# Gabriel M. Filippelli

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## **EDUCATION**

1994	Ph.D.	Earth Sciences, University of California, Santa Cruz
1986	B.S.	Geology, University of California, Davis

#### ACADEMIC EMPLOYMENT

2020–	Chancellor's Professor, IUPUI
2021-	Executive Director, Environmental Resilience Institute, Indiana University
2004–	Professor, Department of Earth Sciences, IUPUI
2000-2004	Associate Professor, Department of Earth Sciences, IUPUI
1994-2000	Assistant Professor, Department of Earth Sciences, IUPUI
2020-	Adjunct Professor of Global Health, Indiana University Richard M. Fairbanks
	School of Public Health
2013-2014	Senior Science Advisor, US State Department, Office of Ocean and Polar Affairs
2008	Visiting Professor, Department of Geology, University of Salamanca, Spain
2003-2010	Chair, Department of Earth Sciences, IUPUI
2002	Visiting Professor, Department of Geology, University of Salamanca, Spain

## **RESEARCH INTERESTS**

Earth Sciences and human health, climate change, sediment geochemistry, chemical weathering, nutrient cycling, paleoceanography, terrestrial metal cycling

#### **TEACHING EXPERIENCE**

Applied Earth Sciences: The Human Dimension, Introduction to Oceanography, Global Environmental Change, Introduction to Geochemistry, Global Warming Science, Global Cycles, Environmental Geochemistry, Geological Oceanography

#### HONORS AND AWARDS

2022	Fulbright Distinguished Chair, University of Newcastle, Australia
2021	F. Earl Ingerson Lecturer, Geochemical Society
2020	Chancellor's Professor, IUPUI (highest distinguished rank on the campus)
2020	John W. Ryan Award for Distinguished Contributions to International Programs
	and Studies, Indiana University
2019	Visiting Research Fellow Award, Chinese Science Committee

2019	Prose Award for Excellence in Physical Science and Math (top publication for the year), Association of American Publishers, for <i>GeoHealth</i> , Gabriel Filippelli Editor-in-Chief
2019	School of Science Innovative Educator Award. IUPUI
2018	Visiting Research Fellow Award, Macquarie University, Sydney
2017	Charles R. Bantz Chancellor's Community Fellow
2016	Prestigious External Award Recognition, IUPUI
2016	Willeke Distinguished Lecture, Miami University, Ohio
2015	Fellow, International Association of GeoChemistry
2015	Certificate of Appreciation, U.S. Department of State
2014	Prestigious External Award Recognition, IUPUI
2013-14	Jefferson Science Fellow, U.S. Department of State, serving as Senior Science Advisor in the Bureau of Ocean, International Environment & Science
2013	Chancellor's Faculty Award for Excellence in Civic Engagement
2013	Research Award, School of Science, IUPUI
2007	Prestigious External Award Recognition, IUPUI
2005-2006	Distinguished Lecturer, IODP-Joint Oceanographic Institutions
2003 2000	Invited Presenter, Coalition for National Science Funding Exhibition and
2001	Reception; hosted by the US Congress and the National Science Foundation
2003	Distinguished Five College Lecturer in Geosciences, Williams College
2000	Teaching Excellence Recognition Award. Indiana University.
1997	Teaching Excellence Recognition Award. Indiana University.
	Research Faculty Fellow. Center for Earth and Environ. Sciences, IUPUI
1995	Summer Faculty Fellow. Purdue Research Foundation.
	Summer Research Fellow. Indiana University.
1992-1994	National Defense Science and Engineering Graduate Fellow (administered by the
	Office of Naval Research).
1992	Outstanding Teaching Assistant Award, UC Santa Cruz.
1991-1992	JOI/USSAC Ocean Drilling Program Graduate Fellow.
1991	Aaron Waters Thesis Proposal Award. Earth Sciences, UC Santa Cruz.
1989-1990	U.C. Regent's Fellow. Awarded by the U.C. Regents.

# **LEADERSHIP POSITIONS**

2021-	Executive Director, Indiana University Environmental Resilience Institute
2020-	Steering Committee, Midwest Climate Collaborative
2020-2021	Letter Panel of the Future of Association Convening: Envisioning for The
	Sciences (FACETS), American Institute of Physics
2020	Organizing Committee, Midwest Climate Summit
2019-	Editorial Board, International Journal of Environmental Research and Public
	Health
2018-2020	Science Committee, V.M. Goldschmidt Conference, Honolulu Hawaii
2012-	Founding Member, Reconnecting to Our Waterways; Co-Chair 2018-present
2017-	Editor-in-Chief, GeoHealth (American Geophysical Union)
2017-	Air Quality Fellow, U.S. Department of State. Serve as a Science Advisor for the
	U.S. Embassy in Islamabad, Pakistan

