



11 September 2014

RE: Recommendation letter for Olek

Dear Sir or Madam,

It is with my greatest enthusiasm to recommend Olek as a learner and researcher. Olek joined our lab as a research assistant in summer 2014. I was delighted to observe Olek's personal and scientific qualities up close in our three-month nearly daily associations, and thus believe I am qualified to speak to Olek's passion and intellectual gift in science and his bright futures to come. Among the dozens of high-school and undergraduate students, I would rank Olek in the top 2 (the other went on to Princeton University).

Olek was recommended to me by a colleague as a summer research intern. My colleague spoke very highly of Olek's self-motivation in science. While still a high school student then, Olek had already learned advanced math and physics subjects through courses and tutoring. My interactions with Olek quickly affirmed Olek's breadth and depth of scientific knowledge that is rare among his peers. As we collaborate on a couple of research projects over the summer, I became increasingly impressed by the array of exceptional qualities Olek displayed.

Olek is extremely passionate and studious about science. The first project Olek undertook was to culture dinoflagellate and isolate its nuclei for x-ray scattering studies. He took detailed notes in our discussion on the project, and then went on his own to find out the things he didn't quite understand. Olek then came back with insightful questions and suggestions on improvements on research design. Such initiatives are rarely seen even from graduate students. With all questions answered, Olek would then dive to hard work. He was a very busy person in the lab and often had lunch at 3-4pm. In his Dad's words, Olek is a true "workhorse" to get things done, which I cannot agree more with.

The second quality I like to emphasize is Olek's independence. This may have naturally come along with his passion and hard-working. Olek would read on his own related literature and technical methods and tread along while asking questions as needed. After just several days, it was only necessary for me to be present in the lab and answer occasional questions from Olek. Olek is also an excellent planner so as not to be caught off guard by surprises. Olek truly became a collaborator in weeks' time.

I would like to further comment on Olek's creativity in research. One component of his dinoflagellate work is to construct a light/dark room for cell growth. It required timed on and off of light at desired intensities. It was quite a surprise that Olek used a programmable Christmas light control and Christmas lights to realize this function, and it worked! Another project of Olek's was to build a humidity control chamber using spectrophotometer cuvettes, which will be directly mounted on x-ray sample stages. Olek did a very impressive job in cutting/drilling using available tools in the lab, showing very strong hands-on skills.

When Olek asked me to write a letter for him as he expected to need it in the future, I gladly accepted it. While not knowing what program he may be applying, I have no doubt that he will be an excellent fit and addition to your program. I thank you very much for your favorable consideration. Please don't hesitate to contact me if you have any question.

Sincerely,

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