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- **RESEARCH INTERESTS**

Climate change, extreme climate events, climate impacts, mitigation co-benefits, event attribution, air quality, paleoclimatology, planetary habitability, and earth system models

- **EDUCATION**

Ph.D., Geological Sciences, University of Michigan, Ann Arbor, MI	2011
B.S., Atmospheric Sciences, Texas A&M University, College Station, TX	2002
B.S., Physics (*cum laude*), minor Geology, Tulane University, New Orleans, LA	2001

- **EMPLOYMENT**

Assistant Professor, Northwestern University, Evanston, IL	
Dept. of Earth & Planetary Sciences	2015-present
Dept. of Civil & Environmental Engineering (by courtesy)	2018-present
Postdoctoral Research Scholar, Stanford University, Stanford, CA	
Dept. of Earth System Science	2011-2015
Lecturer, University of Michigan, Jackson Hole, WY	
Rocky Mountain Field Station	2010
Research Assistant, University of Michigan, Ann Arbor, MI	
Dept. of Geological Sciences	2006-2011
Graduate Student Mentor, University of Michigan, Ann Arbor, MI	
Dept. of Geological Sciences	2008-2009
Graduate Student Instructor, University of Michigan, Ann Arbor, MI	
Dept. of Geological Sciences	2007-2009
U.S. Air Force Weather Officer	
Deputy Flight Commander, Aviano AB, Italy	2005-2006
Combat Weather Operations Course, Keesler AFB, Biloxi, MS	2005
Assistant Flight Commander, Sembach AB, Germany	2002-2005
Weather Officer Course, Keesler AFB, Biloxi, MS	2002
Americorps Trail Boss, Langely, WA	
South Whidbey Island	1998-1999

- **POST DOCTORAL RECOGNITION**

Scialog Signatures of Life in the Universe Fellow	2020
NU Associated Student Government Faculty & Administrator Honor Roll	2018

JGR-Atmospheres Top 10 downloaded papers	2017
2016 Editor's Citation for Excellence in Refereeing, *JGR-Atmospheres*	2017
AGU Congressional Visit Day – State of Illinois representative	2017
Hewlett Diversity Curriculum Fellow, Weinberg College, Northwestern University	2016
Outstanding Achievement in Mentoring, SEES, Stanford University	2015
ESI "Highly Cited Paper", Horton et al. (2014)	2015
National Council of Grad. Schools-ProQuest Distinguished Dissertation Nominee	2012
UM Rackham Graduate School-ProQuest Distinguished Dissertation Award	2011

- **PRE-DOCTORAL AWARDS AND HONORS**

Outstanding Student Paper Award, American Geophysical Union	2010
Outstanding Graduate Student Instructor, UM, university-level	2009
Outstanding Graduate Student Instructor, UM, department-level	2009
Rocky Mountain Association of Geologists Veterans Scholarship	2007
Scott Turner Award in Earth Sciences, UM Dept of Geological Sciences	2007
Horace H. Rackham Research Grant, UM	2007
Departmental Fellowship, UM Dept of Geological Sciences	2006-2007
Commendation Medal, U.S. Air Forces in Europe	2004 & 2005
Distinguished Graduate, U.S. Air Force Combat Weather Course	2005
Basic Meteorology Scholarship, U.S. Air Force, Texas A&M University	2001-2002
ROTC Supplemental Academic Scholarship Award, Tulane University	1997-2001
U.S. Air Force Reserve Officer Training Corps Academic Scholarship	1996-2001

- **PUBLICATIONS**
  Mentorship key: undergraduate***, graduate**, or postdoc*

31. J.L. Schnell*, D.R. Peters***, D. Wong, X. Lu, H. Zhang, H. Guo, P.L. Kinney & D.E. Horton (submitted) Potential for electric vehicle adoption to mitigate extreme air quality events in China.

30. H. Chen**, Z. Zhuchang, A. Youngblood, E.T. Wolf, A. Feinstein, & D.E. Horton (in 1st revision) Enhanced and persistent flare-driven bio-indicating chemistry on synchronously-rotating rocky worlds.

29. D. Peters***, J.L. Schnell*, P.L. Kinney, V. Naik & D.E. Horton (accepted) Public health and climate co-benefits and tradeoffs of U.S. vehicle electrification, ***GeoHealth***.

28. N.S. Diffenbaugh, C.B. Field, E. Appel, I. Azevedo, D. Baldocchi, M. Burke, J. Burney, P. Ciais, S.J. Davis, A.M. Fiore, S. Fletcher, T. Hertel, D.E. Horton, S. Hsiang, R.B. Jackson, X. Jin, M. Levi, D. Lobell ,G.A. McKinley, F.C. Moore, A. Montgomery**, K.C. Nadeau, D. Pataki, J.T. Randerson, M. Reichstein, J.L. Schnell*, S.I. Seneviratne, D. Singh, A. Steiner & G. Wong-Parodi (2020) The COVID-19 Lockdowns: A Window into the Earth System, ***Nature Reviews Earth and Environment***, doi.org/10.1038s43017-020-0079-1.

27. C. Deser, F. Lehner, K. Rodgers, T. Ault, T. Delworth, P. DiNezio, A. Fiore, C. Frankignoul, J. Fyfe, D.E. Horton, J.E. Kay, R. Knutti, N. Lovenduski, J. Marotzke, K. McKinnon, S. Minobe, J. Randerson, J.A. Screen, I.R. Simpson & M. Ting (2020) Strength in numbers: The utility of Initial-condition large ensembles with multiple Earth System Models, ***Nature Climate Change***, doi.org/10.1038/s41558-020-0731-2.

26. K.N. Braun***, E.J. Theuerkauf, M.T. Hurtgen, A.L. Masterson & D.E. Horton (2020) Loss-on-ignition estimates for soil organic carbon on a Great Lakes freshwater coastal wetland, ***Wetlands***, doi.org/10.1007/s13157-020-01270-z.

25. Z. Liu, D.E. Horton, C. Tabor, B.B. Sageman, L.M.E. Percival, B.C. Gill & D. Selby (2019) Assessing the contributions of comet impact and volcanism toward the climate perturbations of the Paleocene-Eocene thermal maximum, ***Geophysical Research Letters***, doi.org/10.1029/2019GL084818.

24. H. Chen**, E.T. Wolf, Z. Zhuchang & D.E. Horton (2019) Habitability and spectroscopic observability of warm M-dwarf exoplanets evaluated with 3D chemistry-climate models, ***The Astrophysical Journal***, doi.org/10.3847/1538-4357/ab4f7e.

23. D. Touma, S. Stevenson, S.J. Camargo, D.E. Horton, & N.S. Diffenbaugh (2019) Variations in the intensity and spatial extent of tropical cyclone precipitation, ***Geophysical Research Letters***, doi.org/10.1029/2019GL083452.