2017	Guest Editor, International Journal of Environmental Research and Public Health, "Urban Geochemistry and Human Health"
2014-	Associate Editor, Geochemical Journal
2013-2014	JOIDES Resolution Facilities Governing Board member, National Science
	Foundation
2010-	Director, Center for Urban Health; a Signature Center of IUPUI
2009-2011	Chair, Science Planning Committee, Integrated Ocean Drilling Program
2007-2010	EarthChem Advisory Committee, NSF
2006-2009	Science Planning Committee, Integrated Ocean Drilling Program
2007-2009	Vice-Chair, Science Planning Committee, Integrated Ocean Drilling Program
2006-2007	Chair, Geology and Health Division, Geological Society of America
2007	Guest Editor, Deep Sea Research II, Southern Ocean Paleoceanography
2007	Guest Editor, Deep Sea Research II, Marine Authigenic Minerals
2006-2010	NSF Advisory Committee for Marine Geology and Geophysics Data Systems
2004-2018	Associate Editor, Applied Geochemistry
2004-2006	Chair, United States Science Advisory Committee (US National Committee on
	Scientific Ocean Drilling)
1999-2001	Editorial Board, Geology
2002-2005	United States Science Advisory Committee (US National Committee on Scientific
	Ocean Drilling)
2001-2004	Science Steering and Evaluation Panel, Integrated Ocean Drilling Program
1994	Guest Editor, Marine Geology, Marine Phosphorus Cycle

#### **GRANT AWARDS**

Current

Preparing for Environmental Change (co-PI)

**Indiana University Grand Challenges Initiative** 

07/17-07/22 \$35,000,000 (\$470,000 Filippelli portion)

A proposal to Host the Department of Interior's (USGS) Midwest Climate Adaptation Science Center (Ketterson and Filippelli)

United States Geological Survey (subcontract from Univ. Minnesota) 09/21-09/26 \$541,628 (IU portion)

Roots, weathering, and the terrestrial phosphorus cycle of the late Devonian (EAR-1850878; Filippelli and Gilhooly)

National Science Foundation 08/19-08/22 \$310,000

Roots, weathering, and the terrestrial phosphorus cycle of the late Devonian (Gilhooly and Filippelli)

**American Chemical Society-Petroleum Research Fund** 09/19-09/21 \$110,000 GP-EXTRA: Building a new generation of urban environmental scholar-citizens through community-based programs for science and impact (Lead PI; ICER-1701132; Supplementary Award granted August 2021)

National ScienceFoundation08/17-08/22\$485,310

A new paradigm for Environmental Lead Reduction: Community Lead Screening (co-PI with Lead PI H. Beidinger, Univ. Notre Dame)

**Housing and Urban Development (HUD); sub-contract from U Notre Dame** 01/21-01/23 \$330,830

Ending Environmental Racism from the Ground Up: The Bookworms Initiative Vice President for Research, Indiana University 10/20-10/21 \$15,000

A social and environmental history of dry cleaning in Indianapolis (co-PI with Kryder-Reid, Dwyer)

IUPUI Office of the Vice Chancellor for Research10/20-10/21\$30,000

#### Past

A new paradigm to reduce lead poisoning in Indiana children (Filippelli and Sisk; Univ. Notre Dame)

**Collaboration in Translational Research (CRC), NIH CTSI** 05/18-04/20 \$70,000

How the evolution of roots transformed Earth's surface, and may have caused mass extinctions doing so (Filippelli and Gilhooly)

**IUPUI Office of the Vice Chancellor for Research** 

01/19-01/20 \$35,000

Indianapolis as a Living Laboratory: Science Learning for Resilient Cities (co-PI with Ryan, Butler University)

#### **National Science Foundation**

10/13-10/18 \$2,943,065

Building Healthy Cities Through Community-Engaged Science and Action: Getting the Lead Out (sole PI)

2017 Charles R. Bantz Chancellor's Community Fellowship

6/17-6/18 \$50,000

Enhancing Hepatitis C and Hepatitis B Surveillance in Indiana (sole PI)

#### Indiana State Department of Health

8/17-8/18 \$67,760

Acquisition of a field emission scanning electron microscope (FESEM) (Xie, Agarwahl, Gattone, Decca, Filippelli co-PIs)

National Science Foundation

9/12-9/15 \$495,744

Safe Urban Gardening Initiative (Sole PI)

#### Indianapolis Foundation

6/16-6/17 \$1,500

Formative research for a lead exposure community action plan: A collaborative social and environmental science research project (Filippelli, Leech)

#### **IUPUI Research Support Funds Grant**

8/14-4/15 \$32,000

Angel Mounds REU Site: Multidisciplinary training for students in environmental and social sciences through archaeological research (Collaborator; Wilson PI)

#### **National Science Foundation**

06/13-08/16 \$267,204

Jefferson Science Fellowship

#### **National Academy of Sciences**

8/13-8/14 \$60,000

Building lead safe communities in the Martindale-Brightwood and NearWest neighborhoods in Indianapolis (Filippelli w/Improving Kids' Environment, Inc.)

