

ALLISON E. BAER

Ph.D. Candidate | Graduate Research Assistant
Department of Geographical Sciences, University of Maryland
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EDUCATION

2018 – Present	Ph.D., Geographical Sciences, University of Maryland
2012 – 2015	B.S., Environmental Science and Policy, University of Maryland, <i>summa cum laude</i> Minor in Geographic Information Sciences International Studies Scholar, College Park Scholars Program

PUBLICATIONS

Peer-reviewed

1. Hoffman-Hall, A., Puett, R., Loboda, T.V., Silva, J.A., Chen, D., **Baer, A.**, Nyunt, M., Aung, P. (in review). Contextualizing Malaria Exposure in Myanmar by Combining Satellite-Derived Land Cover and Use Observations with Field Surveys. Submitted to *GeoHealth*.
2. Gerst, M. D., Kenney, M. A., **Baer, A. E.**, Speciale, A., Wolfinger, J. F., Gottschalck, J., ... & Dewitt, D. (2020). Using Visualization Science to Improve Expert and Public Understanding of Probabilistic Temperature and Precipitation Outlooks. *Weather, Climate, and Society*, 12(1), 117-133.

Technical reports

1. Effective Visual Communication of Climate Indicators and Scientific Information: Synthesis, Design Considerations, and Examples. A Technical Input Report to the 4th National Climate Assessment Report. Gerst, M.D., M.A. Kenney, J.F. Wolfinger, **A. Baer**, et al. (2017). Version [2.0]. http://www.umdindicators.org/?page_id=1028.

RESEARCH EXPERIENCE

08/2018 – Present	Graduate Research Assistant <i>Department of Geographical Sciences, University of Maryland</i>
07/2016 – 08/2018	Faculty Assistant <i>Earth System Science Interdisciplinary Center, University of Maryland</i>
01/2016 – 07/2016	Research Analyst I <i>Optimal Solutions Group, LLC, College Park, MD</i>
06/2015 – 12/2015	General GIS Intern <i>National Consortium for the Study of Terrorism and Responses to Terrorism, University of Maryland</i>
06/2015 – 12/2015	Research Assistant <i>Earth System Science Interdisciplinary Center, University of Maryland</i>
01/2014 – 06/2015	Intern <i>U.S. Global Change Research Program, Washington, DC</i>

TEACHING EXPERIENCE

Fall 2019	Instructor of Record <i>Developing Countries (GEOG130), University of Maryland</i> Total 52 students.
Spring 2017	Teaching Assistant <i>Capstone in Environmental Science and Policy (ENSP400), University of Maryland</i> Supported two sections; total 35 students.

PRESENTATIONS (* denotes presentation by co-author)

Invited

1. **Baer, A.E.**, Kenney, M.A., Gerst, M.G. (February 2018). *Diagnosing Understandability Challenges in NOAA Climate Prediction Center's Temperature and Precipitation Outlooks*. Invited webinar hosted by the Earth Science Information Partners.

Accepted

1. **Baer, A.E.**, Loboda T.V. (2020). Comparing the performance of a citizen-science network of low-cost air quality air sensors to regulator data. NASA ABoVE Science Team Meeting, virtual meeting. <https://astm6-agu.ipostersessions.com/default.aspx?s=09-98-87-A0-E6-1A-FA-E4-79-58-CF-F8-B6-54-4B-79>
2. Hoffman-Hall, A., **Baer, A.E.**, Loboda, T.V. (December 2019). *Assessing occupational exposure risk factors for subclinical malaria as a function of land cover and land use in Myanmar*. E-Lightning poster presented at the American Geophysical Union Annual Meeting, San Francisco, CA.
3. Shevade, V., Chen, D., Hoffman-Hall, A., **Baer, A.E.**, He, J., and Loboda, T.V. (December 2019). *Identifying Population Vulnerability to Malaria in Myanmar*. Poster presented at the American Geophysical Union Annual Meeting, San Francisco, CA.*
4. Loboda, T., French, N.H.F., Chen, D., Billmire, M, **A. Baer**. (December 2019). *Quantifying variability in fire-driven PM_{2.5} concentrations within Alaska during years of low, moderate, and high fire activity*. Poster presented at the American Geophysical Union Annual Meeting, San Francisco, California.*
5. Kenney, M.A., Gerst, M.G., **Baer, A.**, Speciale, A., DeWitt, D., Gottschalck, J., and Handel, S. *Diagnosing Understandability Challenges in NOAA Climate Prediction Center's Temperature and Precipitation Outlooks*. (January 2018). Oral talk presented at the American Meteorological Society Annual Meeting, Austin, TX.*
6. **Baer, A.E.**, Kenney, M.A., Gerst, M.G., Wolfinger J.F. *Diagnosing Understandability Challenges in NOAA Climate Prediction Center's Temperature and Precipitation Outlooks*. (November 2017). Presented at the Cooperative Institute for Climate and Satellites Science Conference, College Park, MD.
7. **Baer, A.E.**, Kenney, M.A., Gerst, M.G., Wolfinger J.F. *Identifying Users, Diagnosing Understandability Challenges, and Developing Prototype Solutions for NOAA Climate Prediction Center's Temperature and Precipitation Outlooks*. (December 2016). Presented at the Cooperative Institute for Climate and Satellites Science Conference. College Park, MD.
8. **Baer, A.E.**, Sharova, M., Deng, Y (alphabetical order). *Developing a Pilot Indicator System for U.S. Climate Changes, Impacts, Vulnerabilities, and Responses*. (May 2015). Presented at the Sigma Xi Mid-Atlantic Regional Meeting, Fairfax, VA.

PROFESSIONAL EXPERIENCE

05/2014–12/2015	Facility Supervisor <i>University Recreation and Wellness University of Maryland, College Park, MD</i>
05/2014–08/2014	Summer Naturalist <i>Eden Mill Nature Center, Pylesville, MD</i>
09/2013–05/2014	Facility Staff <i>University Recreation and Wellness, University of Maryland</i>
06/2013–08/2013	Summer Intern <i>Eden Mill Nature Center, Pylesville, MD</i>

HONORS & AWARDS

Grants and Fellowships

2020 Honorable Mention, NSF Graduate Research Fellowship Program
2019 Jacob K. Goldhaber Travel Grant, UMD
2018 College of Behavioral and Social Sciences Dean's Fellowship, UMD

University Awards

2015 Senior Marshal
2013 Primannum Honor Society New Member Scholarship, University of Maryland

Research

12/2015 Second Place: Undergraduate Student Poster, Sigma Xi Mid-Atlantic Regional Meeting

SERVICE

2019 **Convener and Session Chair**
American Geophysical Union Annual Meeting, San Francisco, California
Session: *Monitoring, Modeling, and Forecasting Health Impacts of Fire Emissions*

05/2019–08/2019 **Orientation Committee Member**
Department of Geographical Sciences, University of Maryland

01/2014–12/2015 **Ambassador**
College of Behavioral and Social Sciences Ambassadors, University of Maryland

PROFESSIONAL MEMBERSHIPS

2019 – Present American Geophysical Union