22. X. Tan, T.Y. Gan, S. Chen, D.E. Horton, X. Chen, B. Liu & K. Lin (2019) Trends in persistent seasonal-scale atmospheric circulation patterns responsible for seasonal precipitation totals and occurrences of precipitation extremes over Canada, ***Journal of Climate***, doi.org/10.1175/JCLI-D-18-0401.1.

21. J.L. Schnell*, V. Naik, L.W. Horowitz, F. Paulot, P. Ginoux, M. Zhao & D.E. Horton (2019) Air quality impacts from the electrification of light-duty passenger vehicles in the United States, ***Atmospheric Environment***, doi.org/10.1016/j.atmosenv.2019.04.003.

20. C.W. Callahan***, J.L. Schnell* & D.E. Horton (2019) Multi-index attribution of extreme winter air quality in Beijing, China, ***Journal of Geophysical Research – Atmospheres***, doi.org/10.1029/2018JD029738.

19. K.N. Braun***, E.J. Theuerkauf, A.L. Masterson, B.B. Curry & D.E. Horton (2019) Quantifying carbon budget deficits from a rapidly eroding freshwater coastal wetland, Lake Michigan, USA, ***Scientific Reports***, doi.org/10.1038/s41598-019-40855-5.

18. H. Chen**, E.T. Wolf, S. Domagal-Goldman, R. Kopparapu & D.E. Horton (2018) Biosignature anisotropy modeled on temperate tidally-locked M-dwarf planets, ***The Astrophysical Journal Letters***, doi.org/10.3847/2041-8213/aaebd2.

17. A. Sharma, A.F. Hamlet, H.J.S. Fernando, C.E. Catlett, D.E. Horton, V.R. Kotamarthi, D.A.R. Kristovich, A.I. Packman, J.L. Tank & D.J. Wuebbles (2018) The need for an integrated land-lake-atmosphere modeling system, exemplified by North America's Great Lakes region, ***Earth's Future***, doi.org/10.1029/2018EF000870.

16. X. Tan, T.Y. Gan & D.E. Horton (2018) Projected timing of perceivable changes in climate extremes for terrestrial and marine ecosystems, ***Global Change Biology***, doi.org/10.1111/gcb.14329.

15. D.L. Swain, D. Singh, D.E. Horton, J.S. Mankin, T. Ballard & N.S. Diffenbaugh (2017) Earth system linkages to anomalous northeastern Pacific atmospheric ridging, ***Journal of Geophysical Research – Atmospheres***, doi.org/10.1002/2017JD026575.

14. N.S. Diffenbaugh, D. Singh, J.S. Mankin, D.E. Horton, D.L. Swain, D. Touma, A. Charland, Y. Liu, M. Haugen, M. Tsiang & B. Rajaratnam (2017) Quantifying the influence of observed global warming on the probability of historically unprecedented extreme climate events, ***Proceedings of the National Academy of Science***, doi.org/10.1073/pnas.1618082114.

13. S.H. Paull, D.E. Horton, M. Ashfaq, D. Rastogi, L.D. Kramer, N.S. Diffenbaugh & A.M. Kilpatrick (2017) Drought and immunity determine the intensity of West Nile virus epidemics and climate change impacts, ***Proceedings of the Royal Academy B***, doi.org/10.1098/rspb.2016.2078.

12. D. Singh, D.L. Swain, J.S. Mankin, D.E. Horton, L.N. Thomas, B. Rajaratnam & N.S. Diffenbaugh (2016) Recent amplification of the North American winter temperature dipole, ***Journal of Geophysical Research – Atmospheres***, doi.org/10.1002/2016JD025116.

11. D.L. Swain, D.E. Horton, D. Singh & N.S. Diffenbaugh (2016) Trends in atmospheric patterns conducive to seasonal precipitation and temperature extremes in California, ***Science Advances***, doi.org/10.1126/sciadv.1501344.

10. D.E. Horton, N.C. Johnson, D. Singh, D.L. Swain, B. Rajaratnam & N.S. Diffenbaugh (2015) Contribution of changes in atmospheric circulation patterns to extreme temperature trends, ***Nature***, doi.org/10.1038/nature14550.

9. C. Li, E. Sinha, D.E. Horton, N.S. Diffenbaugh & A.M. Michalak (2014) Joint bias correction of temperature and precipitation in climate model simulations, ***Journal of Geophysical Research - Atmospheres***, doi.org/10.1002/2014JD022514.

8. D. Singh, D.E. Horton, M. Tsiang, M. Haugen, M. Ashfaq, R. Mei, D. Rastogi, N.C. Johnson, A. Charland, B. Rajaratnam & N.S. Diffenbaugh (2014) Severe precipitation in Northern India in June 2013: Causes, historical context, and changes in probability, in "Explaining Extremes of 2013 from a Climate Perspective", ***Bulletin of the American Meteorological Society***, 95(9), S58-61.

7. D.E. Horton, C.B. Skinner, D. Singh & N.S. Diffenbaugh (2014) Occurrence and persistence of future air stagnation events, ***Nature Climate Change***, doi.org/10.1038/nclimate2272.

6. D.P. Lowry, C.J. Poulsen, D.E. Horton, T.H. Torsvik & D. Pollard (2014) Thresholds for Paleozoic ice sheet initiation, ***Geology***, doi.org/10.1130/G35615.1.

5. D.E. Horton, Harshvadhan & N.S. Diffenbaugh (2012) Response of air stagnation frequency to anthropogenically enhanced radiative forcing, ***Environmental Research Letters***, doi.org/10.1088/1748-9326/7/4/044034.

4. D.E. Horton, C.J. Poulsen, I.P. Montañez & W.A. DiMichelle (2012) Eccentricity-paced late Palaeozoic climate change, ***Palaeo-3****,* doi.org/10.1016/j.palaeo.2012.03.014.

3. D.E. Horton, C.J. Poulsen & D. Pollard (2010) Influence of high-latitude vegetation feedbacks on late Palaeozoic glacial cycles, ***Nature Geoscience***, doi.org/10.1038/NGEO922.

2. D.E. Horton & C.J. Poulsen (2009) The paradox of late Paleozoic glacioeustasy, ***Geology***, 37, 715-718, doi.org/10.1130/G30016A.1.

1. D.E. Horton, C.J. Poulsen & D. Pollard (2007) Orbital and CO_2 forcing of late Paleozoic continental ice sheets, ***Geophysical Research Letters***, doi.org/10.1029/2007GL031188.

