

Amanda Hoffman-Hall, Ph.D.

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Education

- 2020 Ph.D. Geographical Sciences. University of Maryland College Park.
Dissertation: Interdisciplinary Geospatial Assessment of Malaria Exposure in Ann Township, Myanmar
- 2011 B.S. Geography, University of Oklahoma
Graduated with Special Distinction

Research Interests

Algorithm development for satellite mapping of land cover and land use change

Spatial epidemiology and prediction of infectious disease risk

Population and human settlement mapping, with emphasis on vulnerable, remote, and isolated populations

Professional Experience

- 2020 – Present **Director of Undergraduate Studies**, Department of Geographical Sciences, University of Maryland, College Park, MD
- 2017 – 2020 **Ph.D. Candidate**, Interdisciplinary Geospatial Assessment of Malaria Exposure in Ann Township, Myanmar, Department of Geographical Sciences, University of Maryland, College Park, MD
- 2016 - 2020 **Undergraduate Advising Coordinator**, Department of Geographical Sciences, University of Maryland, College Park, MD
- Commencement/Events Coordinator**, Department of Geographical Sciences, University of Maryland, College Park, MD

- 2015 – 2016 **Graduate Research Assistant**, NASA Project: Arctic-Boreal Vulnerability Experiment (ABOVE) Arctic Boreal Burned Area (ABBA), Dr. Tatiana Loboda's Lab, University of Maryland College Park, MD
- 2014 – Present **Instructor**, Department of Geographical Sciences, University of Maryland, College Park, MD
- 2014 – 2015 **Adjunct Professor**, Towson University, Towson, MD
- 2013 – 2016 **Graduate Research Assistant**, NASA Project: Forested land cover and land use change (LCLUC) in Northern Eurasia under the combined drivers of climate and socio-economic transformation, Dr. Tatiana Loboda's Lab, University of Maryland College Park, MD
- 2012 – 2017 **Primary Researcher**, BSOS Dean's Research Initiative Project: Assessing the impact of climate change on *Phytophthora cinnamomi* induced red oak (*Quercus rubra*) decline in Shenandoah National Park
- 2012 – 2014 **Teaching Assistant**, Department of Geographical Sciences, University of Maryland, College Park, MD
- 2012 – 2013 **Graduate Research Assistant**, NASA LCLUC Project: Synthesis of forest growth, response to wildfires and carbon storage for Russian forests, Dr. Tatiana Loboda's Lab, University of Maryland, College Park, MD
- Graduate Field Assistant**, NASA Carbon Monitoring System Project: A framework for high-resolution estimation of terrestrial carbon stocks and dynamics, Dr. George Hurtt's Lab, University of Maryland, College Park, MD
- 2011 – 2012 **GIS Analyst**, Chesapeake Energy, Oklahoma City, OK
- 2011 **Dam Safety Technician**, Oklahoma Water Resources Board, Oklahoma City, OK

Awarded Grants

- 2020 **PI** for UMD Teaching Innovation Grant, "GEOG201/211: Geography of Environmental Systems" (\$6,800)
- 2020 **PI** for UMD College of Behavioral and Social Sciences Dean's Research Initiative Undergraduate Mentored Teams Grant, "Perceptions of Geography Key Words and Program Names by University of Maryland Undergraduates" (\$1,000)

- 2015 **PI** for UMD College of Behavioral and Social Sciences Dean's Research Initiative Dissertation Improvement Grant, "Assessing the impact of climate change on *Phytophthora cinnamomi*, a destructive forest pathogen in the northeastern United States" (\$2,500)
- 2014 **PI** for UMD College of Behavioral and Social Sciences Dean's Research Initiative Pre-Candidacy Grant, "Assessing the impact of climate change on *Phytophthora cinnamomi*, a destructive forest pathogen in the northeastern United States" (\$1,500)

Publications

In review

Chen, D., Shevade, V., Baer, A., He, J., Hoffman-Hall, A., Ying, Q., Loboda, T.V. Thirty-meter Land Cover Land Use Map for Myanmar. Submitted to **Scientific Data**.

