May 8, 2017

Sen. Fred Girod Rep. Paul Holvey 900 Court St. NE, H285 Salem, OR 97301 Re: Capital Construction SB 5505

Hello, Senator Girod and Representative Holvey,

I am an undergraduate student at Clackamas Community College, and I am in my third term of the Biology for Science Majors class. I am writing in hopes of persuading you to approve an expansion of the Biology lab in the DeJardin building. This expansion would create room for an experiment preparation station for use by students and staff.

Following the suggestions of the "Vision and Change in Undergraduate Biology Education" publication by the American Association for the Advancement of Science (AAAS) and the National Science Foundation, the Majors Biology class at Clackamas Community College supports student-led experimentation. This experimentation introduces students to the process of researching, planning, and executing an experiment with guidance by instructors and support by staff. For students, such as me, who are pursuing careers in the scientific field, this type of education is invaluable. The ability to problem-solve, collect data, recognize problems, and interpret results successfully is the base for all scientific work, regardless of discipline.

The experiments that undergraduate students carry out in Biology class regularly utilize all available space. It is common for experiments to be left on a counter for the entire term, with regular check-ins by students to make observations, alter conditions, and carry out further procedures. Due to a lack of space in the lab preparation room, the experiments often spill over into the lab classroom. For example, as of my writing, there are at least four terrariums, 10 potted plants, and 2 goldfish tanks in the lab classroom we use twice weekly. This lab room is shared with several other classes besides our own.

The major disadvantage of this arrangement is that students are not always free to access their experiments during times of the day when other classes are using the lab. Oftentimes, and especially with live organisms, experiments must be monitored frequently to prevent experimental conditions from altering, organisms from dying, or bacterial or fungal contamination (which, in the case of roundworm experiments, is truly exasperating).

Funding for Biology undergraduate research can solve this problem by providing additional space for experiments in the lab preparation room that can be accessed by students at any time within the college's hours of operation. Another benefit of this space is that it will open up new opportunities for experiments that are too large and space dominating to be attempted in the current state of the lab. When not in use by students, the extra space will provide much-appreciated room for the lab staff to prepare materials for the many classes that they supply.

Please represent the needs, and support the development, of Biology undergraduate students at Clackamas Community College. The best improvement you can make to our education is the approval of funding that would allow additional space for day-long use by students. Please express your approval with matching funding for the expansion of the science labs in DeJardin Hall.

Thank you for your consideration.

Sincerely, Phil Nosler nosler.philip@student.clackamas.edu

Phil Nosler