# Sarah Stevens

[Webpage](sarahlrstevens.info) – [sarah.lr.stevens@gmail.com](mailto:sarah.lr.stevens@gmail.com) – [CV weblink](https://github.com/sstevens2/CV/blob/master/sstevens_CV.pdf)

## Education

2012-2018 (expected)

**PhD, Microbiology Doctoral Training Program**;  
University of Wisconsin - Madison

SciMed GRS Fellow  
MDTP Recruiting Commitee - **2014-2015**  
MDTP Steering Committee - **2015-2016**

2007-2011

**Bachelor of Science - Molecular and Cellular Biology**;  
University of Illinois Urbana - Champaign

*Minor in Informatics*  
James Scholar Honors

## Research Experience

**University of Wisconsin - Madison,** [**McMahon Lab**](https://mcmahonlab.wisc.edu/)

Graduate Research Assistant - **2012-Present**

Determining the forces that shape population structure and how wild bacterial populations change through time in lakes as a model system using reference genomes (composite genomes from metagenomes and single-cell genomes) for uncultivated but common freshwater bacteria and metagenomic time series from several lakes.

**University of Illinois Urbana - Champaign,** [**Metcalf Lab**](https://mcb.illinois.edu/faculty/profile/metcalf/)

Visiting Researcher - **2011-2012**

Assembled genomes from isolates belonging to the archaeal genus *Methanosarcina* and analyzed shared genomic content of members of this genus.

**University of Illinois Urbana - Champaign,** [**Whitaker Lab**](https://mcb.illinois.edu/faculty/profile/rwhitakr)

Undergraduate Research Assistant - **2010-2011**

Studied insertion sequences in *Sulfolobus* islandicus in an independent project, cultured archaea, organized sample/culture database, cleaned-up and prepped lab equipment.

## Publications

Garcia, S. L.\*, **Stevens, S. L. R.**\*, Crary, B., Martinez-Garcia, M., Stepanauskas, R., Woyke, T., Tringe, S. G., Andersson, S., Bertilsson, Malmstrom, R. R., McMahon, K. D. (*accepted at ISME Journal*). Contrasting patterns of genome-level diversity across distinct co-occurring freshwater bacterial populations. \*Equal contributors

He, S., **Stevens, S. L. R.**, Chan, L.-K., Bertilsson, S., Glavina del Rio, T., Tringe, S. G., Malmstrom, R. R., McMahon, K. D. (2017). Ecophysiology of Freshwater Verrucomicrobia Inferred from Metagenome-Assembled Genomes. mSphere. doi:[10.1128/mSphere.00277-17](https://doi.org/10.1128/mSphere.00277-17)

Bendall, M. L.\*, **Stevens, S. L. R.**\*, Chan, L.-K., Malfatti, S., Schwientek, P., Tremblay, J., Schackwitz, W., Martin, J., Pati, A., Bushnell, B., Froula, J., Kang, D., Tringe, S. G., Bertilsson, S., Moran, M. A., Shade, A., Newton, R. J., McMahon, K. D., Malmstrom, R. R. (2016). Genome-wide selective sweeps and gene-specific sweeps in natural bacterial populations. ISMEJ. doi:[10.1038/ismej.2015.241](https://doi.org/10.1038/ismej.2015.241) **featured article**

\*Equal contributors

## Organizations

[Software Carpentry](http://software-carpentry.org/) **and** [Data Carpentry](http://www.datacarpentry.org/)  
*Instructor* - **2015-Present**  
- [DC Genomics Hack-a-thon Contributor](https://github.com/datacarpentry/genomics-hackathon) - **Mar. 23-25, 2015**

[Computational Biology, Ecology, and Evolution (ComBEE)](https://goo.gl/Pf57mb) group  
*Founder/Co-Chair* - **2014-2017**  
- [ComBEE](https://goo.gl/Pf57mb) provides an opportunity for researchers to discuss new computational tools and learn bioinformatics skills together.  
- [ComBEE Python Study Group](https://goo.gl/8fcWc3) - **2014-2017**  
- [ComBEE R Study Group](https://goo.gl/xKfLHf) - **2015-2017**

[DOE Joint Genome Institute](http://jgi.doe.gov/)  
*Intern/Affiliate* - **Jan. 2015-Mar. 2015**