- **EXTERNAL RESEARH SUPPORT**
  Mentorship key: undergraduate***, graduate**, or postdoc*

1. D.E. Horton (PI), N. Loeb (Co-PI), S. Young (Co-PI) & J. Wang (Co-PI) SCC-CIVIC-PG Track B: Fostering Municipal- and Community-based Resilience to Hydroclimatic Extremes in America's Heartland, Aurora, Illinois, NSF CIVIC Stage 1, (submitted).

2. M.S. Bryan (PI), J. Jastogi (Co-PI) & D.E. Horton (Co-PI) (2020) Air Quality and COVID-19 Severity in Cook County, Illinois, NIEHS, $463k (submitted).

3. D.E. Horton & A. Montgomery** (2020) Characterization of neighborhood-scale air quality using satellite observations, high-density ground-based sensors, and numerical model simulations, NASA FINESST, $135k (declined).

4. S. van der Lee (PI)…D.E. Horton (Sr. Per.) et al (2019) HDR DSC: Collaborative Research: The Metropolitan Chicago Data Science Corps (MCDC): Learning from Data to Support Communities, NSF, (declined).

5. D.E. Horton & A. Montgomery** (2019) Characterization of neighborhood-scale air quality using remote sensing, modeling, and high-density ground-based measurements, NASA FINESST, $135k (declined).

6. D.E. Horton & H. Chen** (2019) Habitability and observational prospects of rocky exoplanets evaluated with 3D chemistry-climate models, NASA FINESST, $135k (awarded).

7. A.B. Becker (PI), D.E. Horton (Co-PI), J. Rudyk (Co-PI) & M. Geraci (Co-PI) (2019) Capturing climate mitigation and public health co-benefits of a multi-level neighborhood walkability intervention, Robert Wood Johnson Foundation, $350k (declined).

8. P. Kinney (PI), D.E. Horton (Co-PI), M. Walsh (Co-PI), J.I. Levy (Co-PI), C. Peterson (Co-PI) B. Keppard (Co-PI) T. Reardon (Co-PI), S. Jones (Co-PI) & J. Tamerius (Co-PI) (2019) Assessing the health and equity impacts of the transition to electric vehicles in eastern Massachusetts, Robert Wood Johnson Foundation, $350k (declined).

9. D.E. Horton (PI), A. Fiore (Co-PI), P. Kinney (Co-PI) & T. Holloway (Co-PI) (2019) Assessing co-benefits of cross-modal transportation electrification in China and India, Wellcome Foundation, $431k (declined).

10. G. Buscanera (PI), K. Daniels (Co-PI), A. Handwerger (Co-PI) & D.E. Horton (Co-PI) (2018) Defining precursors of ground failure: a multiscale framework for early landslide prediction through geomechanics and remote sensing, NSF PREEVENTS, $1.45M (awarded).

11. A. Packman (PI), D.E. Horton (Co-PI), S.L. Young (Co-PI), M.H. Garcia (Co-PI) & S. Collis (Co-PI) (2018) RAISE: Systems Approaches for Vulnerable Evaluation and Urban Resilience (SAVEUR), NSF Convergence, $1M (awarded).

12. A. Packman (PI)…D.E. Horton (Sr. Per.) et al, NSF NRT-INFEWS-HRD: Urban Water-Food-Energy-Ecosystems Design Strategies, $3M (declined).

13. D.E. Horton & H. Chen** (2018) Simulating biosignatures in Earth-like planets atmospheres, NASA Earth and Space Science Fellowship, $135k (declined).

14. P. Jing (PI) & D.E. Horton (Co-I), NASA ROSES-2017 SAGE III/ISS Science Team: Influence of dynamical processes on the distribution of ozone in the lower stratosphere and upper troposphere using SAGE III/ISS, $392k (declined).

15. C.B. Phillips*, A. Packman & D.E. Horton, Effects of river flow variability and sediment dynamics on habitat stability under changing climate and hydropower development, The Nature Conservancy NatureNet Science Fellows Post-doctoral Research Grant, $44.2k (awarded).

16. D.E. Horton & H. Chen** (2018) 3-D biosignatures and atmospheric chemistry of Earth-like planets, NSF Graduate Research Fellowship Program, $135k (declined).

17. K.C. Park (PI), D.E. Horton (Co-PI), N.A. Patankar (Co-PI) & F. Lamm (Co-PI) INFEWS/T3: Atmospheric water collection for sustainable drip irrigation, $2.5M (declined).

18. D.E. Horton & H. Chen** Role of day-length in modulating atmospheric circulation and habitable refugia, NASA Earth and Space Science Fellowship, $135k (declined).

19. M.L. Chipman*, Y. Axford, & D.E. Horton Quantitative temperature reconstructions from South Greenland over the past two millennia: evaluating the role of internal variability in driving high-latitude climate, NSF Division of Earth Science Postdoctoral Fellowship, (declined).

- **INTERNAL RESEARH SUPPORT**
  Mentorship key: undergraduate***, graduate**, or postdoc*

1. R. Cronk*** (2020) Air pollution effects on mammographic breast density, Weinberg Summer Research Grant, $3.5k (awarded)

2. C. Carty*** (2020) Quantifying the horizontal transport of gaseous constituents on a slow rotation exoplanet, Weinberg Summer Research Grant, $3.5k (awarded)

3. M. Visa*** (2020) Ride-share vehicle electrification, Northwestern Summer Undergraduate Research Grant, $3.5k (awarded).

4. A.E. Motter, D.M. Abrams & D.E. Horton (2019) What is the air quality and CO_2 impact of an electric vehicle transition?, Center for Engineering Sustainability and Resilience Seed Funding Initiative, $60k (awarded).

5. D.E. Horton (2019) Projected changes in Middle East dust storm frequency, intensity, and duration, Northwestern Undergraduate Research Assistant Program, $3.5k (awarded).

6. D. Goldstein*** (2019) The impacts of EVs on public health, Weinberg Summer Undergraduate Research Grant, $3.5k (awarded).

7. A. Rogin*** (2019) Modelling the co-benefits of CTA bus electrification on air quality and health, Weinberg Summer Undergraduate Research Grant, $3.5k (awarded).

8. L. Yang*** (2019) Projections of breadfruit (*Artocarpus altilis*) range suitability under divergent climate pathways, Northwestern Summer Undergraduate Research Grant, $3.5k (awarded).

9. C. Cai*** (2019) Modeled atmospheric emission profiles of different marine fuels and their impacts on public health over the Great Lakes Region, Northwestern Summer Undergraduate Research Grant, $3.5k (awarded).

10. D. Peters*** (2018) Electric vehicle impacts in China, Weinberg Summer Undergraduate Research Grant, $3.5k (awarded).

