

Dear Fellow Students... a letter from an undergraduate researcher

Dear UMBC Student,

Hello! My name is Hasina Jamal and I am a fifth-year senior here at UMBC. As I was looking back at my last four years here, I wanted to share with underclassmen and upperclassmen alike about the one thing I am truly grateful for having done: Research.

During my sophomore year, my advisers said that I should consider conducting research. I knew I was going to be overwhelmed with all of my classes. In addition, I never conducted research in high school, so it would be new for me. After much hesitation, I decided to try it out anyway and I am very happy that I did! I talked to one of the chemical engineering professors on campus and asked if I could be in his lab. He accepted and afterwards I was working on making nanoparticle oxygen sensors! For those students who have never conducted research, I'd highly recommend giving it a shot! It doesn't matter what your major is. Just click on your department's website and look at the research that professors are conducting. If something interests you, shoot the professor an email or call him or her to arrange to meet to discuss working in their lab. It can't hurt!

After staying a little over a semester in the lab, I took my experience to the next level. I signed up to present at the Undergraduate Research and Creative Achievement Day (URCAD), sponsored by the Office of Undergraduate Education. We got to choose whether to present a poster amongst other UMBC students, or to share our project orally (using Powerpoint). I chose to give an oral presentation. The organizers were great in assisting me in preparing the slides! Everyone that signs up attends a workshop which goes over how to create and present posters or oral presentations. For more information about URCAD and how to sign up (it's easy!), be sure to check out.

URCAD itself is quite an experience! Professors from all departments come to learn about students' projects. It felt a little intimidating at first (I'm a computer engineering student, but ended up presenting about the chemistry-related topics in my project to a chemistry professor), but the questions that were asked ended up helping me gain confidence in my knowledge. After I presented, I walked around and was amazed at all the awesome research that UMBC students, particularly those in the humanities majors, were conducting.

After presenting at URCAD, I heard about applying for an Undergraduate Research Award (URA). I changed my major, switched labs, and was incredibly busy with extracurricular activities and homework. I didn't make the time to look into it, but luckily, my mentor Dr. Choa brought it up, telling me that if I got accepted, our lab would get \$1,500 for our project. I checked out and felt a little overwhelmed. However, after seeing all the past students that had become URA Scholars I said to myself "Hey! If they can do it, I'm sure I could too!" I worked with my mentor on preparing a proposal and shortly thereafter, I became a URA Scholar! With the money, my lab was able to purchase supplies in order to make our trace gas detector a reality!

I've presented research at URCAD every year since then (three years so far!). I admit, at times I felt as if it was an added hassle. However, now that I'm being interviewed for jobs, I can truly grasp how beneficial the experience has been for me!

At my last interview which was partly conducted in a group, we were asked whether or not we conducted research while in college. First the first two guys were asked and they responded in the negative. When he got to me, I said "yes." He asked what I had done, and as I explained my project, my interviewer's eyes lit up.

I admit, my project is pretty cool; I use lasers and tiny microphones. Nonetheless, I honestly don't think his eyes lit up because of my research project. I think he was impressed that a busy college student would make the time to have a sustained research project, and would be able to describe it so well. When asked about whether or not I had presented research, I mentioned URCAD, much to the company's delight. Preparing for URCAD meant preparing for interviews; the process endowed me with the ability and the confidence to explain my research projects well.

The benefits far exceed being able to find a job. The whole experience of being thrown into a project that you know nothing about, and coming out learning more and having contributed to the project's aim is really something; you feel empowered and know that whatever job you get, you've been in the "I-know-nothing-and-have-much-to-learn-and-do" situation before!

For those of you in science or math related fields, I would highly recommend that sophomores apply for the Pre-MARC (Minority Access to Research Careers) program and that juniors or seniors apply to the MARC program! The latter provides two years of funding (tuition, room, and board!). Please note, however, that in order to apply for URCAD and for URA funding, you don't need to be in the science field. Dance, Theatre, English, and History majors (amongst students in many other fields!) have successfully become URA scholars and have presented in URCAD.

Thanks for your time! If you have any URCAD or URA-specific questions, feel free to contact Ms. Janet McGlynn, 410.455.5754. She has been very attentive, helpful, and prompt in answering my questions these last three years! Of course, if you have any questions about my experiences presenting, or would like some advice (or help with writing your proposal), please don't hesitate to contact me! I would be more than happy to help set you off into the wonderful, enriching world of research.

Best wishes,

Hasina Jamal
Computer Engineering
ja4@umbc.edu