

# Richard J. Abdill

Minneapolis, Minn.

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## Education

- **University of Minnesota** **Minneapolis, Minn.**  
*Ph.D. student, Bioinformatics and Computational Biology*  
Supervisor: Dr. Ran Blekhman *2018–present*
- **University of Maryland** **College Park, Md.**  
*B.A., Print Journalism* *2008–2011*

## Publications

- **2020 (preprint): Abdill RJ, Adamowicz EM, Blekhman R.** *International authorship and collaboration in bioRxiv preprints.* <https://doi.org/10.1101/2020.04.25.060756>
- **2020 (preprint): Carneiro CFD, Queiroz VGS, Moulin TC, Carvalho CAM, Haas CB, Rayê D, Henshall DE, De-Souza EA, Amorim FE, Boos FZ, Guercio GD, Costa IR, Hajdu KL, van Egmond L, Modrák M, Tan PB, Abdill RJ, Burgess SJ, Guerra SFS, Bortoluzzi VT, Amaral OB.** *Comparing quality of reporting between preprints and peer-reviewed articles in the biomedical literature.* <https://doi.org/10.1101/581892>
- **2019: Mangul S, Mosqueiro T, Abdill RJ, Duong D, Mitchell K, Sarwal V, Hill B, Brito J, Littman RJ, Statz B, Lam AKM, Dayama G, Grieneisen L, Martin LS, Flint J, Eskin E, Blekhman R.** *Challenges and recommendations to improve installability and archival stability of omics computational tools.* <https://doi.org/dm26>
- **2019: Abdill RJ & Blekhman R.** *Rxivist.org: Sorting biology preprints using social media and readership metrics.* <https://doi.org/dm27>
- **2019: Abdill RJ & Blekhman R.** *Tracking the popularity and outcomes of all bioRxiv preprints.* <https://doi.org/gf2str>

## Conference proceedings

- 2019: Computational Genomics Summer Institute. Oral presentation: “The perilous geometry of compositional data.” Los Angeles, Calif., 15–19 July 2019.
- 2019: Great Lakes Bioinformatics Conference. Oral presentation: “Tracking the popularity and outcomes of all bioRxiv preprints.” Madison, Wisc., 19–22 May 2019.

## Software and tools

- **Rxivist** – A web application that indexes all bioRxiv preprints and allows users to sort and filter them based on Twitter activity and download metrics. <https://rxivist.org>
- **PanLingua** – A web application leveraging Google machine-translation services to enable users to search and view bioRxiv preprints in any of 104 world languages. <https://panlingua.rxivist.org>
- **UMN OB-GYN Research Database** – Built a database (MS Access) and reporting tool (Python

and Javascript) for the University of Minnesota Medical School to track publications, grants and projects in the Department of Obstetrics, Gynecology and Women's Health.

- **DADA2 Docker image** – A publicly available Docker image to help users process amplicon data with the R tool “DADA2.” <https://hub.docker.com/r/blekhmanlab/dada2>

## Service and outreach

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- **Skype A Scientist**, 2019–present. Participant in a program that matches researchers with primary and secondary school classrooms to facilitate discussions about scientific research with kids and teens. Most recent session was a video call with an 11<sup>th</sup> grade science class in California.
- **Microbiome Digest**, 2020–present. Volunteer author at [microbiomedigest.com](http://microbiomedigest.com), a daily aggregator of new and newsworthy microbiome research papers.
- **Tutoring**, 2020–present. Volunteer tutor at the International Institute of Minnesota's College Readiness Academy, which helps prepare recent immigrants for college-level courses.
- **Ad-hoc peer review**: *eLife*, *Journal of Open Source Software*, *Nature Biotechnology* (supervised), *PLOS Computational Biology*, *Publications*.

## Instruction

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- **GCD 8920, Genomic Analysis**: Worked as a teaching assistant for this graduate-level course and taught class sessions covering quality control of genetic sequencing data, genome-wide association studies and RNA-seq analysis. *University of Minnesota, spring 2020*.

## Honors

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- 2019: Award, best talk – Great Lakes Bioinformatics Conference, Madison, Wisc.
- 2019: Great Lakes Bioinformatics Conference Travel Fellowship

## Previous employment

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Full employment history available upon request.

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| ○ <b>Minnesota Supercomputing Institute</b> | <b>Minneapolis, Minn.</b>              |
| ○ <i>System programmer</i>                  | 2018                                   |
| ○ <b>Gannett/USA Today</b>                  | <b>McLean, Va.; Minneapolis, Minn.</b> |
| ○ <i>Software engineer</i>                  | 2014–2015; 2016–2018                   |
| ○ <b>Target</b>                             | <b>Minneapolis, Minn.</b>              |
| ○ <i>Lead engineer</i>                      | 2015–2016                              |
| ○ <b>Amazon Web Services</b>                | <b>Herndon, Va.</b>                    |
| ○ <i>DevOps Consultant</i>                  | 2015                                   |
| ○ <b>Village Voice Media</b>                | <b>Fort Lauderdale, Fla.</b>           |
| ○ <i>Staff writer</i>                       | 2012                                   |
| ○ <b>The Diamondback</b>                    | <b>College Park, Md.</b>               |
| ○ <i>Senior staff writer, copy editor</i>   | 2008–2011                              |