

Berkeley City College, 2050 Center St.



Berkeley, CA 94704; 510-981-2800

January 23, 2024

Dear Dr. Sambrano and Members of the CIRM ARS,

We are writing in support of the Infrastructure 6.1 grant no. 15478 submitted by Dr. Mohammed Mostajo Radji, Genomics Institute, UC Santa Cruz. Dr. Mostajo Radji has been a guest lecturer in the Biotechnology Program at Berkeley City College (BCC) for the past two years and has inspired a number of students to consider careers in genomics and regenerative medicine and to think of transferring to UCSC to complete their degrees. One of our CIRM interns is conducting his internship at the Genomics Institute with Dr. Mostajo Radji and Dr. David Haussler this year, and hopes to continue his education at UCSC.

This past semester, Dr. Mostajo Radji and his group at UCSC offered to work on a cloud-based experiment that could be incorporated into Dr. Yeh's Introductory Biotechnology Laboratory class at BCC. The experiment involved testing the effects of chemicals on the development of nerve cells developed in Dr. Mostajo Radji's laboratory. Following a zoom lecture by Dr. Mostajo Radji, the students in Dr. Yeh's class selected two chemicals based on their alleged impact on the brain, Lion's Mane and Gotu Kola, created alcohol-based extracts of the fungus and plant, and then delivered the extracts to Dr. Mostajo and his team at UCSC. The chemicals were added to the growing nerve cells that were in a special chamber equipped with a camera that allowed the results to be live-screened to the cloud for later analysis by the students. This was a superb opportunity for our students to engage in a research project in conjunction with scientists at a renowned institution and it would not have been feasible if the experiment had to be conducted on site.

We want to continue our collaboration with Dr. Mostajo Radji at the Genomics Institute. Thus far, the cloud-based experiment described above fits well with Dr. Yeh's introductory class, but we would like to pursue the feasibility of expanding the opportunities for students to gain greater experience in this field. There are state funds available to support workplace training for underrepresented community college students and we have an established course in our curriculum that allows students to gain experience in the workplace. The majority of students at BCC and in the Biotechnology program come from underserved and disadvantaged backgrounds and many do not have the means to travel far from home; thus, the opportunity to engage in research and gain experience via a cloud-based platform would be invaluable.

As we are presently collaborating with Dr. Mostajo Radji at the Genome Institute and he is trying to expand their program across the state, we can commit to outreach efforts to other colleges. We are in regular meetings with colleagues who oversee science and biotechnology programs in community colleges across the state of California. A number of these colleges are distant from 4-year schools and students do not have the luxury of carpooling to UCSC as we did, but a cloud-based set of experiments such as we performed is doable and would serve the students well.

We strongly urge that you fund Dr. Mohammed Mostajo Radji's unique Infrastructure proposal. Creating the technology and infrastructure that allows students, no matter where they are residing, to participate and be

inspired by the discoveries and potential of this scientific field will support academic and industry laboratories and enhance the workforce in the state of California.

Sincerely,



Barbara Des Rochers, Ph.D.
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Coordinator and Faculty, Biotechnology
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Erika Yeh, Ph.D.
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