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EDUCATION

- Ph.D.** - Environmental Engineering Science, **Colorado School of Mines**, Golden, Colorado **August 2018**
Thesis: *The Microbiology of the Sulfur-Dominated Glacial Ecosystem Borup Fiord Pass, and High Arctic Low-Temperature Spring Associated Microbial Mats*
- M.S.** - Environmental Engineering Science, **Colorado School of Mines**, Golden, Colorado **December 2013**
- B.S.**, Major – Biology, **University of Colorado Denver**, Denver, Colorado **December 2006**

RESEARCH ACTIVITIES

- GFZ German Research Centre for Geosciences**, Potsdam, Germany **Jan 2019 - Present**
Postdoctoral scholar
Advisor: Prof. Dr. Liane G. Benning
- Colorado School of Mines**, Golden, Colorado **Aug 2018 - Dec 2018**
Postdoctoral scholar
Advisor: Dr. John Spear

PUBLICATIONS

- 2020** **Trivedi, C. B.**, Stamps, B. W., Lau, G. E., Grasby, S. E., Templeton, A. S., Spear, J. R. (2020). Microbial Metabolic Redundancy Is a Key Mechanism in a Sulfur-Rich Glacial Ecosystem. *mSystems*.
<https://doi.org/https://doi.org/10.1128/MSYSTEMS.00504-20>
- Jarett, J. K., Džunková, M., Schulz, F., Roux, S., Paez-Espino, D., Eloë-Fadrosh, E., Jungbluth, S. P., Ivanova, N., Spear, J. R., Carr, S. A., **Trivedi, C. B.**, Corsetti, F. A., Johnson, H. A., Becraft, E., Kyrpides, N., Stepanauskas, R., & Woyke, T. (2020). Insights into the dynamics between viruses and their hosts in a hot spring microbial mat. *The ISME Journal*, 14(10),
<https://doi.org/10.1038/s41396-020-0705-4>.
- 2018** **Trivedi, C. B.**, Lau, G. E., Grasby, S. E., Templeton, A. S., & Spear, J. R. (2018). Low-temperature sulfidic-ice microbial communities, Borup Fiord Pass, Canadian high Arctic. *Frontiers in microbiology*, 9.
<https://doi.org/10.3389/fmicb.2018.01622>
- 2017** Bradley, J.A.* , Daille, L.K.* , **Trivedi, C.B***, Bojanowski, C.L., Stamps, B.W., Stevenson, B.S., Nunn, H.S., Johnson, H.A., Loyd, S.J., Berelson, W.M. and Corsetti, F.A. Spear, J.R. (2017). Carbonate-rich dendrolitic cones: insights into a modern analog for incipient microbialite formation, Little Hot Creek, Long Valley Caldera, California. *NPJ biofilms and microbiomes*, 3(1), 32. <https://doi.org/10.1038/s41522-017-0041-2>
*Co-first authors
- Lau, G. E., Cosmidis, J., Grasby, S. E., **Trivedi, C. B.**, Spear, J. R., & Templeton, A. S. (2017). Low-temperature formation and stabilization of rare allotropes of cyclooctasulfur (β -S₈ and γ -S₈) in the presence of organic carbon at a sulfur-rich glacial site in the Canadian High Arctic. *Geochimica et Cosmochimica Acta*, 200, 218–231.
<https://doi.org/10.1016/j.gca.2016.11.036>
- 2016** Stoll, Z. A., Ma, Z., **Trivedi, C. B.**, Spear, J. R., & Xu, P. (2016). Sacrificing power for more cost-effective treatment: A techno-economic approach for engineering microbial fuel cells. *Chemosphere*, 161, 10–18.
<https://doi.org/10.1016/j.chemosphere.2016.06.072>

GRANTS, FELLOWSHIPS, AND AWARDS

- INTERACT Transnational Access Travel Grant** 2019
Travel and logistical costs for fieldwork in Greenland. EUR 10,920
- XSEDE HPC Startup Grant** 2018
Access to high performance computing resources. USD 8,455
- SETI Travel Grant** 2015
Astrobiology Science Conference, Chicago, IL. USD 500

