



June 19, 2018

Dear Dr. Demming-Adams and Dr. Adams,



Your research focus on the photosynthetic **capability** of plants and their different adaptations and using this background to find suitable strains for the production of biofuels matches my fascination for the world of photosynthetic organisms and their potential to help human society move away from the dependence on fossil fuels. In the past I have already acquired some experience working with photosynthetic organisms - their basic biology and how they could potentially be used for the generation of biofuels or secondary metabolites - making me an excellent add-on to your team.



During my bachelor thesis I gained insight into the cultivation of *Nannochloropsis oceanica* and *Phaeodactylum tricornutum* in the lab of Dr. Uwe Maier at the University of Marburg, Germany, and during my master thesis I successfully cultivated and processed *Synechocystis* sp. PCC 6803 in the lab of Dr. Wolfgang Hess at the University of Freiburg, Germany ([Publication](#)). These experiences have left me well **prepared** to work preparing and cultivating both algae and cyanobacteria. The wide array of lectures and courses I took in plant sciences, translational biology and microbiology has also left me with a solid foundation to learn and develop new procedures and protocols in the lab.

Taking part in a scientific competition for university students called iGEM (international Genetically Engineered Machine) gave me the chance to both work independently and cooperate with an interdisciplinary team of 20 students. Working in a team I expanded my proficiency in handling not only Microsoft office suite and gene analysis softwares (Geneious, Snapgene) but also learned how to set up and organize databases (FileMaker) and use an internal wiki for accurate and reliable data storage - organizational skills that I could invest to improve data recording and storage in any lab. Through iGEM and my theses I learned to clearly communicate results to my team and a wider audience using oral presentations and a [website](#). To further hone this skill I attended a professional course on proper presentation.

In my current position at the European Molecular Biology Laboratory (EMBL) I acquired experience in the basic organization and daily maintenance of running a lab **since my team only comprises two members**. Within the first few months at EMBL my job description changed quite dramatically and I **had** to quickly learn techniques that were new to both my supervisor and me. **Due to** the reshaping I also started working in a BSL2 environment and am thus aware of the importance of stringently following safety guidelines and maintaining a safe and clean working environment. Working in a facility also taught me how to balance multiple projects at once while managing my time to keep ahead of deadlines.

Besides the experience I collected in different laboratory environments over time, I bring excellent interpersonal, organizational and communication skills shaped by a range of volunteering activities. Given my skillset I believe I could make valuable contributions to the Demming-Adams and/or Adams lab and it would be an honor to contribute to your research. If you agree, I would appreciate the opportunity to discuss the position and my potential contributions in more detail. Thank you for your time and consideration, I look forward to hearing from you.

Sincerely,

Note: Reference contacts and letters and a more complete CV can also be sent upon request.