11. K. Braun*** (2017) Quantifying carbon in Illinois wetlands, Academic Year Undergraduate Research Grant, $1k (awarded).

12. S. Weiser*** (2017) Climate change and sinuosity, Northwestern Summer Undergraduate Research Grant, $3.5k (awarded, unclaimed).

13. C. Callahan*** (2017) Quantifying the influence of climate change on extreme air quality events, Northwestern Summer Undergraduate Research Grant, $3.5k (awarded, unclaimed).

- **PROFESSIONAL TALKS**

Invited Research Seminars

1. CLIVAR–Large Ensembles Working Group 2020
2. Climate Change Research Luncheon, Northwestern University, IL 2020
3. Marine, Earth, & Atmospheric Sciences, North Carolina State University 2020
4. Dept. of Geological & Environmental Sciences, Western Michigan University 2019
5. Dept. of Earth & Environmental Sciences, Tulane University 2018
6. Dept. of Civil & Environmental Engineering, Northwestern University, IL 2018
7. CLIVAR–Predictability, Predictions, and Applications Interface Panel 2018
8. CLIVAR–Large Ensembles Working Group 2018
9. Associated Colleges of the Chicago Area Spring Physics Seminar 2018
10. Environmental Law Colloquium, Pritzker School of Law, Northwestern U, IL 2018
11. Finite Earth Faculty Luncheon, Northwestern University, IL 2017
12. Dept. of Geological Sciences, Indiana University, IN 2016
13. Dept. of Earth & Environmental Sciences, University of Illinois at Chicago 2016
14. Carnegie Endowment for International Peace, Washington, DC 2016
15. Dept. of Civil & Environmental Engineering, Northwestern University, IL 2016
16. Institute for Sustainability and Energy at Northwestern University, IL 2016
17. Dept. of Geosciences, University of Wisconsin-Milwaukee, WI 2016
18. Understanding Global Change Workshop, Stanford University, CA 2015
19. Dept. of Earth & Planetary Sciences, Northwestern University, IL 2015
20. Dept. of Geography, Portland State University, OR 2014
21. Dept. of Environmental Earth System Science, Stanford University, CA 2014
22. Global Health Education Program, Stanford University School of Medicine, CA 2014
23. Atmosphere, Energy & Earth Division, Lawrence Livermore National Lab, CA 2014
24. Earth Day 2014: Connecting the Dots, Stanford University, CA 2014
25. Dept. of Civil & Environmental Engineering, Stanford University, CA 2014

26. School of Earth Sciences, Stanford University, CA 2013
27. Dept. of Geology, University of Cincinnati, OH 2012
28. Dept. of Earth Sciences, University of Memphis, TN 2012
29. Dept. of Earth Sciences, Dartmouth College, NH 2012
30. Synergistic Ocean-Atmosphere-Climate Seminar, U.C., Davis, CA 2011

Invited Academic Lectures

1. CE-260, McCormick School of Engineering, Northwestern University, IL 2018
2. JOUR-425, Medill School of Journalism, Northwestern University, IL 2017
3. EGL-102-001, English Dept., Oakton Community College, IL 2017
4. EGL-102-003, English Dept., Oakton Community College, IL 2017
5. EARTH-342, Weinberg College, Northwestern University, IL 2017
6. CE-260, McCormick School of Engineering, Northwestern University, IL 2017
7. PPTYTORT-613, Pritzker School of Law, Northwestern University, IL 2017
8. CE-361, McCormick School of Engineering, Northwestern University, IL 2016
9. EARTH-342, Weinberg College, Northwestern University, IL 2016
10. PPTYTORT-613, Pritzker School of Law, Northwestern University, IL 2016
11. CE-260, McCormick School of Engineering, Northwestern University, IL 2016
12. JOUR-425, Medill School of Journalism, Northwestern University, IL 2016

First-authored Conference Presentations

Mentorship key: high school****, undergraduate***, graduate**, or postdoc*

12. D.E. Horton, J.L. Schnell*, A. Montgomery**, A.L. Rogin***, D.R. Peters***, C. Cai***, D. Goldstein*** & K. Srinivasan**** (2019) Decision-tools for informed EV adoption and co-benefit/tradeoff analyses, AGU Fall Mtg.

11. D.E. Horton, C. Callahan*** & J.L. Schnell* (2019) Multi-index attribution of the meteorology behind Beijing's poor air quality events, CLIVAR Large Ensembles Workshop, Boulder, CO.

10. D.E. Horton, J.L. Schnell*, Y. Suo** & C. Callahan*** (2017) Meteorological drivers of extreme air pollution events, AGU Fall Mtg.

9. D.E Horton, J.S. Mankin, D. Singh, D.L. Swain & N.S. Diffenbaugh (2016) Cluster classification of mid-latitude summer circulation patterns in the CESM1 Large Ensemble, AGU Fall Mtg.

8. D.E Horton, J.S. Mankin, D. Singh, D.L. Swain, N.C. Johnson & N.S. Diffenbaugh (2015) Probability of atmospheric circulation pattern occurrence in pre-industrial, historical, and future climates, AGU Fall Mtg.

7. D.E Horton, D. Singh, D.L. Swain & N.S. Diffenbaugh (2014) Surface temperature extremes and detectable trends in northern hemisphere mid-tropospheric planetary wave pattern occurrence and persistence, AGU Fall Mtg.

6. D.E Horton & N.S. Diffenbaugh (2013) Occurrence and persistence of air stagnation events in current and future forcing regimes, AGU Fall Mtg.

5. D.E Horton, A.M. Kilpatrick, J. Ruybal & N.S. Diffenbaugh (2012) The evolution of disease vectors in a warming world: mosquitoes, incubators, and CMIP5 temperature projections, AGU Fall Mtg.

4. D.E Horton, C.J. Poulsen & T.H. Torsvik (2011) Paleozoic ice sheet inception; a study of paleogeographic sensitivity, AGU Fall Mtg.

3. D.E Horton, Harshvardhan & N.S. Diffenbaugh (2011) Future changes in air stagnation frequency; a global perspective, AGU Fall Mtg.

2. D.E Horton & C.J. Poulsen (2010) High-latitude ecosystem change enables late Paleozoic glacial-interglacial cycles, AGU Fall Mtg.

1. D.E Horton, C.J. Poulsen & D. Pollard (2007) Simulations of late Paleozoic continental ice sheets under orbital and CO_2 forcing, AGU Fall Mtg.

Co-authored Conference Presentations
Mentorship key: high school****, undergraduate***, graduate**, or postdoc*

58. H. Chen**, M. Mendillo, J.C. Becker & D.E. Horton, (2020) On the ionospheres of strongly- to weakly-oxygenated exoplanets, AGU Fall Mtg.