CONFERENCE PROCEEDINGS

- 2018 Trivedi, C. B.**, Stamps, B. W., Lau, G. E., Templeton, A. S., Grasby, S. E., Spear, J. R.; *Metabolic investigation of microbial communities found in a sulfur-dominated glacial spring system in the Canadian High Arctic*; 2018 Rocky Mountain Geobiology Symposium – Golden, CO, Poster
- Trivedi, C. B.**, Stamps, B. W., Lau, G. E., Templeton, A. S., Grasby, S. E., Spear, J. R.; *Metabolic investigation of microbial communities found in a sulfur-dominated glacial spring system in the Canadian High Arctic*; 2018 Graduate Research and Discovery Symposium (GRADS), Colorado School of Mines – Golden, CO, Poster
- 2017 Trivedi, C. B.**, Lau, G. E., Templeton, A. S., Grasby, S. E., Daille, L. K., Spear, J. S.; *The Geobiology of a Sulfur-Dominated Glacial Spring System Found in the Canadian High Arctic*; 2017 Astrobiology Science Conference, Poster (#3540)
- Daille, L. K., **Trivedi, C. B.**, Bradley, J. A., Bojanowski, C. L., Stamps, B. W., Nunn, H. S., Johnson, H. A., Stevenson, B. S., Berelson, W. M., Corsetti, F. A., Spear, J. R.; *Carbonate-rich Cones: A potential modern analogue of ancient conical stromatolites*; 2017 Rocky Mountain Geobiology Symposium – Golden, CO
- Trivedi, C. B.**, Lau, G. E., Templeton, A. S., Grasby, S. E., Spear, J. R.; *Microbiological implications of a sulfur-dominated glacial spring system found in the Canadian High Arctic*; 2017 Graduate Research and Discovery Symposium (GRADS), Colorado School of Mines – Golden, CO, Poster
- 2015 Trivedi, C. B.**, Lau, G. E., Templeton, A. S., Grasby, S. E., Spear, J. R.; *Community Characterization of Microbial Populations Found at a Cold Water Sulfidic Spring in the Canadian High Arctic*; 2015 AGU Fall Meeting, Poster (P11C-2105)
- Bojanowski, C. L., **Trivedi, C. B.**, Daille, L. K., Bradley, J. A., Stamps, B. W., Nunn, H. S., Johnson, H. A., Stevenson, B. S., Berelson, W. M., Corsetti, F. A., Spear, J. R.; *Vertical Microbial Community Variability of Carbonate-based Cones may Provide Insight into Formation in the Rock Record*; 2015 AGU Fall Meeting, Poster (B21C-0445)
- Daille, L. K., **Trivedi, C. B.**, Bradley, J. A., Bojanowski, C. L., Johnson, H. A., Stamps, B. W., Stevenson, B. S., Berelson, W. M., Corsetti, F. A., Spear, J. R.; *Carbonate-rich Cones: A New Modern Analogue of Ancient Conical Stromatolite Formation?*; 2015 GSA Annual Meeting, Poster (#109-7)
- Templeton, A. S., Lau, G. E., Cosmidis, J., **Trivedi, C. B.**, Spear, J. S., Grasby, S. E.; *Sulfur Oxidation and Biomineralization Processes in Sulfidic Ice Ecosystems*; Goldschmidt 2015 – Czech Republic
- Trivedi, C. B.**, Lau, G. E., Templeton, A. S., Grasby, S. E., Spear, J. R.; *Community Characterization of Microbial Populations Found in Supraglacial Icings at Borup Fiord Pass*, 2015 Astrobiology Science Conference, Poster (#7633)
- Lau, G. E., **Trivedi, C. B.**, Grasby, S. E., Spear, J. S., Templeton, A. S.; *Characterization of Sulfur-Rich Materials in Supraglacial Icings at Borup Fiord Pass, Canadian High Arctic*, 2015 Astrobiology Science Conference (#7349)
- Lau, G. E., **Trivedi, C. B.**, Spear, J. S., Grasby, S. E., Templeton, A. S.; *Characterization of Sulfur-Rich Materials in Supraglacial Icings at an Arctic Analogue to Europa*; NASA Ames Europa Plume Workshop

FIELD EXPERIENCE

- Multiple glaciers, Greenland & Iceland** 2019 - present
Field sampling for genomic, geochemical, and organic analyses
- Borup Fiord Pass, Nunavut, Canada** 16 June – 5 July, 2014
NASA Exobiology field campaign. Field sampling of water, ice, and mineral precipitate samples for genomic and biogeochemical analysis.
- Yellowstone National Park, USA** 2014 - present
Multiple field campaigns focusing on sample collection for genomic and geochemical analysis of thermal features.

ADVANCED TRAINING COURSES

- EU FT-ICR MS Advance User School** 14 April – 18 April, 2019
Faculdade de Ciências da Universidade de Lisboa (FCUL), Campo Grande
- International GeoBiology Course** 19 June – 21 July, 2015
Wrigley Institute for Environmental Studies, University of Southern California

PROFESSIONAL SERVICE

- US Association for Polar Early Career Scientists** Feb 2018 – present
Board member and website manager
- NASA Exobiology Grant Panel** 2014
Executive Secretary, Denver, CO

PROFESSIONAL MEMBERSHIPS

- American Society for Microbiology October 2012 – present
American Geophysical Union July 2015 – present
Sustainable Remediation Forum (SURF) May 2013 – present
Association for Polar Early Career Scientists (APECS) Jan 2018 - present
US Association for Polar Early Career Scientists (USAPECS) Jan 2018 - present