toward the moon. They begin to notice

thousands of other shuttles flying along with them, some ahead, and some behind, all moving toward that same glowing orb in the sky. Suddenly, they realize their journey has become a race. Anxiously they lean in, gathering speed and confidence, and sometimes, with the right guidance and the perfect angle, they land safely, their wings intact ready to teach the next explorers how to fly.

The guidance for this last leg comes mostly from mentors back on the ground. Like Yoda in Star Wars these are the people with the expertise to alter a student's course and lead them toward their goals. These are people who have been where the students are attempting to go and remember the path that led them there. Once the few students who make it have landed safely and are accepted into their graduate program of choice, they now fully understand the journey. They finally know exactly what it takes, and it is their responsibility to help the students coming up behind them to understand the course.

Pre-professional students should expect a journey full of ups and downs. Failure occurs often and disappointment is guaranteed. This essay will describe each leg of my journey; from my freshman lift off, through the sophomore and junior pressure cooker, and finally to my landing on the moon as a senior. It is my hope that the experiences I had while at UVU will provide some sort of a guide for future students so they might avoid some of the most common mistakes while still daring to become confident, engaged, resilient, and creative students and leaders.

FRESHMAN: LEARN HOW TO LEARN AND ENGAGE

When was the last time you used a map? Not a smartphone or a GPS. I mean an actual folded up, crinkled mess with coffee and ketchups stains smudged around the corners. My guess is that the answer to this question will vary according to your age, from, "I have never used a paper map because I am not old," to, "It has been a long time since I sat struggling to make sense of the spaghetti bowl highways crisscrossing the coffee stained pages of a paper map." Hardcopy maps have indeed become largely irrelevant but they are not extinct. Expert cartography remains an important skill for professional hikers, adventurers, and space explorers around the world.

Most people wonder why they need to see the entire state when step by step directions can be had in real time from a friendly robotic voice. Why understand the entire journey to the moon when knowledge of how to start the engine is all that is required for the test? This is the mindset of the freshman pre-professional student. Or at least, this was my attitude as I began my journey toward medical school. I saw classes as obstacles to overcome. Tests were a mindless dumping of facts, and every professor was an enemy trying to prevent me from reaching my goals. This state of mind may be effective at passing freshman level courses, but it did little to help me on my long journey toward medical school.

A hardcopy map is an ancient tool used today by a select few. It tells you where you have been, where you are, and where you are going. Herein is the importance of the analogy. Like a cartographer or an explorer of space, students need to see their field from every angle. They need to understand the past, be knowledgeable about the present, and be prepared for the future. Pre-professional students should be able to navigate and engage in their chosen fields just as an expert cartographer navigates complicated terrain. They must become whole, well rounded, and intelligent human beings who understand the inherent beauty of knowledge itself. Getting an “A” on a test is important, but even more important is the act of becoming engaged in hands on, experiential learning.

One important part of learning to engage in a field of study more thoroughly is learning how to ask questions. As we ask these questions, we can begin to see the beauty of the things we study, regardless of the discipline. Whether our engagement is in the laboratory, the community, or the classroom, in every discipline, be it science or art, our rocket does not begin to elevate until we become educated and aware enough to ask questions about the things that we do not understand. In biology we isolate, examine, and identify. We experiment and we learn. In literature and the arts, they do the same with a beautifully crafted sentence, a simple pause, a stroke of a brush, or the slow notes of a cello. What often begins as a mundane observation can, if allowed, grow into a valuable and important question that is worth answering. However, insightful observations are rarely made by those not engaged in the act of performing. As Johann Wolfgang von Goethe (1808) noted, “knowing is not enough; we must apply.

Willing is not enough; we must do” (quoted in Arensdorf et al., 2009). Thus, the journey for pre-professional students will not truly begin until they have the opportunity to engage in science, art, and the community around them. Thus, my first advice for pre-professional students is this to engage in your education and the world around you, and you will begin to see and understand its art.