57. R.D. Harp*, J.M. Colborn, K.B. Karnauskas, B. Candrinho, K.L. Colborn, L. Zhang & D.E. Horton, (2020) Toward using climate to increase lead-time of a malaria early warning system in Mozambique, AGU Fall Mtg.

56. I. Crisologo*, S. Collis & D.E. Horton (2020) Climatological analysis of melting layer altitude in landfalling atmospheric rivers using weather radars, AGU Fall Mtg.

55. A. Montgomery**, J.L. Schnell*, A.L. Rogin*** & D.E. Horton (2020) Characterization and mitigation strategies for Chicago air quality, AGU Fall Mtg.

54. C.B. Phillips*, C.A. Rogéliz, D.E. Horton, J. Higgins & A.I. Packman (2020) River channel and watershed self-organization limit the flux of fine particles, AGU Fall Mtg.

53. I. Crisologo*, H. Luo, D.E. Horton, G. Buscarnera, M.H. Garcia & S. Collis (2020) Characterization of uncertainties in high-resolution rainfall retrieval for small catchments, European Conference on Radar in Meteorology and Hydrology.

52. C.B. Phillips*, C.A. Rogéliz, D.E. Horton, J. Higgins & A.I. Packman (2020) Landscape and river self-organization limit the flux of fine particles, EGU Annual Mtg.

51. H. Chen**, Z. Zhuchang, E.T. Wolf, A. Youngblood, A. Feinstein & D.E. Horton (2020) Influence of Large Stellar Flares on Magnetized and Unmagnetized Tidally-locked Rocky Exoplanets, Asia-Oceania Geosciences Society, Hongcheon, South Korea.

50. H. Chen**, Z. Zhuchang, E.T. Wolf, A. Youngblood, A. Feinstein & D.E. Horton (2020) Influence of Large Stellar Flares on Magnetized and Unmagnetized Tidally-locked Rocky Exoplanets, Exoplanets III, Heidelberg, DE.

49. D. Goldstein***, K. Srinivasan****, J.L. Schnell* & D.E. Horton (2020) Consumer-targeted electric v. internal combustion vehicle emissions calculator, International Symposium on Sustainable Systems and Technology, Pittsburgh, PA.

48. J. Wang, I. Crisologo*, S. Collis, D.E. Horton & G. Buscarnera (2020) High resolution precipitation retrieval for hydrological modeling including WRF-hydro and land failure models over California, USA, Weather Radar and Hydrology, Nanjing, China.

47. D.E. Lawson, A.E. Nesbitt, B. Whitehouse, D.E. Horton, M.N. Peterson, K.T. Stephenson & D.J. Wuebbles (2020) Using local examples of wildlife climate adaptation to start a nationwide dialog on climate change one state at a time, AMS Annual Mtg.

46. D. Touma, S. Stevenson, S.J. Camargo, D.E. Horton & N.S. Diffenbaugh (2020) Variations in the intensity and spatial extent of tropical cyclone precipitation, AMS Annual Mtg.

45. M.J. Potosnak, P. Banerjee, M.B. Berkelhammer, R. Sankaran, V.R. Kotamarthi, R.L. Jacob, P.H. Beckman, S. Shahkarami, D.E. Horton, A. Montgomery** & C.E. Catlett (2019) Array of Things: A high-density, urban deployment of low-cost air quality sensors, AGU Fall Mtg.

44. I. Crisologo*, H. Luo, A. Medendorp, M.H. Garcia, S. Collis & D.E. Horton (2019) Using high-resolution radar rainfall products to improve city-scale flood models for urban resilience, AGU Fall Mtg.

43. H. Luo, I. Crisologo*, D.E. Horton, M.H. Garcia, S. Collis & A.I Packman (2019) A Revisit of Temporal and Spatial Variability and Resolution of Rainfall Measurements Relevant for Urban Hydrology, AGU Fall Mtg.

42. J.L. Schnell*, D.R. Peters***, D. Wong, X. Lu, H. Zhang, H. Gao & D.E. Horton (2019) Air quality and human health impacts from electric vehicle adoption in Chinese megacities, AGU Fall Mtg.

41. A. Montgomery**, J.L. Schnell* & D.E. Horton (2019) A multiplatform characterization of urban air quality at neighborhood scales: A Chicago Case Study, AGU Fall Mtg.

40. A.L. Rogin***, J.L. Schnell*, A. Montgomery** & D.E. Horton (2019) Air quality and health impacts of electrifying Chicago's municipal vehicle fleet, AGU Fall Mtg.

39. C.B. Phillips*, C.A. Rogéliz, D.E. Horton, J. Higgins & A.I. Packman (2019), A combined physics and data-driven approach for predicting suspended sediment dynamics in river networks, AGU Fall Mtg.

38. L.L. Yang***, N.J.C. Zerenga & D.E. Horton (2019) Breadfruit (*artocarpus altilis*) range suitability and adaptation potential under divergent climate pathways, AGU Fall Mtg.

37. H. Chen**, E.T. Wolf, Z. Zhuchang & D.E. Horton (2019) Habitability and Observability of strongly to weakly oxygenated M-dwarf exoplanets constrained by 3D chemistry-climate models, AGU Fall Mtg.

36. H. Chen**, E.T. Wolf, R. Kopparapu, S. Domagal-Goldman, Z. Zhuchang & D.E. Horton (2019) M-dwarf activity driven 3D climate and photochemistry of inner habitable zone tidally-locked rocky planets, AAS Extreme Solar Systems IV, Reykjavik, Iceland.

35. D. Touma, S. Stevenson, S.J. Camargo, D.E. Horton & N.S. Diffenbaugh (2019) Variations in the intensity and spatial extent of tropical cyclone precipitation, Workshop on Risk Analysis for Extremes in the Earth System, Lawrence Berkeley Laboratory.

34. C.B. Phillips*, C.A. Rogéliz Prada, D.E. Horton & A.I. Packman (2019), Exploring the signature of climate, catchment, and internal variability on river suspended sediment dynamics, Catchment Sciences, Gordon Research Conference.

33. H. Chen**, E.T. Wolf, Z. Zhuchang & D.E. Horton (2019) Coupled 3D chemistry-climate simulations of moist greenhouse terrestrial planets: water-loss and spectroscopic observability, AbSciCon.

32. C.B. Phillips*, C.A. Rogéliz Prada, D.E. Horton & A.I Packman (2019) Deciphering the role of autogenic processes on the dynamics of fine particle transport in mountain streams, EGU Annual Mtg.

31. C.B. Phillips*, D.E. Horton & A.I Packman (2018) Exploring the signature of climate and internal variability on river suspended sediment dynamics, AGU Fall Mtg.