## Teaching

[Software Carpentry](http://software-carpentry.org/) Workshop - University of Wisconsin - Madison  
*Instructor* - [**Jan. 14-15, 2016**](http://uw-madison-aci.github.io/2016-01-14-uwmadison/), [**Jun. 08-09, 2016**](http://uw-madison-aci.github.io/2016-06-08-uwmadison/), [**Jan. 12-13, 2017**](https://uw-madison-aci.github.io/2017-01-12-uwmadison/)  
*Helper* - [**Jan. 13-16, 2015**](https://github.com/UW-Madison-ACI/boot-camps/blob/2015-01-13/README.md), [**Jun. 3-4, 2015**](https://github.com/UW-Madison-ACI/boot-camps/blob/2015-06-03/README.md), [**Aug. 29-30, 2016**](https://uw-madison-aci.github.io/2016-08-29-uwmadison/), [**Jun. 28-29, 2017**](https://uw-madison-aci.github.io/2017-06-28-uwmadison-swc/), [**Aug. 30-31, 2017**](https://uw-madison-aci.github.io/2017-08-30-uwmadison-swc/)

[Data Carpentry](http://www.datacarpentry.org/) Workshop - University of Wisconsin - Madison  
*Instructor* - [**Jan. 10-11, 2017**](https://uw-madison-aci.github.io/2017-01-10-uwmadison/), [**Aug. 22-23, 2017**](https://uw-madison-aci.github.io/2017-08-22-uwmadison-dc/)  
*Helper* - [**Jan. 11-12, 2016**](http://uw-madison-aci.github.io/2016-01-11-uwmadison/), [**Jun. 01-02, 2016**](http://uw-madison-aci.github.io/2016-06-01-uwmadison/), [**Jun. 19-20, 2017**](https://uw-madison-aci.github.io/2017-06-19-uwmadison-dc/)

[Software Carpentry](http://software-carpentry.org/) Workshop - Federal Reserve Bank, Chicago  
*Instructor* - [**Aug. 2-3, 2017**](http://sarahlrstevens.info/2017-08-02-chicago-frb/)

[ComBEE](https://sites.google.com/a/wisc.edu/combee) Anvio Workshop 2017 - University of Wisconsin - Madison  
*Instructor* - [**May. 24, 2017**](https://public.etherpad-mozilla.org/p/2017-05-24-combee-anvio)

[ComBEE](https://sites.google.com/a/wisc.edu/combee) Git/Github Workshop - University of Wisconsin - Madison  
*Instructor* - [**Mar. 2-3, 2017**](https://sstevens2.github.io/git-novice-mod/)

[Software Carpentry](http://software-carpentry.org/) Instructor Training - University of Wisconsin - Madison  
*Helper* - [**Oct. 24-25, 2016**](https://uw-madison-aci.github.io/2016-10-24-ttt-uwmadison/)

[Software Carpentry](http://software-carpentry.org/) Workshop - University of Wisconsin - Milwaukee  
*Instructor* - [**Apr. 25-26, 2016**](http://sstevens2.github.io/2016-04-25-UW-mke/)

[Software Carpentry](http://software-carpentry.org/) Workshop - Northwestern University  
*Instructor* - [**Nov. 10-11, 2015**](http://xuf12.github.io/2015-11-10-northwesternu/)

McMahon Lab Git Workshop  
*Instructor* - [**July 2015**](https://github.com/McMahonLab/git_wksp/tree/2015-summer#mcmahon-lab-git-workshop)

Bioinformatics Basics: Microbial Ecology and Evolution - Illinois Mathematics and Science Academy Intersession  
*Instructor/Course Designer* - **Jan. 2015**

Microbiology 304: Biology of Microorganisms Laboratory - University of Wisconsin - Madison  
*Teaching Assistant/Instructor* - **Fall 2013**

## Oral Presentations

**Stevens, S. L. R.** Starting Your Own Study Group. Rebecca J. Holz series in Research Data Management. October 2016. Madison, WI. [Link to Webpage/Slides](http://researchdata.wisc.edu/news/october-2016-brown-bag-sarah-stevens/)

**Stevens, S. L. R.**, Bendall, M. L., Chan, L.-K., Malfatti, S., Schwientek, P., Tremblay, J., … McMahon, K. D. Malmstrom, R. R. Tracking Microbial Populations Through Time Using Single-cell Genomes and Metagenomics. UW Center for Limnology Seminar. December 2015. Madison, WI. [Link to Slides](https://goo.gl/0ge2LZ)