Published

Hoffman-Hall, A., Puett, R., Loboda, T.V., Silva, J.A., Chen, D., Baer, A., Nyunt, M., Aung, P. (accepted, awaiting typesetting). Contextualizing Malaria Exposure in Myanmar by Combining Satellite-Derived Land Cover and Use Observations with Field Surveys. **GeoHealth**. <https://doi.org/10.1029/2020GH000299>

Bergen, K., Loboda, T., Sun, G., Newell, J., Kharuk, V., Hitztaler, S., Johnson, T., Hoffman-Hall, A., Ouyang, W., Park, K., Fort, C. (2020). Long-term trends in anthropogenic land use in Siberia and the Russian Far East: A case study synthesis from Landsat. **Environmental Research Letters**, 15, 105007. <https://doi.org/10.1088/1748-9326/ab98b7>

Hoffman-Hall, A., Loboda, T. V., Hall, J. V., Carroll, M. L., & Chen, D. (2019). Mapping remote rural settlements at 30 m spatial resolution using geospatial data-fusion. **Remote Sensing of Environment**, 233, 111386. <https://doi.org/10.1016/j.rse.2019.111386>

Jacquelyn K Shuman, J.K., Foster, A.C., Shugart, H.H., Hoffman-Hall, A., Krylov, A., Loboda, T.V., Ershov, D., and Sochilova, E. (2017). Fire disturbances and climate change: implications for Russian forests. **Environmental Research Letters**, 12(3). <https://doi.org/10.1088/1748-9326/aa5eed>

Chen, D., Loboda, T.V., Hoffman-Hall, A., Channan, S., (2014). Long-term record of sampled disturbances in Northern Eurasian boreal forest from pre-2000 Landsat data. **Remote Sensing**, 6: 6020-6038. doi:10.3390/rs6076020

Published Datasets

Chen, Dong; Baer, Allison; He, Jiaying; Hoffman-Hall, Amanda; Shevade, Varada; Ying, Qing; Loboda, Tatiana V (2020): Land cover land use map for Myanmar at 30-m resolution for 2016. **PANGAEA**, <https://doi.pangaea.de/10.1594/PANGAEA.921126>

Loboda, T.V., J.V. Hall, A.H. Hall, and V.S. Shevade. 2017. ABoVE: Cumulative Annual Burned Area, Circumpolar High Northern Latitudes, 2001-2015. **ORNL DAAC**, Oak Ridge, Tennessee, USA. <https://doi.org/10.3334/ORNLDAAC/1526>

Chen, D., T.V. Loboda, S. Channan, and A. Hoffman-Hall. 2015. Russian Boreal Forest Disturbance Maps Derived from Landsat Imagery, 1984-2000. **ORNL DAAC**, Oak Ridge, Tennessee, USA. <http://dx.doi.org/10.3334/ORNLDAAC/1294>

Presentations

Invited

Hoffman-Hall, A., Buenemann, M., Labosier, C., Shabram, P., Porter-Morgan, H., Maeer, J. April 2018. Teaching and Advising About Careers in Geography. Invited panelist at **American Association of Geographers Annual Meeting**, New Orleans, LA.

Hoffman-Hall, A. and Pederson, S. March 2018. Exploring Environmental and Geographical Sciences. Invited talk for **Office of Letters and Sciences STEM Colloquium Series**, College Park, MD.

Accepted Oral

Hoffman-Hall, A., Puett, R., Loboda, T.V., Silva, J.A., Chen, D., Baer, A., Nyunt, M., Aung, P. November 2019. Contextualizing Malaria Exposure in Myanmar by Combining Satellite-Derived Land Cover and Use Observations with Field Surveys. Oral presentation given at **American Association of Geographers Annual Meeting**, Denver, CO.