30. K.N. Braun***, E.J. Theuerkauf, A.L. Masterson, B.B. Curry & D.E. Horton (2018) Quantifying carbon budgets deficits from a rapidly eroding freshwater coastal wetland, Lake Michigan, USA, AGU Fall Mtg.

29. H. Chen**, E.T. Wolf, S. Domagal-Goldman, R. Kopparapu & D.E. Horton (2018) Global biosignature distributions on temperate tidally-locked planets orbiting M-dwarfs simulated with a 3-D chemistry climate model, AGU Fall Mtg.

28. D.R. Peters***, J. Schnell* & D.E. Horton (2018) Modeling public health impacts of air quality changes caused by electric vehicle adoption scenarios in the U.S. and China, AGU Fall Mtg.

27. J. Thompson**, S. van der Lee, & D.E. Horton (2018) Analysis of very long-period noise at flexible-array stations in the North-American midcontinent, AGU Fall Mtg.

26. J. Schnell*, V. Naik, L.W. Horowitz, F. Paulot, P. Ginoux, M. Zhao & D.E. Horton (2018) Air quality impacts from the electrification of light duty passenger vehicles in the United States, AGU Fall Mtg.

25. D. Touma, D.E. Horton, S. Camargo & N.S. Diffenbaugh (2018) Quantifying the historical intensity and spatial extent of extreme tropical cyclone precipitation, AGU Fall Mtg.

24. Y. Suo** & D.E. Horton (2018) Drivers of seasonal variability of atmospheric stagnation features under anthropogenic forcing using a climate model ensemble (CMIP5), Northwestern University Computational Research Day.

23. H. Chen** & D.E. Horton (2018) Modeled 3-D biosignatures from the stratosphere of Proxima Centauri b and M-dwarf planets, Northwestern University Computational Research Day.

22. C. Callahan*** & D.E. Horton (2018) Multi-index attribution of Beijing's 2013 airpocolypse, Northwestern University Computational Research Day.

21. K.N. Braun***, E.J. Theuerkauf, A.L. Masterson & D.E. Horton (2018) Quantifying the annual carbon budget from a rapidly eroding coastal freshwater wetland using field and model data, GSA North-Central Annual Mtg.

20. H. Chen** & D.E. Horton (2018) Modeled 3-D biosignatures from the stratosphere of Proxima Centauri b and M-dwarf planets, AAS Winter Mtg.

19. C. Callahan***, D.E. Horton, N.S. Diffenbaugh (2017) Multi-index attribution of Beijing's 2013 airpocolypse, AGU Fall Mtg.

18. H. Chen** & D.E. Horton (2017) The importance of volcanic sulfate aerosols on decadal-scale climate projections, Northwestern University Computational Research Day.

17. D.L. Swain, D. Singh, D.E. Horton, J.S. Mankin, T. Ballard, L.N. Thomas & N.S. Diffenbaugh (2016) Connections between the tropical Pacific Ocean, Arctic sea ice, and anomalous northeastern Pacific ridging, AGU Fall Mtg.

16. D. Singh, D.L. Swain, J.S. Mankin, D.E. Horton, L.N. Thomas, B. Rajaratnam & N.S. Diffenbaugh (2016) Recent amplification of the North American winter temperature dipole, AGU Fall Mtg.

15. C. Li, A.M. Michalak, E. Sinha, D.E. Horton & N.S. Diffenbaugh (2016) Joint bias correction of temperature and precipitation in climate model simulations, International Mtg. on Statistical Climatology.

14. D. Singh, D.L. Swain, J.S. Mankin, D.E. Horton, L.N. Thomas & N.S. Diffenbaugh (2016) Historical trends in the North American winter temperature dipole, associated atmospheric mechanisms and links to anthropogenic forcing, EGU General Assembly.

13. N.S. Diffenbaugh, D.E. Horton, D. Singh, D.L. Swain, D. Touma & J.S. Mankin (2015) Using atmospheric circulation patterns to detect and attribute changes in the risk of extreme climate events, AGU Fall Mtg.

12. D.L. Swain, D.E. Horton, D. Singh & N.S. Diffenbaugh (2015) Trends in persistent seasonal-scale atmospheric circulation patterns responsible for precipitation and temperature extremes in California, AGU Fall Mtg.

11. D. Singh, D.E. Horton & N.S. Diffenbaugh (2015) Influence of anthropogenic warming on extremes in the Indian summer monsoon using cluster analysis, AMS Annual Mtg.

10. J.P. Matthys*, D.E. Horton & N.S. Diffenbaugh (2014) Meteorological influences on extreme duration $PM_{2.5}$ air pollution episodes, AGU Fall Mtg.

9. D. Singh, D.E. Horton & N.S. Diffenbaugh (2014) Understanding the dynamic and thermodynamic causes of historical trends in the intraseasonal variability of the south Asian summer monsoon, AGU Fall Mtg.

8. N.S. Diffenbaugh, B. Rajaratnam, A. Charland, M. Haugen, D.E. Horton, D. Singh, D.L. Swain & M. Tsiang (2014) Quantifying the influence of observed global warming on the probability of unprecedented extreme climate events, AGU Fall Mtg.

7. C. Li, A.M. Michalak, E. Sinha, D.E. Horton & N.S. Diffenbaugh (2014) Joint bias correction of temperature and precipitation in climate model simulations, AGU Fall Mtg.

6. S.H. Paull, D.E. Horton, N.S. Diffenbaugh & A.M. Kilpatrick (2014) Climate and immunity as drivers of interannual variability of human West Nile virus cases, ESA Annual Convention.

5. D.P. Lowry, D.E. Horton, C.J. Poulsen, T.H. Torsvik & D. Pollard (2013) Controls on ice sheet initiation during the Paleozoic, GSA Annual Mtg.

4. D.E. Ibarra, K. Maher, J.L. Oster, A.E. Egger, C.R. Harris, D.E. Horton & K.L. Weaver (2012) Comparing lake and soil records to climate model simulations of hydrologic conditions across the western U. S. at the LGM, AGU Fall Mtg.

3. I.P. Montañez, U. Brand, C.J. Poulsen & D.E. Horton (2011) Climate-forcing and feedbacks of the Late Paleozoic Ice Age, AGU Fall Mtg.

2. S.M. Bates, T.W. Lyons, I.P. Montañez, C.J. Poulsen & D.E. Horton (2011) Coupled conodont $\delta^{18}O$, phosphate, climate model, and stratigraphic perspectives on carboniferous cyclic deposits from mid-continent North America, AGU Fall Mtg.

1. C.J. Poulsen, D.E. Horton & D. Pollard (2007) Glacial-Interglacial climate change during the late Paleozoic: A climate modeling perspective, GSA Annual Mtg.

