

Education

- 2018–2021 **Master of Science**, *The University of Colorado*, Denver
Biostatistics
- 2011–2014 **Bachelor of Arts**, *The University of Colorado*, Boulder
Molecular, Cellular, and Developmental Biology
- 2009–2011 **No Degree**, *Vassar College*, Poughkeepsie, NY
English

Masters Thesis

- Title *A Mediation Approach to Discovering Causal Relationships Between the Metabolome and DNA Methylation in Type 1 Diabetes*
- Supervisors Katerina Kechris, PhD, Lauren Vanderlinden, MS, and Jill Norris, PhD

Experience

- 2018–Present **Research Assistant and Research Instructor**, *CU*, Denver
- Much of my current role as a research instructor involves selecting and fitting complex statistical models, and making the results understandable for investigators and clinicians. Responsibilities include:
- Logistic regression, ROC curves, and other predictive modeling techniques including random forest and deep learning.
 - Functional data analysis of continuous glucose monitor (CGM) data.
 - Multivariate analysis and integration of multiple high dimensional omics datasets.
 - Longitudinal analysis using generalized linear mixed models.
 - Joint modeling for longitudinal CGM and time-to-event data.
 - Co-PI and lead biostatistician on a multi-center observational study.
 - Wrote and maintain an R package for analysis of CGM data which has been downloaded approximately 45,000 times.
 - Shrinkage regression techniques for model selection.
 - Developed interactive applications in R Shiny and Python Dash.

2015–2018 **Professional Research Assistant**, *Children's Hospital Colorado*, Aurora, CO

- Managed two NIH-funded research studies.
- Recruited, screened, and obtained consent from over 190 study subjects.
- Perform all study visits and some sample processing for both studies.
- Developed a manual of procedures for all study activities and performed all regulatory processes (IRB amendments, continuing review, AE reporting, etc.).
- Responsible for all data management and entry for both studies.

Computer skills

Basic SAS, Julia

Intermediate Python, Dash, Jupyter Notebooks, \LaTeX

Advanced R, R Markdown, R Shiny, Linux, Parallel Computing

Communication Skills

- 2024 Multiple Posters at the North American Cystic Fibrosis Conference, including Jr Investigator Clinical Award for best abstract presentation
- 2023 Multiple Posters at the American Diabetes Association Annual Conference
- 2023 Presentation at the European Diabetic Nephropathy Study Group
- 2022 Multiple Posters at the American Society of Nephrology Annual Conference
- 2020–2023 Multiple Posters at the American Diabetes Association Annual Conference
- 2019 Poster at the Advanced Technologies and Treatments for Diabetes Conference
- 2015 – 2017 Posters at the North American Cystic Fibrosis Conference

Interests

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| - Music | - Cooking |
| - Cycling | - Reading |
| - Movies | - Basketball |

References

References available upon request

Publications

2024 Bjornstad, Petter, Ye Ji Choi, et al. (Mar. 2024). "Insulin Secretion, Sensitivity, and Kidney Function in Young Individuals With Type 2 Diabetes". In: *Diabetes Care* 47.3, pp. 409–417. ISSN: 0149-5992, 1935-5548. DOI: 10.2337/dc23-1818. (Visited on 10/14/2024).

Bjornstad, Petter, Gabriel Richard, et al. (Sept. 2024). "Kidney Energetics and Cyst Burden in Autosomal Dominant Polycystic Kidney Disease: A Pilot Study". In: *American Journal of Kidney Diseases* 84.3, 286–297.e1. ISSN: 02726386. DOI: 10.1053/j.ajkd.2024.02.016. (Visited on 10/14/2024).

Cobry, Erin C. et al. (Apr. 2024). "Frequency and Causes of Nocturnal Alarms in Youth and Young Adults With Type 1 Diabetes Using a First-Generation Hybrid Closed-Loop System". In: *Diabetes Spectrum* 37.2, pp. 118–123. ISSN: 1040-9165, 1944-7353. DOI: 10.2337/ds23-0003. (Visited on 10/14/2024).

Jordan, Kamyron, Timothy Vigers, and Scott Sagel (2024). "Disparities in Elexacaftor/Tezacaftor/Ivacaftor Initiation in the US Cystic Fibrosis Population". In: *Pediatric Pulmonology*.

McGee, Alyssa Caldwell et al. (June 2024). "Glycoprotein Acetyls Associate With Intraglomerular Hemodynamic Dysfunction, Albuminuria, Central Adiposity, and Insulin Resistance in Youth With Type 1 Diabetes". In: *Canadian Journal of Diabetes* 48.4, 244–249.e1. ISSN: 14992671. DOI: 10.1016/j.jcjd.2024.01.010. (Visited on 10/14/2024).

Simon, Stacey L. et al. (July 2024). "Sleep Duration and Association with Cardiometabolic Health in Adolescents and Adults with Type 1 Diabetes: Results from the BCQR-T1D Study". In: *Diabetes, Obesity and Metabolism* 26.7, pp. 2662–2672. ISSN: 1462-8902, 1463-1326. DOI: 10.1111/dom.15582. (Visited on 10/14/2024).

Trojanowski, Paige J. et al. (July 2024). "Body Mass Index Moderates the Association between Diabetes Distress and Objective Self-management Behaviours in Adolescents with Type 1 Diabetes and Elevated A1Cs". In: *Diabetic Medicine* 41.7, e15325. ISSN: 0742-3071, 1464-5491. DOI: 10.1111/dme.15325. (Visited on 10/14/2024).

Additional Publications

Scholar <https://bit.ly/3P6sqIB>

ORCID <https://orcid.org/0000-0001-7087-8570>

R Package <https://cran.r-project.org/package=cgmanalysis>