Hoffman-Hall, A., Puett, R., Loboda, T.V., Silva, J.A., Chen, D., Baer, A., Nyunt, M., Aung, P. November 2019. Malaria Risk in Myanmar: Contextualizing Remotely Sensed Land Cover Data with Qualitative Land Use Data to Inform Targeted Interventions. Oral presentation given at **Mid-Atlantic Division American Association of Geographers Annual Meeting**, Baltimore, MD.

Loboda, T. V., Carroll, M., Hoffman-Hall, A., Nyunt, M., Plowe, C. April 2019. Malaria landscape: examining the role of land cover / land use nexus in malaria transmission in Myanmar. Accepted as full talk to **Global Land Programme Open Science Meeting**, Bern, Switzerland.

Hoffman-Hall, A., Loboda, T.V., Puett, R. April 2019. More than Mosquitoes: Malaria Risk in Ann Township, Myanmar. Oral presentation given at **American Association of Geographers Annual Meeting**, Washington DC.

Hoffman-Hall, A., Loboda, T.V., Hall, J. V., Carroll, M. December 2018. Rural Population Mapping at Moderate Spatial Resolutions Using Geospatial Data Fusion. Oral presentation given at **American Geophysical Union Annual Meeting**, Washington DC.

Hoffman-Hall, A. April 2018. Mapping Population: Utilizing Satellite Derived Metrics in Data-Poor Regions. Oral presentation given at **American Association of Geographers Annual Meeting**, New Orleans, LA.

Hoffman-Hall, A. Assessing the impact of climate change on *Phytophthora cinnamomi*, a destructive forest pathogen in the northeastern United States. April 2014. Oral presentation given at **American Association of Geographers Annual Meeting**, Tampa, FL.

Accepted Poster

Hoffman-Hall, A., Puett, R., Silva, J., Chen, D., Baer, A., Plowe, C. V., Nyunt, M. M., Loboda, T. V. December 2020. Land Use Engagement and Malaria Prevalence in Ann Township, Myanmar: The Role of Forest-Related Activities. Poster presented at **American Geophysical Union Annual Meeting**, virtual.

Hoffman-Hall, A., Allison E Baer and Tatiana V Loboda. December 2019. Assessing occupational exposure risk factors for subclinical malaria as a function of land cover and land use in Myanmar. E-Lighting poster presented at **American Geophysical Union Annual Meeting**, San Francisco, CA.

Varada Shevade, Dong Chen, Amanda Hoffman-Hall, Allison E Baer, Jiaying He and Tatiana V Loboda. December 2019. Identifying Population Vulnerability to Malaria in Myanmar Poster presented at **American Geophysical Union Annual Meeting**, San Francisco, CA.

Loboda, T.V., Carroll, M., Chen, D., Hoffman-Hall, A. December 2018. Mapping and Monitoring Myanmar's Malaria Landscape. Poster presented at **American Geophysical Union Annual Meeting**, Washington DC.

Hoffman-Hall, A., Loboda, T.V., Hall, J. V., Carroll, M. October 2018. Rural Population Mapping at Moderate Spatial Resolutions Using Geospatial Data Fusion. Poster presented at **Race, Ethnicity, and Place Conference**, Austin, TX.

Loboda, T., Hoffman-Hall, A., French, N., Jenkins, L., Miller, M. E., Bourgeau-Chavez, L. April 2015. Long-term Multi-Sensor Record of Fire Disturbances in High Northern Latitudes. Poster presented at the **NASA Carbon Cycle and Ecosystems Joint Science Workshop 2015**, College Park, MD.

Bergen, K., Loboda, T., Shugart, H. H., Newell, J., Shuman, J., Brown, D., Sun, G., Hitztaler, S., Poon, W., Hoffman-Hall, A. April 2015. LCLUC Synthesis: Forested Land-Cover and Land-Use

Change in the Far East and East Siberia of Northern Eurasia under the Combined Drivers of Climate and Socio-Economic Transformation. Poster presented at the **NASA Carbon Cycle and Ecosystems Joint Science Workshop 2015**, College Park, MD.