## **Environmental Protection Agency**

4/11-03/13 \$25,000

- Safe Urban Gardening Initiative (Sole PI)
  - Indianapolis Foundation

4/11-4/13 \$50,000

Coupling atmospheric chemistry with human health: A novel approach to investigating the source of chronic childhood lead poisoning (Filippelli and Pryor)

## Indiana University Collaborative Research Proposal

2/11-10/12 \$54,671

Signature Center for Urban Health (Filippelli, Johnson, Wiehe, Zollinger)

Office of the Executive Vice Chancellor, IUPUI

7/10-7/14 \$300,000

Reducing lead burdens to urban children: A pilot project to mine health data to examine "hotspots" in blood lead concentrations in light of the spatial distribution of leadcontaminated soils (Sole PI)

**Indiana Clinical and Translational Science Institute** (pass-through funding from the National Institutes of Health)

2/09-10/12 \$18,000

Chair of the Science Planning Committee (sole PI)

## Integrated Ocean Drilling Program, Inc.

10/09-10/11 \$206,012

MRI: Acquisition: Establishment of the Midwest Isotope and Trace Element Research Analytical Center (MITERAC) (Collaborator; Simonetti and Neal, PIs, Univ. Notre Dame)

#### **National Science Foundation**

7/09-7/11 \$1,159,219

Signature Center for Water Resources Research (Tedesco and Filippelli)

## Office of the Executive Vice Chancellor, IUPUI

7/07-7/10 \$300,000

Testing the shelf-nutrient hypothesis by examining the oceanic phosphorus cycle on glacial timescales (sole PI)

National Science Foundation

4/05-4/11 \$300.000 SMOGEE: Students as Mentors and Owners of Geoscience and Environmental Education: The Global Warming Road Show (co-PI with Schuster, Wood, IUPUI School of Education) National Science Foundation 5/06-5/09 \$114.000 Primary productivity and nutrient mass balances during the late Pleistocene in the Southern Ocean and equatorial Pacific Ocean (sole PI) Ministry of Education and Science, Spanish National Government 1/08-6/08 \$19.000 Phosphorus and carbon sedimentation on precessional timescales: A Pleistocene-Miocene comparison (sole PI) American Chemical Society-Petroleum Research Fund 6/02-9/06 \$50,000 Study of the Effects of Atmospheric Pollutants on the Invasibility of Panne Vegetation by Invasive Plants (co-PI with C. Souch; D. Mason, National Parks Service) **National Parks Service** 4/04-12/07 \$53.100 Paleoceanography and Paleoclimatology of the Southern Ocean: A Synthesis of Three Decades of Scientific Ocean Drilling (main PI, co-PI D. Warnke, Cal. State Hayward) JOI/U.S. Science Support Program 3/04-5/06 \$33,000 United States Science Advisory Committee Chair's Office Support (sole PI) A service grant to run the National Advisory Office for Scientific Ocean Drilling **JOI/US Science Support Program** 10/04-10/06 \$121,720 Water quality and nutrient cycling in three central Indiana watersheds and their reservoirs: Eagle Creek/Eagle Creek Reservoir, Fall Creek/Geist Reservoir and Cicero Cree/Morse Reservoir (Tedesco, Filippelli, Licht, Swope) Veolia Water/Indianapolis Water Company 2/04-2/05 \$141,365 Mercury in Indiana coals: Implications for coal sources (co-PI with M. Mastalerz, Indiana Geological Survey) **Indiana Department of Commerce** 9/02-8/04 \$99.984 The effects of landscape and soil development on the terrestrial phosphorus cycle (Filippelli and Souch) **National Science Foundation** 4/00-10/02 \$99,943 (One REU Supplement was obtained, for an additional \$5,873). Phosphorus sedimentation on continental margins: Present and past fluxes (sole PI) **National Science Foundation** 11/97-10/01 \$180,193 (2 REU Supplements were obtained, for an additional \$13,600). Geochemical and micropaleontological teaching and research exchange: Indiana University and the University of Salamanca, Spain (Filippelli and Flores) International Exchange Affiliations Program, Indiana University