For me, the first opportunity to engage with the university came not in the form of laboratory research, but instead as a student in the Honors Program at UVU. The Honors Program website welcomes its visitors with the following paragraph:

By choosing to join the Honors Program, you have demonstrated a genuine investment in the quality and depth of your undergraduate education. The entire Honors Program staff is here to advise you in your search for excellence.... In a series of small classes with other highly motivated students, you will find true peers willing to be guided by faculty invested in their students’ intellectual potential. You will discover in yourself the ability to grapple with texts and ideas that have fascinated the world’s great thinkers, writers, artists, and scientists, as well as the courage to try out new and challenging ideas, places and experiences. We look forward to sharing the journey with you (McPherson, 2018).

If students have no interest in finding their intellectual potential, if grappling with difficult ideas that challenge them to experience new things is not what they are searching for, then I must ask, what is it that they are looking for? If the answer is simply straight A’s and a certain number on a big exam, then this is may not be the program for you. However, be aware that medical, physician assistant, dental, and other graduate schools are not interested in grades alone. The University of Utah admissions and most other medical and graduate schools participate in what is called a holistic approach of evaluation, meaning they weigh GPA, MCAT/GRE, and other test scores along with extra-curricular undergraduate activities.

Graduate schools want well rounded, well-educated, and informed students. They want future community and national leaders. The honors

program at UVU requires a series of humanities courses, a service learning portion, and a senior thesis/project. There are very few programs that I know of that offer this level of engaged learning. The program, by its very design, invites students to step outside their comfort zone and learn about poetry, art, literature, and leadership. The Honors Program at UVU is an exceptional resource to help students meet, and even exceed, necessary requirements for graduation or future careers.

SOPHOMORE/JUNIOR: STAY THE COURSE AND FIND YOUR YODA

Once freshman year ends, so too does the luxury of time. If freshman year represents preparing for liftoff, then the sophomore and junior years represent liftoff itself and the problem of gravity. Sophomore and junior pre-professional students must find a way to not only excel in their classes, but make time for patient hours, volunteer activities, leadership, and research commitments. They cannot allow themselves to let their grades slip, but they must also continue to engage in their other commitments. It does not take long for a routine like this to become overwhelming, and as the pressure continues to increase, many students will decide to abandon the course. Some will not take off at all and others will make the decision to return to the safety of the earth. They forget about the bigger picture, and thoughts of meaningful engagement become mere background noise muffled by the robotic voice telling them which assignment is due and which test they have to study for later. Rather than branching out and gathering valuable, extra-curricular experience, students begin to fixate on their grades alone. It may sound harsh, but the truth of the matter is that simply surviving and getting by with good grades and a good test score will not be enough. It is a hard lesson to learn, and it is a decision that cannot be undone once it is time for students to apply for graduate, medical, or professional school.

Thus, my advice to sophomore and junior pre-professional students is this: do not allow yourself to be sucked into the idea that just making it through will be good enough. Rocketships that make it to the moon are the ones that are adequately prepared prior to takeoff and are committed to stay the course and continue their journey once the weight of gravity threatens to pull them back. Thus, students must prepare in their freshman year and then continue to engage in their

non-academic commitments if they hope to make it out of these years with their dreams intact.

So the question is, how can students continue to engage when exhaustion has set in. My advice is to find a mentor, someone who can help guide you on your journey. Just like Yoda guiding Luke in his journey to become a Jedi, without great mentors our rocketships cannot ever hope to reach the moon. Not only do mentors help us find more valuable and applicable opportunities and set us on the right path, they also allow us to see and recognize our own potential. In short, they help us learn how to steer our ship, put us on the right course, and then they make us believe that we can make it. My Yoda was Dr. Olga Kopp. She is for me what every young pre-professional student at UVU should strive to find. She is both an inspiration and a motivation. She is an incredible mentor, teacher, and friend. She believes in her students and that belief is very often translated into the students' own belief in themselves. This is the type of mentor pre-professional students must search for and the type of mentor I hope every UVU faculty member will strive to become.