Bergen, K., Loboda, T. Newell, J., Sun, G., Krankina, O., Blam, Y., Cui, L., Estrada, J., Hoffman-Hall, A., Hitztaler, S., Johnson, T., Park, K., Wang, Y., Wang Y.C., Wen, X. April 2014. Synthesis of Long-Term Datasets and of Trends and Variation of Landscape LCLUC Across The Russian Far East and Central Siberia. Poster presented at **NASA LCLUC Annual Meeting**, Rockville, MD.

Chen, D., Loboda, T. V., Hoffman-Hall, A., and Weber, C. Y. Mapping stand-age distribution of Russian forests from satellite data. December 2013. Poster presented at the **American Geophysical Union**, San Francisco, CA.

Hoffman-Hall, A. Phytophthora cinnamomi and climate change. November 2013. Poster presented at the **BSOS Research Interaction Day for Graduate and Early Career Scientists**, College Park, MD.

Students Supervised

- 2020 Benjamin Grove, Undergraduate, Paper Title TBD
- Zihan Chen, Chin-Yun Kuei, Numbi Lutebula, Caitlin McPartland, Adam Mills, Undergraduates, *Perceptions of Geography Key Words and Program Names by University of Maryland Undergraduates*
- 2019 Reiley Auger, Undergraduate, *Water Resources Influence on Civil Conflict: Syrian Case Study* (Poster Presentation at AAG 2019)
- Mahnoor Khan, Undergraduate, *Land Cover Change in Southern California* (Poster Presentation at AAG 2019)
- Damien Wilson, Undergraduate, *Alternate Routes to avoid Flooding in Mozambique* (Poster Presentation at AAG 2019)
- Daryl Rouleau, Undergraduate, *Undergraduate Motivations to Enrolling in a Geographical Sciences Major* (Poster Presentation at AAG 2019)

Teaching Experience

- 2020 – Present **GEOG201: Geography of Environmental Systems & GEOG211: Laboratory**

Instructor – University of Maryland

240 students. Taught online (synchronous and asynchronous).

- 2015 – Present **GEOG 212: Career Planning for Geographical Sciences, GIS, and Environmental Science and Policy Majors**
Instructor – University of Maryland
25 - 50 students. Taught in person, hybrid, and online.
- 2014 – 2017 **GEOG 306: Introduction to Quantitative Methods for Geographic and Environmental Sciences**
Instructor – University of Maryland
15 – 20 students. Taught online (live lectures via webcam).
- 2015 **GEOG 211: Geography of Environmental Systems Laboratory**
Course Designer – University of Maryland
240 students. Taught online.
- GEOG 101: Introduction to Physical Geography**
Adjunct Professor – Towson University
75 students. Taught in person and online.
- 2014 **GEOG 232: Introduction to Geographic Information Systems**
Adjunct Professor – Towson University
20 students. Taught in person.
- GEOG 472: Advanced Remote Sensing**
Co-instructor – University of Maryland
50 students. Taught in person.
- 2013 – 2015 **GEOG 372: Introduction to Remote Sensing**
Teaching Assistant – University of Maryland
25 students. Taught in person.
- 2012 **GEOG 100: Introduction to Geography**
Teaching Assistant – University of Maryland
71 students. Taught in person.