International Exchange Attiliations Program

7/00-6/02 \$3,000

Phosphorus and carbon sedimentation on glacial/interglacial timescales: A pole-tropics comparison (sole PI) American Chemical Society-Petroleum Research Fund 9/00-8/02 \$30,000 Cenozoic phosphorus burial and terrigenous inputs in the Tasman Seaway (sole PI) **JOI/U.S. Science Support Program** 3/01-9/02 \$21.599 Contamination of wetland sediments, Indiana Dunes National Lakeshore: Implications for wetland restoration strategies (Filippelli and Souch) **NOAA-Illinois-Indiana Sea Grant Program** 5/98-5/00 \$104.000 Terrigenous inputs and paleoproductivity in the Southern Ocean (Fellowship Award to fund Ph.D. research of Jennifer Latimer) **JOI/US Science Support Program** 1/00-12/01 \$22,000 Biogeochemical records of climate change: Ocean sediment analyses from Southern Spain and California (Filippelli and Sierro, Flores—University of Salamanca) **US-Spain Science and Technology Program (Fulbright Organization)** 6/99-6/01 \$15.800 Restoring estuarine habitat quality: Effects of alternative types of water control structures on freshwater inflow, the distribution of non-point source pollutants, and the dispersal of nonindigenous species (Tedesco and Filippelli) Florida Gulf Coast University (Florida Coastal Management Program) 7/99-7/00 \$24.870 Dust, ice rafted debris, and biogeochemical cycling in the Southern Ocean (sole PI) **JOI/U.S. Science Support Program** 6/98-6/00 \$21.357 Phosphorus and carbon sedimentation in the Southern Ocean on glacial/interglacial timescales (sole PI) American Chemical Society-Petroleum Research Fund 9/97-9/00 \$25,000 Participation on ODP Leg 177, Southern Ocean Paleoceanography (sole PI) **JOI/U.S. Science Support Program** 12/97-12/98 \$23,400 Phosphorus and carbon geochemistry and accumulation rates in Saanich Inlet sediments, British Columbia (ODP Leg 169S) (sole PI) JOI/U.S. Science Support Program 5/97-3/99 \$16,958 Effects of diagenesis on phosphorus and carbon geochemistry in marine sediments: Implications for sedimentary C:P ratios (sole PI) American Chemical Society-Petroleum Research Fund \$20,000 9/95-9/97 Developing a Web interface for an interdisciplinary course (G185, Global Environmental Change) (Filippelli, Brothers, Tedesco, Souch) **IUPUI Faculty Development Office, Innovative Project in General Education Grant** 6/95-12/95 \$1.000

#### **PEER-REVIEWED PUBLICATIONS**

\*Denotes student author

#Denotes corresponding author, except where single-authored

- 107. Heintzelman, A.\*, Filippelli, G.M., Lulla, V., 2021. Substantial decreases in U.S. Cities ground-based NO<sub>2</sub> concentrations during COVID-19 from reduced transportation. *Sustainability*, 13: 9030. <u>https://doi.org/10.3390/su13169030</u>
- 106. Taylor, M.P., Isley, C.F., Liu X., Gillings, M.M.\*, Rouillon, M., Soltani, N.S., Gore, D.B., and Filippelli, G., 2021. Human health risks from trace metal contaminated urban gardens. *Environment International*. https://doi.org/10.1016/j.envint.2021.106582
- 105. Yang, Q.\*, Yang, Z., Filippelli, G.M., Ji, J., Yu, T., Wang, L., Zheng, G., and Zhang, Q., 2021. Distribution and secondary enrichment of heavy metal elements in karstic soils in Guangxi, China. *Chemical Geology*. https://doi.org/10.1016/j.chemgeo.2021.120081
- 104. Zheng, G.\*, Filippelli, G.M., and Salamova, A., 2020. Increased indoor exposure to commonly used disinfectants during the COVID-19 pandemic. Environmental Science and Technology Letters. https://doi.org/10.1021/acs.estlett.0c00587
- 103. Filippelli, G.M, Freeman, J.K., Gibson, J., Jay, S., Moreno-Madriñán, M.J, Ogashawara, I., Rosenthal, F.S., Wang, Y., and Wells, E., 2020. Climate change impacts on human health at an actionable scale: A state-level assessment of Indiana, USA. *Climatic Change*. https://doi.org/10.1007/s10584-02002710-9
- 102. Filippelli, G.M, Anenberg, S., Taylor, M., van Geen, A., and Khreis, H., 2020. New approaches to identifying and reducing the global burden of disease from pollution. *GeoHealth*. https://doi.org/10.1029/2018GH000167
- 101. Cardoso, A., Delmiro, T., Mocock, J., Rabbani, E., Peres, S., Filippelli, G.M., Macedo, J., and Monteiro, E. *in press*. Mollusk shell waste: Alternative for reuse in construction. *International Journal of Environmental and Waste Management*.
- 100. Donaldson, T., Fore, G., Filippelli, G., and Hess, J., 2020. A systematic review of the literature on situated learning in the geosciences: Beyond the classroom. International Journal of Science Education, 42(5): 722-743. <u>https://doi.org/10.1080/09500693.2020.1727060</u>
- 99. Filippelli, G.M.# and Finkelman, R., 2021. Exploring the intersections of environmental health and urban medical geology. In: Practical Applications of Medical Geology, Siegel, Selinu and Finkelman (Ed), Springer Press. P. 721-747.
- 98. Mazari, K., and Filippelli, G.M., 2019. Using deciduous trees as bioindicators of trace element deposition in a small urban watershed, Indianapolis (IN, USA). Journal of Environmental Quality. https://doi.org/10.1002/jeq2.20009
- 97. Beidinger, H.,# Ahern, L., Ngai, M., Sisk, M. and Filippelli, G.M., 2019. A lack of consistent lead screening of children for elevated blood lead levels results in undue risk to vulnerable children. *Journal of Public Health Policy*. https://doi.org/10.1057/s41271-018-0155-7

