

# Kenneth J. Nieser

Email: [nieser@wisc.edu](mailto:nieser@wisc.edu)

Website: [knieser.github.io](https://knieser.github.io)

## EDUCATION

- |                         |  |
|-------------------------|--|
| 2018-2023<br>(expected) | <b>PhD, Epidemiology</b> , University of Wisconsin-Madison<br>Ph.D. Minor: Statistics<br>Advisor: Amy Cochran, PhD |
| 2009-2013               | <b>BA, Physics and Mathematics</b> , Swarthmore College<br>Graduated with High Honors                              |

## RESEARCH INTERESTS

Epidemiologic methods, social and psychiatric epidemiology, health disparities

## RESEARCH POSITIONS

- |              |  |
|--------------|--|
| 2020-present | <b>Research Assistant</b> , University of Wisconsin-Madison. (PI: Amy Cochran).  |
| 2019-2020    | <b>Project Assistant</b> , University of Wisconsin-Madison<br>UW Madison Center for Human Genomics and Precision Medicine Seed Grant<br>(PI: Amy Cochran). Gene-set enrichment with mathematical biology. 2019-2020. |

## AWARDS AND FELLOWSHIPS

- |           |   |
|-----------|---|
| 2020      | Rankin/Skatrud Travel Award   |
| 2019      | NSF Travel Award to attend Biology and Medicine through Mathematics (BAMM!) |
| 2019      | Student Research Grants Competition – Conference Presentation Funds         |
| 2018-2019 | New Graduate Student Fellowship   |

## PEER-REVIEWED PUBLICATIONS

### Epidemiology/Population Health

1. Cochran, A. L., **Nieser, K. J.**, Forger, D. B., Zöllner, S., McInnis, M. G. (2020). Gene-set Enrichment with Mathematical Biology (GEMB), GigaScience, Volume 9, Issue 10, <https://doi.org/10.1093/gigascience/giaa091>.

### Chemical Physics

1. Collings, P., Goldstein, J., Hamilton, E., Mercado, B., **Nieser, K.** & Reagan, M. (2015). The nature of the assembly process in chromonic liquid crystals. Liquid Crystal Reviews, 1-25.
2. Mercado, B., **Nieser, K.**, & Collings, P. (2014). Cooperativity of the Assembly Process in a Low Concentration Chromonic Liquid Crystal. The Journal of Physical Chemistry B, 13312-13320.

## PRESENTATIONS AND POSTERS AT SCIENTIFIC MEETINGS

1. Bias Analysis of Depression Rate Comparisons between Racial/Ethnic Groups. Society for Epidemiologic Research, Annual Meeting 2020 (poster).
2. Addressing Heterogeneity in Mental Illnesses through Robust Estimation. Population Health Sciences Annual Poster Session 2020 (poster).
3. Robust estimation for factor loadings with application to postpartum depression, BAMM!

- 2019, Richmond, VA (poster).
4. Kinetics of Assembly and Dis-assembly of Structures Forming a Chromonic Liquid Crystal at Low Concentrations, APS March Meeting 2013, Baltimore, MD (oral).

## TEACHING EXPERIENCE

### **Swarthmore College**

#### Teaching Associate

General Physics II (Spring 2013)  
General Physics II with Biomedical Applications (Spring 2012)  
General Physics I (Fall 2011)  
Spacetime, Quanta & Cosmology (Fall 2011 and Fall 2012)

#### Tutor

General Physics II (Spring 2013)  
General Physics II with Biomedical Applications (Spring 2012)  
General Physics I (Fall 2011 and Fall 2012)

## PROFESSIONAL EMPLOYMENT

- |           |   |
|-----------|---|
| 2017-2018 | <b>Senior Analyst</b> , Healthgrades, Madison, WI<br>Supported internal teams as a subject-matter expert on data analysis and campaign research; assisted in training of new analysts                                     |
| 2015-2017 | <b>Market Analyst</b> , Healthgrades, Madison, WI<br>Analyzed electronic medical record data and third-party demographic data to inform marketing strategy and planning for hospital clients                              |
| 2014-2015 | <b>Healthcare Data Analyst</b> , HP Enterprise Services, Madison, WI<br>Analyzed Wisconsin Medicaid claims data and managed care enrollment data; compiled reports for clients in Wisconsin Department of Health Services |
| 2013-2014 | <b>Technical Services Analyst</b> , Epic, Verona, WI<br>Supported multiple hospital organizations in optimizing and troubleshooting Epic software—specifically Willow, the inpatient pharmacy application                 |