

# De Long lab

October 21, 2018

## 1 Their focus

*lab homepage*

### Her background

Dr. Susan De Long is an Assistant Professor of Civil and Environmental Engineering at Colorado State University. She has over 15 years of experience working in the fields of environmental engineering and molecular biology. She holds Bachelor's degrees in Environmental Science and Molecular and Cell Biology from the University of California, Berkeley and earned her M.S. and Ph.D. in Engineering from The University of Texas, Austin.

### Research Areas

Dr. De Long's research is focused on developing **environmentally sustainable biotechnologies**. Her research group **applies molecular biology tools to investigate microbial communities involved in successful treatment processes** and leverages this knowledge to **improve treatment process design**. Additionally, Dr. De Long's group is conducting research to **discover genes and enzymes involved in degradation of recalcitrant pollutants**; this knowledge will support development of molecular biology assays to track **key microbes** in natural or engineered systems to guide development of the **next generation of treatment technologies**.

### Current Research Interests

- Biotreatment of Emerging Contaminants

- Bioremediation
- Bioenergy Generation from Waste Materials
- Water Reuse
- Development and Application of Molecular Biology Tools

## 2 Draft email

**Dear Dr. De Long,**

Having read about your work on microbial communities, I hope to contribute with my experience in engineering and analyzing microbes, my project management skills and my ability to work both independently and as part of a team. Therefore I would like to inquire as to whether you are or will be looking for a research technician/assistant or something similar in the near future?

As a brief background: For my B.Sc. thesis in Biology at the University of Marburg, Germany, I worked with *P. tricornutum* and *N. oceanica* before continuing to study *Synechocystis* sp. PCC6803 for my M.Sc. thesis in Biology at the University of Freiburg, Germany. During my M.Sc. I also participated in a team to develop an affordable diagnostic tool for the international Genetically Engineered Machine (iGEM) competition. After my M.Sc. I joined Europe's flagship laboratory for the life sciences (EMBL) in Rome, Italy, where I work as a Technical Officer in the Genetic and Viral Engineering Facility.

Please find attached my CV with more information, I am happy to send a cover letter upon request. Thank you very much for your time and consideration, I look forward to hearing from you soon and will be following up next week to see if you have any questions concerning my qualifications.

Sincerely,

Rabea Jesser