- 96. Filippelli, G.M.#, Adamic, J.\*, Nichols, D.\*, Shukle, J.\*, and Frix, E.\*, 2018. Mapping the urban lead exposome: A detailed analysis of soil metal concentrations at the household scale using citizen science. *International Journal of Environmental Research and Public Health*, 15(7), 1531. doi: 10.3390/ijerph15071531
- 95. Filippelli, G.M., 2018. Exploring the paradox of increased global health and degraded global environment—How much borrowed time is humanity living on? *GeoHealth*, 2. doi: 10.1029/2018GH000155
- 94. Filippelli, G.M., 2018. Balancing the global distribution of phosphorus with a view toward sustainability and equity. *Global Biogeochemical Cycles*, 32. doi: 10.1029/2018GB005923
- 93. Filippelli, G.M.# and Taylor, M. P., 2018. Addressing pollution-related global environmental health burdens. *GeoHealth*, 2,2 –5. doi: 10.1002/2017GH000119. Awarded Top 20 Downloaded publication 2017-2018 in GeoHealth by Wiley
- 92. Cortina, A.#, Filippelli, G.M., Ochoa, D., Sierro, F.J., Flores, J.A., and J.O. Grimalt, 2018. Climate-driven changes in sedimentation rate impact phosphorus burial along continental margins of the Mediterranean. *Paleogeography, Paleoclimatology, Paleoecology*. doi: 10.1016/j.palaeo.2018.03.010
- 91. Obeng-Gyasi, E.\*#, Armijos, R.X., Weigel, M., Filippelli, G.M., and Sayegh, A., 2018. Cardiovascular-related outcomes in US adults exposed to lead. *International Journal of Environmental Research and Public Health*, 15, 759; doi:10.3390/ijerph15040759
- 90. Obeng-Gyasi, E.\*#, Armijos, R.X., Weigel, M., Filippelli, G.M., and Sayegh, A., 2018. Hepatobiliary-related outcomes in US adults exposed to lead. *Environments*, 5, 46; doi:10.3390/environments5040046
- 89. Filippelli, G.M.# and Cowie, G.L., 2017. Carbon and phosphorus cycling in Arabian Sea sediments across the oxygen minimum zone. *Journal of Oceanography and Marine Research*, 5:171 doi: 10.4172/2572-3103.100017
- 88. Laidlaw, M.A.S.#, Filippelli, G.M., Mielke, H., Gulson, B., and Ball, A., 2017. Lead exposure at firing ranges—A review. *Environmental Health*, 16:34, doi 10.1186/s12940-017-0246-0
- 87. Laidlaw, M.A.S.#, Filippelli, G.M., Brown, S., Paz-Ferreiro, J., Reichman, S., Netherway, P., Truskewycz, A., Ball, A., and Mielke, H., 2017. Case studies and evidence-based approaches to addressing urban soil lead contamination. *Applied Geochemistry*, <u>http://dx.doi.org/10.1016/j.apgeochem.2017.02.015</u>.
- 86. Laidlaw, M.A.S., Filippelli, G.M., Sadler, R.C., Gonzales, C.R., Ball, A.S., and Mielke, H.W., 2016. Children's blood lead seasonality in Flint, Michigan (USA), and soil-sourced

lead hazard risks. *International Journal of Environmental Research and Public Health*, 13, 358: doi:10.3390.

- 85. Leech, T.G.J., Adams, E., Weathers, T., Staten, L., and Filippelli, G.M., 2016. Inequitable chronic lead exposure: A dual legacy of social and environmental injustice. *Family & Community Health*, 39: 151-159. doi: 10.1097/FCH.00000000000106
- 84. Chambers, L.G., Chin, Y-P, Filippelli, G.M., Gardner, C., Herndon, E.M., Long, D.T., Lyons, W.B., Macpherson, G.L., McElmurry, S.P., McLean, C.E., Moore, J., Moyer, R.P., Neumann, K., Nezat, C.A., Soderberg, K., Teutsch, N., and Widom, E., 2016. Developing the scientific framework for urban geochemistry. *Applied Geochemistry*, 67: 1-20. doi: 10.1016/j.apgeochem.2016.01.005
- 83. Filippelli, G.M., 2016. The Global Phosphorus Cycle. In Lal, ed., Advances in Soil Science-Soil Phosphorus. CRC Press, Francis & Taylor. p. 1-21. ISBN 9781482257847
- Filippelli, G.M.#, Risch, M., Laidlaw, M.A.S, Nichols, D.E.\*, and Crewe, J.\*, 2015. Geochemical legacies and the future health of cities: A tale of two neurotoxins in urban soils. *Elementa*, 3: 000059. doi: 10.12952/journal.elementa.000059.
- 81. Teitler, L.#, Florindo, F. Warnke, D.A., Filippelli, G.M., Kupp, G., and Taylor, B., 2015. Antarctic Ice Sheet response to a long warm interval across Marine Isotope Stage 31: A cross-latitudinal study of iceberg-rafted debris. *Earth and Planetary Science Letters*, 409: 109-119, doi: 10.1016/j.epsl.2014.10.037
- 80. Zahran, S., Laidlaw, M.A.S.\*, McElmurry, S.#, Filippelli, G., and Taylor, M., 2015. Linking source and effect: Re-suspended soil lead, air lead, and children's blood lead levels in Detroit, Michigan. In: Everyday Environmental Toxins: Children's Exposure Risks (A. Hassan, ed.). Apple Academic Press, NJ: 325 pp.
- 79. Filippelli, G.M., 2014. A salty start to modern ocean circulation. Science, 344: 1228-1229.
- 78. Zahran, S., Mielke, H.W.#, McElmurry, S., Filippelli, G., Laidlaw, M.A.S.\*, and Taylor, M., 2013. Determining the relative importance of soil sample locations to predict risk of child lead exposure. *Environment International*, 60: 7-14, doi: 10.1016/j.envint.2013.07.004
- 77. Zahran, S., Laidlaw, M.A.S.\*, McElmurry, S.#, Filippelli, G., and Taylor, M., 2013. Linking source and effect: Re-suspended soil lead, air lead, and children's blood lead levels in Detroit, Michigan. *Environmental Science & Technology*, 47: 2839-2845.
- 76. Cortina, A.\*#, Sierro, F., Filippelli, G.M., Flores, J.A, and Berne, S., 2013. Changes in planktic and benthic foraminifer assemblages in the Gulf of Lions, off South France: Response to climate and sea level change from MIS 6 to MIS 11. *Geochemistry, Geophysics, Geosystems*, 14: 1258-1276, doi: 10.1002/ggge.20096.
- 75. Hernández-Almeida, I.\*#, Bjørklund, K.R., Sierro, F.J., Filippelli, G.M., Cacho, I., and Flores, J.A., 2013. A high resolution opal and radiolarian record from the subpolar North

