



BIOMOLECULAR SCIENCES

Spring 2021

TAKE OUR ADVICE. YOU'LL BE GLAD YOU DID. --CCSU Biomolecular Sciences Graduates speak to Prospective Students and Freshmen

We asked a few of our BMS grads:

- *What was the biggest hurdle you faced to get to where you are today?*
- *What did you do during your time at CCSU that helped get you reach your goals? (and if there's anything here you wish you'd avoided, that's interesting too)*
- *Is your career or educational path different from what you'd expected while you were here as a student?*
- *Do you have advice for CCSU students?*

Graduated CCSU in 2007: Matt Rubenstein, a veterinarian in Perth, Australia

Hurdle:

The biggest hurdle I faced getting to where I am today was getting into vet school. Many people have heard that it's tougher to get into vet school than human med school. I don't know if that's true or not, but in Connecticut, we don't have a vet school and when I was applying, we didn't have any contract spots at any vet schools. There were something like 600 applicants for the 16 spots that they had at the University of Missouri College of Veterinary Medicine the year I applied and got in.

How CCSU Helped:

What I did at CCSU that helped me to achieve my goals was getting an absolute rock-solid science education. My first year of vet school was fairly easy because of the amazing science foundation I had. Developing such a strong science foundation at CCSU helped me get into and ultimately succeed at vet school, but honestly, what I use most is probably algebra. I use algebra daily. And yes, I did take algebra in high school, but I was an older student and hadn't thought about algebra at all for years before I went back to school.

Career Path:

Being a veterinarian is different than I had imagined it would be even though I worked for veterinarians for many years before going to CCSU and eventually on to vet school. Regardless of how well you think you might know something (my thoughts on what it would be like to be a veterinarian) there are always nuances which would never cross your radar. Some of being a veterinarian is what I expected, some of it is absolutely not what I expected.

Advice for CCSU Students:

Be f***ing determined; never give up! (you can omit the swearing if you'd like). But in all seriousness, I just never take no for an answer if I want something.

Be tenacious. Be a bulldog. Have complete, resolute, uncompromising loyalty to yourself and your goals. Also, I have relentlessly outworked everyone else to get where I am.

**GRADUATED CCSU in 2011: Elisabeth Adkins Marnik Ph.D.
Assistant Professor Molecular Biochemistry**

Hurdles:

For me, my biggest hurdle was actually applying to graduate school. I come from a complicated family background where college alone was an unusual accomplishment. It was the professors at CCSU that planted the seed and encouraged me that I could and should pursue a degree after my graduation. My desire to pursue a PhD was not understood by most of my family, so having professors who believed in me and helped me with the application process was instrumental in me getting accepted, and then attending, graduate school. That decision has led me to a life better than I could have imagined.

How CCSU helped:

While at CCSU I did undergraduate research with Dr. Thomas King. It was during the years I worked with him that I fell in love with research and the process of science. I had experiments fail, and had to figure out what to do to fix them. Thus, by the time I go to graduate school I was not experiencing failure for the first time. Things in science don't always work, so having been through that experience before helped me realize that it was part of the learning process. I also took advantage of the opportunities I had to volunteer in science outreach in the program Dr. Kathy Martin helps organize and I also tutored fellow students. These experiences helped me realize that in addition to research, I also love teaching. These combined interests have been instrumental in my decision to pursue a faculty job.

Career path:

My ultimate career goal has stayed the same – I wanted to eventually become a professor, which I have just finally started a job doing. However, the path here was certainly different than I expected. No one can really explain to you what it's like to get a PhD and subsequent training, and it was certainly hard at times. However, the skills I learned at CCSU truly helped prepare me. So while it was challenging, I believe it was less challenging than it would have been without the support and training I had at CCSU.

Advice for CCSU students:

Take advantage of the out of class learning opportunities. Do independent research, volunteer, and take some fun classes in non-science subjects. My time at CCSU was so fundamentally important to me because it helped me discover what I love doing. A lot of that discovery started in the classroom, but then expanded outside of it while teaching kids science or working in the laboratory. Those experiences, combined with my education, helped make me a competitive applicant to graduate schools.

Also, talk to your professors and ask them for advice as you pursue your career goals. I have never met a group of faculty more dedicated to their students than those at CCSU, and particularly those in the BMS department. They're the biggest asset to the institution because they're brilliant and they truly care about the happiness and success of their students.

Overall, my decision to attend CCSU was one of the best decisions of my life. I had an excellent educational experience that equipped me for my PhD training and was the springboard to the life I currently have and love. Also, I met the best people there who have truly impacted my life, many of whom are faculty at CCSU and who I am so grateful to have encountered on this journey.

(here is a profile of Dr. Marnik: [Genes to Genomes.](#))

**Graduated CCSU in 2013: Michelle Kayser
Pediatrician, soon to be endocrinologist:**

Dr. Kayser is continuing training in endocrinology at Yale-New Haven Children's hospital ("I could have stopped at pediatrician, but I'm a glutton for punishment and long hours")

Hurdles:

I started off as a music major. Both my parents are musicians, and I was training to be an opera singer. In the middle of my junior year, I realized I didn't want to make music my career. So, my biggest hurdle was switching to a science background at almost the end of my school career. A quarter life crisis, you could call it.

