

My name is Dr. Lisa Chen and I am an associate professor in the Department of Biology at the University of Rochester. I am writing this statement in support of Alan Vera's application for the Discover grant. I first met Alan in January of 2020 when he enrolled as a student in my Introductory Biochemistry class and was immediately impressed by his aptitude. He was one of the most engaged students in the class and frequently chimed in with good questions and comments during lectures. He attended every single class and always sat in the middle of the front row! Although Alan initially struggled with the course material, he worked extremely hard and at the end managed to become one of the top students in the class. In fact, he received one of the highest grades in the class of 100 students. Introductory Biochemistry is an honors level class and students are asked to complete a number of highly challenging workshops and assignments that require self-learning and independent research. Alan worked very hard to complete all of the workshops and was frequently one of the few students that successfully answered the most difficult questions in assignments. Based on his performance in the class, I can confidently state that Alan is one of the hardest working and one of the most mature students I have ever taught.

Alan is a first-generation minority STEM student and entered the University of Rochester as the recipient of the prestigious Handler Scholarship. At the University of Rochester, he has succeeded in maintaining a high GPA in a difficult major (Biochemistry). As a first-generation university student, Alan has had to face significant challenges that were significantly amplified during the Covid-19 pandemic. The fact that despite these challenges he has successfully navigated a difficult curriculum at the University of Rochester demonstrates his aptitude, character and drive.

As a university sophomore, Alan contacted me and expressed his interest in conducting research in my laboratory. During our interview, I was extremely impressed by his maturity, poise and intelligence. Although I typically do not accept underclassmen in my laboratory, I immediately made an exception for Alan! For the past year, Alan has conducted a number of research projects in my laboratory and has gained valuable experience in carrying out a number of biochemical assays to investigate the pathogenic mechanism of prion diseases. In his Discover proposal, he plans to expand this research project by using mass spectrometry-based proteomics to analyze the impact of prion infection on protein turnover rates within a cell. The overall idea for the project was developed through a number of discussions between Alan and I. However, Alan wrote the entire proposal by himself, and I contributed only very minor edits.

Alan will be conducting his project under the supervision on myself and one of my graduate students. Currently, we are limited in the number of researchers that we can have in our laboratory due to Covid-19 restrictions. However, we have developed a plan to allow

Note that this statement is written by the mentor, but can be uploaded by the student.

(Optional)

The mentor can describe their previous interactions with the student. They can also outline the student's credentials and merits that are pertinent to the application.

(Optional)

The mentor can describe specific challenges and circumstances faced by the student that should be considered during review.

(Optional)

The mentor can explain how the plan for this research was developed. Note that it is not necessary for the mentor and student to have previously worked together.

Alan and his graduate student mentor to be in the lab for three days each week together. This plan is consistent with our current Covid-19 safety protocol that has been approved by the Department of Biology and AS&E. For the remaining two days of the week, Alan will be conducting data analysis remotely. Overall, I estimate that Alan will work 40 hours a week on this project. In addition to regular meetings with his graduate student mentor, I will have weekly meetings with him to keep abreast of his progress in this project. Additionally, my laboratory has weekly group meeting where different lab members give updates of their research progress. Alan will be attending these meetings as well. At the end of the summer, Alan will present his results to our entire lab group during one of these meetings. Additionally, I will ask him to present his results at the University of Rochester Research Expo this year.

In summary, Alan is a very talented scientist with unlimited potential. I know he has thought deeply about his academic path and is fully committed to a career in biomedical research and education. I am very proud of him and consider myself fortunate to have him as a member of my laboratory. Alan's outstanding accomplishments and exemplary character make him the ideal candidate for the Discover grant.

(Required)

A mentorship plan is required. The mentor should describe how many hours per week the student will work on this project, how often the student and mentor/supervisor will meet, etc. If project is remote, please specify and tell us how progress will be tracked. If there are any special considerations due to Covid-19 restrictions, these should be described.