Atlantic during the Mid-Pleistocene Transition (1069-779 KA): Paleoceanographic implications. *Palaeogeography, Palaeoclimatology, Palaeocology*, doi:10.1016/j.palaeo.2011.05.049

- 74. Hernandez, I.A.\*#, Sierro, F., Cacho, I., Flores, J.A., and Filippelli, G.M., 2013.
   Paleoceanographic changes in the North Atlantic during the Mid-Pleistocene Transition (MIS 31-19) as inferred from planktonic foraminifera and calcium carbonate records.
   *Boreas*, doi: 0.1111/j.1502-3885.2012.00283.x
- 73. Filippelli, G.M.#, Morrison, D.\*, and Cicchella, D., 2012. Urban geochemistry and human health. *Elements*, 8: 439-444.
- 72. Morrison, D.\*, Lin, Q., Wiehe, S., Liu, G., Rosenman, M., Fuller, T.,\* Wang, J., and Filippelli, G.M.#, 2012. Spatial relationships between lead sources and children's blood lead levels in the urban center of Indianapolis (USA). *Environmental Geochemistry and Health*, 35(2): 171-183, doi:10.1007/s10653-012-9474-y.
- 71. Flores, J.A., Filippelli, G.M.#, Sierro, F., and Latimer, J. 2012. The "White Ocean" Hypothesis: A late Pleistocene Southern Ocean governed by Coccolithophores and driven by phosphorus. *Frontiers in Aquatic Microbiology*, 3: doi: 10.3389/fmicb.2012.00233.
- Laidlaw, M.A.S.\*#, Zahran, S., Mielke, H.W., Taylor, M.P., and Filippelli, G.M., 2012. Resuspension of lead contaminated urban soil as a dominant source of atmospheric lead in Birmingham, Chicago, Detroit, and Pittsburgh, USA. *Atmospheric Environment*, 49: 302-310.
- 69. Jacinthe, P.A.#, Filippelli, G.M., Tedesco, L.P., and Raftis, R.\*, 2012. Carbon storage and greenhouse gas emission from a fluvial reservoir in an agricultural landscape. *Catena*, 94: 53-63, doi:10.1016/j.catena.2011.03.012
- 68. Filippelli, G.M., Laidlaw, M.A.S.,\* and Morrison, D.E.,\* 2012. Poisoned minds: The legacy of lead poisoning among urban youth. In: Liberation Science: Putting Science to Work for Social and Environmental Justice (S. Emerman, ed.). Lulu Press, 200 pp.
- 67. Filippelli, G.M., 2011. Phosphate rock formation and marine phosphorus geochemistry: The deep time perspective. *Chemosphere*, doi:10.1016/j.chemosphere.2011.02.019.
- 66. Hatcher, C.L.\*, and Filippelli, G.M.#, 2011. Mercury cycling in an urbanized watershed: The influence of wind distribution and regional subwatershed geometry in central Indiana, USA. *Water, Air, and Soil Pollution*. doi:10.1008/s11270-010-0703-7.
- 65. Filippelli, G.M., 2010. Phosphorus and the gust of fresh air. Nature, 467: 1052-1053.
- 64. Filippelli, G.M.# and Laidlaw, M.A.S.\*, 2010. The Elephant in the Playground: Confronting lead-contaminated soils as an important source of lead burdens to urban populations. *Perspectives in Biology and Medicine*, 53: 31-45.