- **PROFESSIONAL WORKSHOPS, SERVICE & AFFILITATIONS**

Workshops

1. SAGE All-Hands Community Workshop, Argonne National Lab 2020
2. US CLIVAR Workshop on Large Ensembles, National Center for Atmospheric Research, Boulder, CO 2019
3. Sustainable Urban Systems: Predictive, Interconnected, Resilient, and Evolving, Chicago, IL 2019
4. Urban Scale Processes and their Representation in High Spatial Resolution Earth System Models. Argonne National Lab 2019
5. Workshop on Climate Change Mitigation Health Co-Benefits, WHO & Wellcome Trust, London, UK 2019
6. Early Career Geoscience Faculty Workshop: Teaching, Research, and Managing Your Career, University of Maryland 2017

Service

1. US CLIVAR Working Group on Large Ensembles Core Member 2018-present
    - Provide guidance/steer development and use of Large "Initial-Condition" Earth System Model Ensembles for the international climate research community
2. Global Undergraduate Awards
    - Judge, Earth & Environmental Sciences 2019
3. American Geophysical Union
    - Judge, Outstanding Student Paper Awards, AGU Fall Mtg. 2019
    - Judge, Outstanding Student Paper Awards, AGU Fall Mtg. 2017
    - Session Co-Convener, AGU Fall Mtg. 2016
    - Liaison, Outstanding Student Paper Awards, AGU Fall Mtg. 2016
    - Judge, Outstanding Student Paper Awards, AGU Fall Mtg. 2016
    - Session Co-Convener, AGU Fall Mtg. 2015
    - Liaison, Outstanding Student Paper Awards, AGU Fall Mtg. 2015
    - Judge, Outstanding Student Paper Awards, AGU Fall Mtg. 2015
    - Judge, Outstanding Student Paper Awards, AGU Fall Mtg. 2014
    - Judge, Outstanding Student Paper Awards, AGU Fall Mtg. 2013

Affiliations

1. American Geophysical Union (member since 2007)

2. The Geological Society of America (2007-2015)

- **OTHER MATTERS RELATED TO RESEARCH AND PUBLICATION**

1. Op-Ed: D.J. Hillis, D.E Horton, R. Loureiro, K. Popendorf, C. Downs, R.E. Doel, T.P. Clement & A. Kobelski (2018) *YOU* Should Advocate for Science, *EOS*. 99, https://doi.org/10.1029/2018EO097137.
    a. Op-ed based on 2017 Congressional Visit Day sponsored by AGU.

2. Original Artwork: D.E Horton (2018) Anthropocene, ***Flint Magazine***, eds. B. Gaydos & M. Asshaq.
    a. Flint Magazine is a multimedia magazine featuring the work of over 20 international contributors: artists, writers, filmmakers, and designers. Anthropocene: "Directions: Fill out form. Take outside. Place under rock. Forget." Custom etched poly-vinyl, guaranteed to live in the ground for millennia. Words / concept by Daniel Horton, Northwestern University.

3. Book Review: D.E Horton (2014) Review of "*Palaeozoic Climate Cycles: Their Evolutionary and Sedimentological Impact*" Geological Society London, Special Publications, 376, by A. Gąsiewicz & M. Słowakiewicz (eds), in ***Geologos***, 20, 310-311.

- **TEACHING AND ADVISING**

Courses Taught (number enrolled)

1. Earth System Modeling – EARTH-343 (15) F2020
2. Sustainability & Social Justice Writing Seminar – EARTH-102 (15) SP2020
3. Physics of Weather & Climate – EARTH 340 (30) F2019
4. Earth System Modeling – EARTH-343 (10) W2019
5. Advanced Topics in Atmospheric Science – EARTH-450 (6) W2019
6. Sustainability & Social Justice Writing Seminar – EARTH-102 (15) SP2018
7. Physics of Weather & Climate – EARTH-340 (20 + 4 auditors) W2018
8. Sustainability & Social Justice Writing Seminar – EARTH-102 (15) SP2017
    a. Selected for Hewlett Diversity Curriculum Fellowship
9. Earth System Modeling – EARTH-343 (13) W2017
10. Sustainability & Social Justice Writing Seminar – EARTH-102 (16) SP2016
11. Earth System Modeling – EARTH-343 (6) SP2016

Postdoctoral Advisees / Mentees

1. Dr. Ryan Harp 2020-present
    a. ISEN Ubben Fellow
2. Dr. Jordan Schnell
    a. ISEN Ubben Fellow 2017-2020
    b. Now a Research Associate at CIRES, CU-Boulder
3. Dr. Irene Crisologo
    a. NAISE Fellow 2019-present

b. AGU Voices for Science 2020-2021

4. Dr. Colin Philips
    a. Nature Conservancy NatureNet Fellow 2018-2020
    b. Now an Asst. Professor at Utah State, Dept. of Civil & Environmental Eng.

Graduate Student Advisees / Mentees (* indicates primary research advisor)

1. Xiang Li, CEE Northwestern University 2020
    a. PhD Thesis Committee Member
2. Chuxuan Li*, Northwestern University 2020-present
3. Anastasia Montgomery*, Northwestern University 2018-present
    a. Ph.D. candidate
    b. 2019 Air & Waste Management Assoc. – Lake Michigan Section Stephen H. Rothblatt scholarship winner
    c. Selected AGU Congressional Visit Day 2019
    d. AGU Voices for Science Program 2020-2021
4. Howard Chen*, Northwestern University 2016-present
    a. Ph.D. candidate
    b. NASA FINESST Awardee 2019
        i. Proposal: *Habitability and observational prospects of rocky exoplanets evaluated with 3D chemistry-climate models*
    c. AGU OSPA 2019
        i. Habitability and observability of strongly to weakly oxygenated M-dwarf exoplanets constrained by 3D chemistry-climate models
    d. Thesis:
        i. Ch1 published in ***Astrophysical Journal Letters*** (2018)
        ii. Ch2 published in ***The Astrophysical Journal*** (2019)
        iii. Ch3 in 1st revision at ***Nature Astronomy***
5. Yuxi Suo*, Northwestern University 2016-2018
    a. Master's student
    b. Thesis: *Seasonal Air Stagnation in CMIP5*
6. Jacoya Thompson, EPS Northwestern University 2017-2019
    a. Master's student
    b. Thesis: *Analysis of very long-period noise at flexible-array stations in the North American midcontinent*
7. Laura Larocca, EPS Northwestern University 2018-present
    a. Preliminary Examination Committee Member
    b. PhD Committee Member
8. Peter Gibson, University of New South Wales
    a. External PhD Thesis Examiner/Reader 2017
9. Ashley Gilliam, EPS Northwestern University
    a. PhD Thesis Committee Member 2016