How CCSU helped:

I credit my success to the BMS department. I wouldn't have discovered my passion without BMS and specifically without Kathy Martin's support. Kathy pushed me from the beginning to become a doctor. She found a doctor for me to shadow. I followed the doctor one day and I knew that was it. I called her up and said, "you were right!"

I really didn't have guidance in this field and they really helped me come up a plan and strategies through the entire process as I applied to UCONN Medical School.

I knew this path would be hard (and actually it's harder than I thought it would be, mostly because of the state of healthcare in this country) but I very much love what I do. I love kids and they're the gems of our world.

Advice to students:

Don't be afraid to identify mentors and sit down with them. At CCSU, particularly in the BMS department, there's accessibility to professors who are there for you. You won't just be a number lost in a sea of students; you'll be an individual. Reach out to any professor that you might connect with. They're wonderful at steering you in the direction you should go.

**Graduated CCSU December 2015: Willeed Rabah
Resident physician**

Hurdle:

The discipline and perseverance needed to gain acceptance into medical school. I did a lot of reaching out during my undergraduate career to make connections with those who were familiar with the application process to medical school. I also spent a lot of my free time volunteering, involving myself in research and on campus clubs, this often came at the expense of my social life.

How CCSU helped:

Well, I think the most important thing a student needs to figure out early on is why they are attending college. In my opinion, one attends college to reach a goal; it's a means to an end. If you're attending college without a career goal, then you are already behind. This just means that you should have an idea of where you want to end up earlier rather than later. I knew from day one what my goal was, and I prepared accordingly by doing the leg work early on. I knew which courses I needed to take, and I knew which extracurricular activities I needed to have on my CV before graduation.

I wish I avoided volunteering positions that I had no interest in. For example, volunteering at a hospital, I wasn't responsible for much nor did I particularly enjoy it. Instead, I should have found paid positions in things I found interesting.

Career path:

I stuck to it. I graduated in 3 1/2 semesters and gained acceptance to medical school right after graduation without taking time off in between.

Advice:

If I could go back, I would have a Plan B. I think this is important, as medical school is very competitive, I am not sure what I would have done if I did not gain admission to medical school.

Graduated CCSU in 2018: Catherine Schuberth-Galdamez
Oncology Nurse at Hartford Hospital

Hurdle:

The biggest hurdle I've face to get to where I am today was the accelerated nursing program I attended *after* Central. Granted, I did decide to graduate from CCSU, start my accelerated nursing program, buy a house, and get married all within a month.

How CCSU helped:

Everything I did at Central helped me reach my goals, my experience doing research and all my BMS courses taught me to think critically which benefited me not only through the accelerated nursing program but also in my nursing career. The education I received at Central were the building blocks to my nursing education. The support of my BMS family (students and professors) also helped me to strive for my goals of entering the medical field.

Career path:

I always knew I wanted to be in the medical field somehow and being a BMS major at Central prepared me and enabled me to enter any program in the medical field I wanted. I decided on nursing with the assistance in research and advice of my wonderful advisor. I knew I selected the right career as well, from all the support I received from my professors when I told them I decided to go on to nursing.

Advice:

My advice for any students at CCSU is to not be afraid to continue with your education and to always seek out help when needed, because you will always find the help at Central. My time at Central was the most influential of my life and I hope that you are able to get everything out of Central that I did!

Graduated CCSU in 2020: Brenden Griffith
In PhD program for cell molecular biology at UCONN

Hurdle:

A large challenge that I faced was confronting the ideas of finding what I loved to do versus what I *thought* I had loved to do. For a long time, I wanted to be a physician. So, I used the resources in BMS to strengthen my resume... I found myself enjoying the aspects of basic science research more than the idea of becoming a physician. So, I dove deeper into research and started another project. This is when I really took a step back to look at things from the outside in. I said to myself, "I really love doing this science. Surely, this was because I was working on going to medical school, right?" I pondered this question to find that it wasn't my quest to medical school that made me love doing research. Within one year I was able to put all my efforts towards enriching my resume to get into graduate school

How CCSU helped:

I took advantage of the volunteering experiences like Great Explorations and Partners in Science, both science outreach programs. CCSU also has many wonderful clubs which you can participate in. Some clubs I participated in was the Biology club, the Pre-health society, and the Student Organ Donation Advocacy (SODA) club. I would also say to take advantage of the many opportunities there are with faculty. Having small class sizes allows for professors to get to know you.

Educational Path:

Absolutely, it changed, however it is for the better. All the opportunities that I had during my undergrad allowed me to really search and confirm what I loved to do rather than just thinking what I like to do.

Advice:

Get involved! For example, research in BMS is required. This is unique, research experience can be hard to come by as an undergrad. Exploit this opportunity to find more about yourself. Whether you enjoy research or not will help you as you find what you like to do and what steps you should take next.