- Nelson, J.A.\*#, Licht, K., Yansa, C., and Filippelli, G.M., 2010. Climate-related cyclic deposition of carbonate and organic matter in Holocene lacustrine sediment, Lower Michigan, USA. *Journal of Paleolimnology*, 44: 1-13; doi:10.1007/s10933-009-9381-0.
- 62. Pandit, C.\*, Filippelli, G.M., and Li, L.#, 2010. An estimation of heavy metal concentration in soils using reflectance spectroscopy and partial least squares regression. *International Journal of Remote Sensing*, 31: 4111-4123, doi:10.1080/01431160903229200.
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Security clearance (Top Secret); United States Government. Valid until August 2024.

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FILIPPELLI, G.M., 1997. Monsoonal circulation and chemical weathering in the late Miocene. Seventh Annual V.M. Goldschmidt Conference, Lunar and Planetary Institute, Houston: 71.

FILIPPELLI, G.M., L. Tedesco, A. Barth, D. Clark, J. Carnahan, B. Belt, V. Hernly, J. Latimer, M. Laidlaw, B. Pace, D. Zbieskowski, M. Corbin, S. Belt, 1997. Lake sedimentation and climate in Southern California through the Holocene: Dry Lake, San Bernardino Mountains. *Eos (abs.)*, **78 (17)**: S171.

Carnahan, J.W., and FILIPPELLI, G.M., 1997. Germanium/silicon in freshwater diatoms as an indicator of past chemical weathering intensities. *Eos (abs.)*, **78 (17)**: S193.

Latimer, J.C., and FILIPPELLI, G.M., 1997. Phosphorus and iron sedimentation in the Southern Ocean on Glacial/Interglacial time scales. *Eos (abs.)*, **78 (17)**: S191.

Belt, B.W., Jr., FILIPPELLI, G.M., Barth, A.P., and Carnahan, J.W., 1997. Water chemistry and weathering: A comparative study of granitic and metamorphic catchment lithologies. *Eos (abs.)*, **78 (17)**: S155.

Rickabaugh, T.A, Tedesco, L.P., Savarese, M., and FILIPPELLI, G.M., 1997. Distribution of trace elements in sediments of Rookery Bay National Estuarine Research Reserve (RBNERR), Southwest Florida. *National Estuarine Research Foundation Meeting*.

FILIPPELLI, G.M., Duncan, A., and Cowie, G., 1996. Carbon and phosphorus cycling in continental margin sediments of the Arabian Sea. *Eos (abs.)*, **77 (17)**: S149.

FILIPPELLI, G.M., 1996. The Asian monsoon hypothesis: Uplift, weathering, and a nutrient pulse event to the oceans in the late Miocene. *IGCP 325*, Strasbourg, France.

Duncan, A., FILIPPELLI, G.M., and Cowie, G., 1996. Effects of oxygenation on Corg:Porg sedimentation on the Arabian Sea continental margin. *Eos (abs.)*, **77 (46)**: F287.

FILIPPELLI, G.M., 1995. A late Miocene weathering event: evidence from oceanic geochemical records and implications for global cooling. *GSA Abstracts with Programs*, **26**: A237.

FILIPPELLI, G.M., Zins, S.P., Latimer, J.C., and Ravelo, A.C., 1995. Nutrient weathering from continents on glacial/interglacial timescales: oceanic and lacustrine records. *International Conference on Paleoceanography V Meeting*, Nova Scotia, Canada. p. 91

FILIPPELLI, G.M., 1995. Assessing the future impacts of nutrient release from agricultural runoff on ocean productivity. *SEPM Congress on Sedimentary Geology*, St. Petersburg, FL. p. 53

FILIPPELLI, G.M., and Ravelo, A.C., 1995. Sea level, phosphorites, and the phosphorus cycle. *SEPM Congress on Sedimentary Geology*, St. Petersburg, FL. p. 53

FILIPPELLI, G.M., and Ravelo, A.C., 1995. Glacial/Interglacial cycles, phosphorus sedimentation in the ocean, and continental weathering. *MESH Workshop*, Corvallis, OR. p. 17

FILIPPELLI, G.M., 1994. Iron-phosphorus scavenging events: Distant effects of east Pacific Rise hydrothermal activity during the Neogene. *GSA Abstracts with Programs*, **26** (7): A424.

Sloan, L.C., FILIPPELLI, G.M., and Bluth, G. J., 1994. Quantifying continental weathering rates during the Eocene. *GSA Abstracts with Programs*, **26** (7): A421 (INVITED).

FILIPPELLI, G.M., and Delaney, M.L., 1994. Cenozoic weathering input trends of phosphorus to the ocean may not be as expected based on other geochemical proxies: Evidence from equatorial Pacific sediments. *Eos (abs.)*, **75 (3)**: OS97 (INVITED).