Professional Teaching Development

- Nov 2019 **Trauma Informed Hate-Bias Response Training**
University of Maryland Office of Diversity and Inclusion
<https://diversity.umd.edu/training-education/hate-response/>

- August 2018 **An Introduction to Evidence-Based Undergraduate STEM Teaching**
The Center for the Integration of Research Teaching and Learning
<http://stemteachingcourse.org/>
- June 2018 **Teaching Institute**
Johns Hopkins University Teaching Academy
<https://cer.jhu.edu/teaching-academy/ti>
- May 2018 **Khan Academy for Teachers 101**
Khan Academy
www.khanacademy.org
- March 2018 **Education Research 101: A Beginner's Guide to Designing Ed Research**
University of Maryland Teaching & Learning Transformation Center
<https://tltc.umd.edu/workshops-0>
- Evidence-Based: 4 Research Findings that Every Instructor Should Know About**
University of Maryland Teaching & Learning Transformation Center
<https://tltc.umd.edu/workshops-0>
- Feb 2018 **101 Active Learning Techniques You Can Try Tomorrow**
University of Maryland Teaching & Learning Transformation Center
<https://tltc.umd.edu/workshops-0>
- Universal Design: Making Your Course Accessible to Everyone**
University of Maryland Teaching & Learning Transformation Center
<https://tltc.umd.edu/workshops-0>
- Nov 2017 **Teaching Backwards: Learning Outcomes & Course Design**
University of Maryland Teaching & Learning Transformation Center
<https://tltc.umd.edu/workshops-0>

Awards and Honors

Research

- Fall 2018 Race, Ethnicity, and Place Conference Graduate Student Poster Competition
(1st Place)
- Spring 2018 BSOS Enlightening Talk (3 Minute Thesis) Competition (3rd Place)
UMD Graduate Research Appreciation Day Oral Presentation (1st Place)

Spring 2017 Department of Geographical Sciences Excellence in Graduate Research Award (3rd Place)

Spring 2011 University of Oklahoma Geography Chair's Best Capstone (Senior Research) Award

Advising

Spring 2019 Nominated for University of Maryland Graduate Advisor of the Year Award

Spring 2018 Nominated for College of Behavioral and Social Sciences Advisor of the Year Award

Teaching

Spring 2015 Department of Geographical Sciences Outstanding Teaching Assistant

Fall 2012 University of Maryland Athletics MVP (Most Valuable Professor)

Other

Spring 2020 O.E. Baker Award, for outstanding performance as a Graduate Student in Geographical Sciences, University of Maryland

Spring 2011 University of Oklahoma Clyde Bollinger Award (Outstanding Senior Geography Student)

Association of College Rowing Coaches Scholar Athlete Award

Fall 2010 Inducted into Gamma Theta Upsilon – Geography Honor Society

University of Oklahoma School of Meteorology Outstanding Out-of-State Student Scholarship

2008 – 2011 Full Athletic Scholarship - Coxswain for the University of Oklahoma NCAA Division 1 Women's Rowing team

Service

Reviewer

2020 Reviewed manuscripts for "International Journal of Remote Sensing" and "Environmental Research Letters"

2019 Reviewed manuscripts for “Science of Remote Sensing” and “International Journal of Applied Earth Observations and Geoinformation”

Professional Organizational Committees

2020 Early Career Chair of AGU GeoHealth Section Diversity Committee

College Level Committees

2015 – 2016 College of Behavioral and Social Sciences Dean’s Graduate Student Advisory Council Geographical Sciences Representative

2014 – 2015 College of Behavioral and Social Sciences Dean’s Graduate Student Advisory Council Chair

2013 – 2014 Co-Chair of College of Behavioral and Social Sciences Research Interaction Day for Graduate and Early-Career Scientists

College of Behavioral and Social Sciences Dean’s Graduate Student Advisory Council Geographical Sciences Representative

College of Behavioral and Social Sciences Summer Research Institute Graduate Panel Member

Departmental Committees

2020 - Present UMD Geographical Sciences Diversity Committee

2016 - Present UMD Geographical Sciences Undergraduate Committee

2014 – 2015 UMD Center for Geospatial Information Science Director Search Committee

2013 – 2014 UMD Geographical Sciences Orientation Committee

2012 – 2013 UMD Geographical Sciences Awards Committee

Professional Organizations

2014 – Present American Association of Geographers

2018 - Present American Geophysical Union

Other

2020

Faculty Essay Reviewer for Maryland Ascent Fellows