**Stevens, S. L. R.**, Bendall, M. L., Chan, L.-K., Malfatti, S., Schwientek, P., Tremblay, J., … McMahon, K. D. Malmstrom, R. R. Genome-wide and Gene-specific Selective Sweeps in Freshwater Bacterial Populations Revealed Using Metagenomics. JF Crow Institute for the Study of Evolution Seminar Series. October 2015. Madison, WI. [Link to Slides](https://goo.gl/oSnDYG)

**Stevens, S. L. R.**, Bendall, M. L., Chan, L.-K., Malfatti, S., Schwientek, P., Tremblay, J., … McMahon, K. D. Malmstrom, R. R. Genome-wide and Gene-specific Selective Sweeps in Freshwater Bacterial Populations Revealed Using Metagenomics. 14 Symposium Society for Aquatic Microbial Ecology. August 2015. Uppsala, Sweden [Link to Slides](https://goo.gl/RcrxhJ)

**Stevens, S. L. R.**, Bendall, M. L., Chan, L.-K., Malfatti, S., Schwientek, P., Tremblay, J., … McMahon, K. D. Malmstrom, R. R. Genome-wide Selective Sweeps in Natural Bacterial Populations Revealed by Time-series Metagenomics. 15th International Symposium on Microbial Ecology. August 2014. Seoul, South Korea. [Link to Slides](https://goo.gl/6iunz0)

## Poster Presentations

**Stevens, S. L. R.**, Egan, R., Malmstrom, R.R., McMahon, K. D. Comparative Genomics of Selected Bacterial Populations from Several Freshwater Bog Lakes. 2017 Microbial Population Biology Gordon Research Conference. July 2017. Andover, NH. [Link to Poster](https://goo.gl/ZRSh9W)

**Stevens, S. L. R.**, Egan, R., Malmstrom, R.R., McMahon, K. D. Comparative Genomics of Selected Bacterial Populations from Several Freshwater Bog Lakes. 2017 Microbial Population Biology Gordon Research Seminar. July 2017. Andover, NH. [Link to Poster](https://goo.gl/ZRSh9W)

**Stevens, S. L. R.**, Garcia, S. L., … McMahon, K. D. Contrasting Patterns fo Genome-level Diversity across Distinct Co-occurring Populations. 16th International Symposium on Microbial Ecology. August 2016. Montreal, Canada. [Link to Poster](https://goo.gl/8JGS52)

**Stevens, S. L. R.**, Garcia, S. L., … McMahon, K. D. Tracking Distinct Freshwater Populations Through Time by Mapping Metagenomes to Single-cell Genomes. DOE Joint Genome Institute User Meeting 2016. Walnut Creek, CA. [Link to Poster](https://goo.gl/ShUQVn)

**Stevens, S. L. R.**, Bendall, M. L., … McMahon, K. D. Malmstrom, R. R. Genome-wide and Gene-specific Selective Sweeps in Freshwater Bacterial Populations Revealed Using Metagenomics. 2015 Microbial Population Biology Gordon Research Conference. July 2015. Andover, NH. [Link to Poster](https://goo.gl/rwaFKV)

**Stevens, S. L. R.**, Bendall, M. L., … McMahon, K. D. Malmstrom, R. R. Dynamics of Sequence-Discrete Bacterial Populations Inferred Using Metagenomes. 15th International Symposium on Microbial Ecology. August 2014. Seoul, South Korea. [Link to Poster](https://goo.gl/qsYL32)

**Stevens, S. L. R.**, Bendall, M. L., … McMahon, K. D. Malmstrom, R. R. Dynamics of Sequence-Discrete Bacterial Populations Inferred Using Metagenomes. SciMed GRS Poster Session 2014. September 2014. Madison, WI.

**Stevens, S. L. R.**, Bendall, M. L., … McMahon, K. D. Malmstrom, R. R. Dynamics of Sequence-Discrete Bacterial Populations Inferred Using Metagenomes. DOE Joint Genome Institute User Meeting 2014. Walnut Creek, CA. [Link to Poster](https://goo.gl/1voTvB)

## Awards

UW-Madison Dept. of Bacteriology Travel Award - **Spring 2017**  
UW-Madison Dept. of Bacteriology Betley-Allen Fellowship - **2016-2017**  
UW-Madison Graduate School Travel Award - **Fall 2015**  
UW-Madison Dept. of Bacteriology Travel Award - **Spring 2014**

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