Undergraduate Advisees / Mentees

1. Katherine Braun 2017-2018
    a. Program in Environmental Sciences Honors
    b. Program in Environmental Sciences Best Thesis 2018

c. Honors Thesis: *Quantifying the annual carbon budget from a rapidly eroding freshwater coastal wetland using field and model data*
    i. Global Undergraduate Awards Earth & Environmental Science Highly Commended and USA & Canada Regional Winner
    ii. Published in ***Scientific Reports*** (2019) and ***Wetlands*** (2020)
d. Northwestern Academic Year URG awardee
e. Northwestern Conference Travel Grant awardee

2. Christopher Callahan 2017-2018
    a. Program in Environmental Sciences Honors
    b. Program in Environmental Sciences Best Thesis 2018
    c. Honors Thesis: *Multi-index attribution of extreme winter air quality in Beijing, China*
        i. Published in ***Journal of Geophysical Research – Atmospheres*** (2019)
    d. Northwestern SURG awardee
    e. Weinberg Conference Presentation Grant awardee
3. Daniel Peters 2018-2019
    a. Program in Environmental Sciences Honors
    b. Program in Environmental Sciences Best Thesis 2019
    c. Honors Thesis: *Public Health and Climate Co-Benefits of US Vehicle Electrification* Scenarios
        i. Submitted to ***GeoHealth*** (in 2nd review)
    d. Weinberg SURG awardee
    e. Northwestern Conference Travel Grant awardee
    f. Phi Beta Kappa
4. Spencer Weiser W2017-2019
    a. Phi Beta Kappa (junior year)
    b. Northwestern SURG awardee
    c. Marshall & Rhodes nominee
5. Lucy Yang F2017-2020
    a. Program in Environmental Sciences Honors
    b. Program in Environmental Sciences Best Thesis 2020
    c. Northwestern SURG awardee
    d. Phi Beta Kappa (junior year)
    e. Marshal, Rhodes & Fulbright nominee 2020
        i. Fulbright semifinalist
    f. Honors Thesis: *Breadfruit (Artocarpus altilis) Adaptation Potential Under Divergent Climate Pathways*
    g. Weinberg Conference Presentation Grant awardee
6. Pooya Shams F2017
7. Kjetil Oddens SU2018
    a. Summer Internship Grant Program
8. Cassia Cai F2018-present
    a. Northwestern SURG awardee
    b. WHOI summer fellow 2020
9. Amy Rogin W2019-2020
    a. Program in Environmental Sciences Honors

b. Program in Environmental Sciences Best Thesis 2020
c. Weinberg SURG awardee
d. Phi Beta Kappa (junior year)
e. Fulbright nominee 2020
    i. Semifinalist
f. Honors Thesis: *Air Quality and Health Impacts of Electrifying Chicago's Municipal Vehicle Fleet*
g. Weinberg Conference Presentation Grant awardee
h. Northwestern Conference Presentation Grant awardee

10. Daniel Goldstein SU2019-2020
    a. Program in Environmental Sciences Honors
    b. Weinberg SURG awardee
    c. Honors Thesis: *Consumer-Targeted Electric v. Internal Combustion Vehicle Emissions Calculator*
11. Charles Stanier SU2019
    a. Weinberg URAP
12. Grace Hauser F2019-
13. Aristana Scourtas F2019-
    a. NAISE summer intern fellowship
14. Christina Carty W2020-
    a. Weinberg SURG awardee
15. Regan Cronk W2020-
    a. Weinberg SURG awardee
16. Maxime Visa SP2020-
    a. Northwestern SURG awardee
17. Rachel Fry SU2020
    a. CIERA REU

High School Advisees / Mentees (* indicates primary research advisor)

1. Karthik Srinivasan SU2019-2020

- **DEPARTMENT, COLLEGE, AND UNIVERSITY SERVICE**

Department Service

1. EPS Director of Undergraduate Studies 2019-present
2. Geodynamics Faculty Search Committee Member 2016-2017
3. Geophysics Faculty Search Committee Member 2019-2020

College Service

1. Program in Environmental Sciences Advisory Committee Member 2016-present

University Service

1. Faculty Affiliations
    a. Center for Interdisciplinary Exploration and Research in Astrophysics
    b. Institute for Sustainability and Energy at Northwestern
    c. Finite Earth Strategic Theme Faculty Group

2. One Book Event Convener – "An Evening with Tom Skilling" 2017
3. One Book Event Presenter – "NU Faculty Docents at MSI" 2017
4. Panel Member, NU Global Brigades, "Global Sustainability" 2016

- **COMMUNITY SERVICE & OUTREACH**

Municipal Service & Outreach

1. The Rotary Foundation Environmental Task Force 2020
    a. Speaker/advisor on climate change and sustainability initiative
2. Third Coast Disrupted: Artists + Scientist on Climate 2019-present
    a. Artist & Scientist Collaboration
3. It's Getting Hot in Here, Wonder & Skepticism Panel Discussion 2019
    a. Panel member, hosted by Empty Bottle, Chicago, IL
4. U.S. Rep. Bradley Schneider, 10th District IL, Climate Change Panel 2019
    a. Panel member, hosted at the Chicago Botanical Garden
5. Chicago Climate/Environmental Data & Research Convening 2018
    a. Mayoral office initiative to share and preserve municipal climate data

Educational Outreach

1. Sky Day Project Advisory & Curriculum Boards 2016-present
    a. Citizen art/science education & curriculum development initiative whose mission is to increase understanding and appreciation of our shared atmosphere: www.skydayproject.org

Media Outreach

1. Selected Interviews & Research Highlight Agencies
    a. 2019: CNN, Newsweek, The Independent, Chicago Tribune, EOS, Phys.org
    b. 2018: Chicago Sun Times, Toledo Blade, fountainink, WBEZ Worldview, Newsweek, Daily Northwestern, North by Northwestern
    c. 2017: WBEZ Worldview, WTTW Chicago Tonight, WGN Radio, Reuters, NU Business Review, Washington Post, E&E News, Mercury News, North by Northwestern, Daily Northwestern, Chicago Magazine, Chicago Tribune, Popular Science, Phys.org
    d. 2016: Christian Science Monitor, StateTech Magazine, Stanford News, Carnegie Endowment for International Peace, Washington Post, SFGate, In Our Nature
    e. 2015: TeachAboutUs, Climate Central, The Guardian, Environmental Research Web, Climate Wire, AP Big Story, Nature Podcast, Nature News & Views, Yale Environment 360
    f. 2014: Nature Climate Change News & Views, Pacific Standard, City Lab, Motherboard, Climate Wire, Scientific American, Nature News, USA Today, NBC News, Climate Central