

Hello,

My name is Doug and I'm a Post-doctoral Research Fellow here at OSU Wexner Medical Center working in the COPPER transplant surgery research lab. Our lab has a position opening up for an undergraduate laboratory assistant.

We are looking for 1<sup>st</sup> or 2<sup>nd</sup> year undergraduate students who are interested in getting their foot in the door with a biomedical science research laboratory. Candidates do not need any prior research experience, they will learn everything they need for the job here in our lab. They will spend the first 3-6 months completing all of the required medical center onboarding, security, safety and laboratory training. Students will also learn the primary support duties that keep the lab operational, including fundamental skills like sterile technique, chemical handling, safe operation of equipment etc. They will then work one-on-one with the research scientists and staff in our lab to learn core experimental techniques in molecular biology, tissue culture and/or animal handling (depending on their interest). Once their skills training has completed, students are given the opportunity to decide if they'd like to:

- Continue in the lab exclusively as a research assistant. This is a paid position, hourly, through the medical center
- Undertake a unpaid research project for undergraduate research credit with the assistance of their program and/or program advisors
- Combine both of the above and do a mixture of research credit and paid research assistant work
- Or move forward with more experience, new contacts and opportunities for great recommendations

Our goal is to find students that will be happy doing a mix of both jobs: some research support work, some independent research of their own. We would love to find someone who would be a great fit and could stay with our lab for a few years, to really make a project or operational area their own! Below, you will find a brief overview of our lab, the work we do, and who we are. Interested candidates should respond to the 11 questions in red below the introduction and email their responses to our lab email address [CopperLabAssistant@gmail.com](mailto:CopperLabAssistant@gmail.com)

Thank you so much for your interest in our lab!

--Doug



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## THE COPPER LAB:

About the lab and the undergraduate research assistant training program:

**Who we are:** We are a well-funded research laboratory in the medical center, department of surgery. The lab is co-directed by two physician scientist who are both co-primary investigators of the lab and transplant surgeons at OSU Wexner Medical Center: Dr. Sylvester Black (abdominal) and Dr. Bryan Whitson (thoracic).

**Where are we:** Wiseman hall, on the main OSU medical campus at 400 W. 12<sup>th</sup> Ave. We have three large laboratory spaces consisting of molecular biology labs, a microsurgery suite, and a microscopy facility. In addition to the two primary investigators, Dr. Black & Dr. Whitson, we have three research scientists, a laboratory project manager, two undergraduate research assistants and several incoming, rotating medical and surgical fellows.

**What we do:** Our laboratory focuses on organ transplantation; specifically our goal is to maximize the number of organs that can be used for life-saving transplants. **How will we do this?** By limiting damage that makes organs unusable or causes them to stop functioning after transplant. **Why is this important?** Currently the list for organ transplant is years long and there are nowhere near enough donor organs to match the number of recipients waiting in need. The shortage of transplantable organs is so great that the majority of individuals waiting for an organ transplant will die on the waiting list. In spite of the great need and low availability, each year many organs that are intended for transplantation turn out to be too damaged to use and they are turned away as unusable! Or worse, they are used and quickly stop functioning. get thrown away. Our lab studies the ways in which this damage occurs during the many complex steps required for organ donation, and we look for drugs and treatments that can protect against this damage or reverse it. We work primarily with tissue culture cell lines, animal models and donated human tissues.

**Who we are looking for:** Someone who is eager to get experience in a medical research laboratory. Someone who is willing to learn, take ownership of the work in the lab and provide the vital support we need to keep the lab work moving forward!

### Role Expectations:

- Expected hours per week: 12-15 hours minimum
- Can split duties with multiple undergraduates
- Once trained the work is extremely flexible – students will have set duties that they will be comfortable doing independently so they have the freedom to come in whenever they want as long as they can accomplish their work throughout the week
- This role is extremely important to our lab, so we'd like to have a week notice before leaving town to give the lab time to divide up and cover for the research assistant's duties
- This isn't a ready-made research position. This is intended to be an opportunity to get your foot through the door of a high-profile research lab in the medical center.

- a. The first two months are dedicated to basic lab safety training, medical center background check and access.
- b. The next six months will be committed to training in the lab and learning the ropes. After that, they can decide if they'd like to focus on paid lab support tasks, research for class credit or split their time 50%-50%

We were all once an undergraduate student, looking for a research opportunity and hoping to get reference letters from someone who really knew me... and this is an excellent opportunity. In any case, it can serve as the first opportunity to get research experience or formal research credits. But if you're looking to progress to graduate, medical, dental, vet school etc. It is also an exceptional opportunity to set yourself apart from your peers. This role can become whatever you want, including a doorway and stepping stone to your next stage of training, research presentations, publications, reference letters .... The sky really is the limit. SO if you are interested in the opportunity, please answer the following list of questions in **red** and send your responses to [CopperLabAssistant@gmail.com](mailto:CopperLabAssistant@gmail.com).

**Thanks and we look forward to hearing from you!**  
**The COPPER Lab**

## **COPPER Lab Undergrad questionnaire:**

1. What year are you in your studies at Ohio State:
  - a. How long have you been at OSU
  - b. Approximately how much longer do you expect to remain at OSU?
2. What is your major/minor (if undecided, what majors/minors are you considering?)
3. What is your approximate GPA?
4. What are your biggest time commitments during the week? (This includes things like extracurriculars, leadership organizations, sports/band/clubs, other employment etc.)
5. If you are not originally based in Columbus, what times of the year do you typically leave Columbus for vacation/trips home? (For example: would you be more likely to be gone just for spring break or would you be returning home in the summers and semester breaks?)
6. How many hours per week could you devote to working in our lab? In what intervals?
7. What are your hopes for after undergrad? Professional career? Go to grad school or professional school? If so, what area of study?
8. Do you have any laboratory research experience?
9. Do you have any lab experience from your courses studied here at OSU or elsewhere (like biology lab etc.)
10. What is the highest scientific class you've completed (biology, biochem, etc. or if still completing pre-requisites, classes such as math or chemistry?)
11. Would you be willing to commit to giving us a notice of two months prior to leaving the position? Obviously, this isn't required but if it is at all possible, we would hope to be able to have the current/graduating student help us to train the incoming student who will replace them.