These middle two years are not all doom and gloom. The pressure can spur resiliency, and the struggle can turn students into leaders. If students make a commitment to engage in their education during their freshman year, it can provide them with valuable experiences and other incredible opportunities during their remaining three years. For example, because of the Honors Program, I was introduced to a study abroad program where I spent two months at the University of Cambridge, and I also had a chance to organize a three week trip to serve orphaned children in Sarajevo, Bosnia. Because of the opportunities this program presented, I became much more passionate and engaged in my coursework. It was also due to the Honors thesis requirement that my team and I traveled to Japan, China, Prague, Portugal and Vienna to present our work at international conferences. Thus, because of a simple decision to participate in one program, I was able to not only fulfill, but also excel in my leadership, volunteer, patient, and research requirements.

Students do not have to travel the world to find valuable experiences. All that is needed is the commitment to participate in activities that really

matter to them and a mentor who will help support them when the going gets tough. This way, when the weight of extra-curricular involvement becomes too difficult, students can lean on both their passion and the help of their mentors to keep moving forward, their spaceship fortified and ready to take on the challenge.

Pre-professional students must choose their experiences and their mentors wisely because both can have a lasting impact on the success or failure of the journey toward graduate, medical, or professional school. Finally, try to enjoy this time of pressure and stress. It will eventually dissipate, and if you are prepared, you will make it out the other side ready to land gracefully at your destination.

SENIOR: DO NOT COAST, IT IS A SPRINT TO THE MOON

A student's senior year goes by in a flash. Students are kept busy with pre-professional exams, the last few courses, and wrapping up any remaining extra-curricular activities. My advice for those who manage to make it here would be: do not coast, keep working, keep striving, and in the end, be grateful to those mentors, teachers, and friends who have helped you make it this far. It was not until my senior year that I began my thesis project for the Honors Program. I was a semester late and my time was running out. In an effort to avoid the amount of work necessary, I thought about not finishing the program. I tried to convince myself that it didn't and wouldn't matter to most medical schools anyway. This could not have been further from the truth. During my acceptance phone call with the dean of admissions at the University of Utah School of Medicine, he told me that it was my research experience, my participation in the Honors Program, and my time spent volunteering abroad that had stood out the most to the committee. Ultimately, I was accepted because I engaged in my education during my freshmen year by joining the Honors program, because I had incredible mentors and I chose to stay the course during my sophomore and junior year, and because I refused to coast during my senior year.

Thanks to a chance encounter with some fungi, invested professors, research partners, and mentors I was able to finish my thesis and eventually start my own lab group under Dr. Kopp's supervision that would grow to include fourteen undergraduate students. The important thing to remem-

ber during this stage is that experiences build upon each other, and the end result and the greatest opportunities can be missed if students have resigned themselves to simply gliding into their destination without much thought as to what they need to do to successfully complete their journey.

It is in this last year that students will begin gathering letters of recommendation and filling out applications. Here is where they will have the chance to reflect on the things they have done and the person they have become. If it has been done right, they will fill out these applications proud of what they have done and ready to take on the next step of their education. If they haven't, they will be filled with anxiety and worry because they know that the admissions committee is an apt audience that will indeed notice the unprepared rocket ship and the pins that they let fall.

In summary, my advice for pre-professional students is to engage in your education in a way that brings out passion and excitement for the knowledge you are gaining. Seek out mentors that are invested in your success and that care about your future. Your engagement and their help will lead you to incredible opportunities that you never would have imagined when you first began your journey. Finally, do not give up when you are just about to reach the moon; do not abandon your goal of going to graduate, medical, or professional school. Make sure you are constantly seeking to understand the whole picture, that you are always striving to learn and engage, and stay strong until you reach your goal. Continue to work and become the best person that you can become. Finally, a short note to those who are a little behind. For those students who have yet to understand the beauty of the questions they ask and the experiences that come with engagement but are already in their junior or senior year, my advice to you is to start today. If you already are at this very moment falling back to earth in your battered rocket ship, correct the course, and begin again. It is never too late.

Karaleen Anderson graduated in 2017 with her Bachelors of Science in Biology from Utah Valley University. She is currently teaching labs in the biology department and leading various research projects on campus. She will attend medical school at the University of Utah in the fall of 2018.

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