

# Curriculum Vitae

## Kathleen S. Fitzgerald

University of Tennessee  
Energy Science and Engineering  
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### Education

- 2016-present    **PhD Student**  
Bredesen Center for Interdisciplinary Research and Graduate Education  
University of Tennessee, Knoxville | Oak Ridge National Laboratory  
Advisor: Dr. T.C. Hazen
- 2011-2015    **BS Microbiology | Minor Business Administration**  
University of Tennessee, Knoxville  
Magna Cum Laude

### Experience

- 2015-2016    **Post-Baccalaureate Intern**  
Higher Education Research Experience  
Oak Ridge National Laboratory | Oak Ridge Associated Universities  
Mentor: Dr. T.C. Hazen  
Research known hydrocarbon degraders isolated from the Deep Water Horizon oil spill and gain a greater understanding of their capabilities and mechanisms of bioremediation
- 2014-2015    **Student Research Assistant**  
University of Tennessee, Knoxville | Dr. T.C. Hazen  
Research in basic and applied field microbial ecology. Emphasis on bioremediation, enhanced oil recovery and water quality.

### Research Interests

My primary research is focused on applied microbial ecology with an emphasis on understanding the function and role of microbial communities in the natural attenuation and bioremediation of metals and radionuclides in contaminated areas.

### Publications

Techtmann, S. M., **K. S. Fitzgerald**, S. C. Stelling, D. C. Joyner, S. M. Uttukar, A. P. Harris, N. K. Alshibli, S. D. Brown, and T. C. Hazen. 2016. *Colwellia psychrerythraea* strains from distant deep-sea basins show adaptation to local conditions. *Front. Environ. Sci.*4:33. doi: 10.3389/fenvs.2016.00033 (NA, 2).

## Awards

Best Poster. Oak Ridge National Lab. Oak Ridge Institute for Science and Education (ORISE) Summer Student Poster Sessions. August 6, 2015.

Honorable Mention Poster in the College of Arts and Sciences. Exhibition of Undergraduate Research and Creative Achievement (EURECA), University of Tennessee, Knoxville. April 14, 2015.

## Posters and Presentations

Liu J, Techtmann S, Fortney J, Joyner D & Hazen T. Presentation by **Fitzgerald K.** Invited. Microbial Degradation and Community Changes to Crude Petroleum Oil in Different Deep Oceans. June 29, 2016. Yokohama, Japan. Goldschmidt Conference.

Brewer, S. S., M. F. Campa, A. Garcia de Matos Amaral, S. M. Techtmann, **K. Fitzgerald**, J. L. Fortney, and T. C. Hazen. Contributed. Isolation and Characterization of Anaerobic Microbial Communities from Hydraulic Fracturing Fluids. June 16, 2016. Boston, MA. ASM Microbe Annual Meeting.

**Fitzgerald, K.**, S. M. Techtmann, J. L. Fortney, D. C. Joyner, and T. C. Hazen. Invited. Diversity and Distribution of Archaeal amoA Genes in Geochemically Distinct Marine Basins. August 6, 2015. Oak Ridge, TN. Oak Ridge National Lab. Oak Ridge Institute for Science and Education (ORISE) Summer Student Poster Sessions.

**Fitzgerald, K.**, S. M. Techtmann, J. L. Fortney, D. C. Joyner, and T. C. Hazen. Contributed. Diversity and Distribution of Archaeal amoA Genes in Distant Marine Basins. April 13-15, 2015. Knoxville, TN. University of Tennessee Exhibition of Undergraduate Research and Creative Achievement (EURECA).

## Workshops and Conferences

Women in STEM Research Symposium. University of Tennessee, Knoxville. March 1, 2018.

Women Engineers Day. Conference. Knoxville, TN. April 22, 2017.

Goldschmidt. Conference. Yokohama, Japan. June 26 – July 1, 2016.

Do-It-Yourself Microbial Genome Sequence Analysis. Workshop. American Society for Microbiology Conference. Boston, MA. June 16, 2016.

American Society for Microbiology Conference. Boston, MA. June 16-20, 2016.

Southeastern Biogeochemistry Symposium. University of Tennessee, Knoxville. March 11-13, 2016.

Undergraduate Research Symposium. Exhibition of Undergraduate Research and Creative Achievement (EURECA). University of Tennessee, Knoxville. April 14, 2015.

Undergraduate Research Symposium. Exhibition of Undergraduate Research and Creative Achievement (EURECA). University of Tennessee, Knoxville. April 12, 2014.

## **Leadership**

President. Kappa Kappa Gamma Knoxville Alumnae Association.  
2017-present. Intergenerational leadership, event management, meeting planning.

Treasurer. Kappa Kappa Gamma Knoxville Alumnae Association.  
2015-2017. Fundraising, financial management, philanthropy.

Homecoming Chairman. All Campus Events. University of Tennessee.  
2013-2015. Promotion, coordination, community relations.

Logistics Coordinator. Panhellenic Council.  
2013-2015. Organization, teamwork, counsel.

Welcome Leader. New Student and Family Programs.  
2012-2015. Introductions, peer management, advisement.

President. Junior Panhellenic Council.  
2011-2013. Leadership, promotion, philanthropy.

PR and Marketing Director. Hess Hall Council.  
2011-2012. Event coordination, advertising, media relations.

## **Scientific Outreach**

Ask a Scientist Volunteer.  
Knoxville, TN. 2016-present.

Chemical Magic Show Coordinator and Leader.  
Rutherford County Tennessee Schools. 2014-2016.

## **Community Outreach**

Light the Night, Leukemia and Lymphoma Society. Volunteer. 2014-present.

Free Little Library Coordinator. 2017-present.

Big Brother, Big Sister Volunteer. 2012-2017.

## **Training & Skills**

HAZWOPER – 40 hours

Radiological Worker 1 & 2 – 24 hours

On-Site Field Training (Y-12, ORNL)  
Hazardous Waste  
Hazardous Communication  
Gas Chromatography (FID, ECD)  
Illumina MiSeq  
Effective Public Speaking – 40 hours  
Fire Extinguisher  
Personal Protective Equipment  
Compressed Gas Cylinder  
First Aid

### **Professional Society Memberships**

American Society of Microbiology. 2013-present.  
Geochemical Society. 2015-present.