Levin, A.L., FILIPPELLI, G.M., Delaney, M.L., and Ravelo, A.C., 1994. Glacial/Interglacial variations in phosphorus accumulation rates in equatorial Pacific sediments. *Eos (abs.)*, **75 (3)**: OS111.

FILIPPELLI, G.M., and Delaney, M.L., 1993. Phosphorus geochemistry of equatorial Pacific sediments. *GSA Abstracts with Programs*, **25** (6): A200.

FILIPPELLI, G.M., 1993. Oceanic phosphorus geochemistry and accumulation: Implications for the marine phosphorus cycle through the Cenozoic. *Dissertations Symposium on Chemical Oceanography, XI*, Honolulu, Hawaii, p. 12-14 (INVITED).

FILIPPELLI, G.M., and Delaney, M.L., 1992. Phosphorus accumulation rates during the Cenozoic: The eastern (ODP Leg 138) and western (ODP Leg 130) equatorial Pacific. *Eos (abs.)*, **73 (43)**: F260.

FILIPPELLI, G.M., and Delaney, M.L., 1992. Phosphorus accumulation rates in the eastern equatorial Pacific from Miocene to present: Results from Sites 844, 846, and 851, ODP Leg 138. *International Conference of Paleoceanography, IV*, Kiel, Germany, p. 111-112.

FILIPPELLI, G.M., and Delaney, M.L., 1992. Phosphorus diagenesis and burial rates in a Miocene anoxic basin: the Monterey Formation at Shell Beach, California. *Eos (abs.)*, **72 (51)**: F54.

FILIPPELLI, G.M., and Delaney, M.L., 1992. Phosphorite giant deposition is not geochemically surprising after all. *International Geological Congress, 29*, Kyoto, Japan, p. 56. Also presented at AGU/ASLO 1992 Ocean Sciences Meeting, New Orleans, LA.

FILIPPELLI, G.M., and Delaney, M.L., 1991. Phosphorus accumulation rate changes in the Miocene Monterey Formation, Shell Beach, California. *SEPM Theme Meeting, Continental Margins: Sedimentation, Tectonics, Eustacy, and Climate*, p. 10.

# **EDITORIAL POSITIONS**

Editor-in-Chief, GeoHealth, 2017-present

Associate Editor, Geochemical Journal, 2014 – present.

Associate Editor, Applied Geochemistry, 2004 – present.

*Guest Editor*, **International Journal of Environmental Research in Public Health**, Special Issue: "Urban Geochemistry and Human Health" Publication 2018

*Guest Editor*, **Deep Sea Research II**, Special Issue: "Paleoceanography and Paleoclimatology of the Southern Ocean: A Synthesis." Publication 2007.

*Guest Editor*, **Deep Sea Research II**, Special Issue: "Authigenic Mineral Formation in the Marine Environment: Pathways, Processes and Products." Publication 2007.

Editorial Board, Geology, 1999-2001.

*Guest Editor*, **Marine Geology**, Special Issue: "Phosphorus cycling and sedimentation in marine and freshwater systems." Vol. 139/1-4, 1997.

# ADVISORY AND REVIEW PANEL POSITIONS

Jefferson Science Fellow external review team, National Academy of Sciences (2014, 2015, 2016) Siemens Science Prize panel member (2014, 2015)

JR Facilities Board Science member (2013)

National Science Foundation, panel member, Ocean Sciences Division (2013).

Awards Committee Member, Geology and Health Division of the Geological Society of America. 2012-2014

Gulf of Mexico Research Initiative Review Panel (2012)

National Science Foundation, Panel Member, Ocean Sciences Division (2011).

US EPA STAR Fellowship Review Panel (Feb. 2011)

Science Planning Committee, Integrated Ocean Drilling Program. 2006-2009. Vice-Chair, 2007-2009, Chair 2009-2011.

EarthChem Advisory Board, National Science Foundation. 2007-2010.

- Advisory Panel member, GeoHealth I: Building Bridges across the Geological and Health Sciences. Reston, VA March 2008.
- Steering Committee, Indiana Environmental Summit (2007, 2009, 2011).

National Science Foundation, Panel Member, Ocean Sciences Division (2005).

US Advisory Committee for Scientific Ocean Drilling (USAC). 2002-2006.

Science Steering and Evaluation Panel, Integrated Ocean Drilling Program. 2001-2004.

- Technical Advisory Panel, National Ocean Sciences Bowl, Consortium for Ocean Research and Education (CORE), 2000-2004.
- Geoscience Panel Chair, National Defense Science and Engineering Graduate Fellowship competition, Washington, DC. 2000-2003.

#### **GRADUATE STUDENTS SUPERVISED**

- Austin Stanforth, PhD 2016. *Application of Geospatial Analysis Techniques for Public Health*. Indiana University.
- Richard Thomas, MS 2014. *Geochemical Impact of Super-critical CO*<sub>2</sub> into St. Peter Sandstone within the Illinois Basin: Implications for Storage Capability in a Carbon Dioxide Sequestration System. Indiana University.
- Julie Crewe, MS 2012. Analysis of mercury concentrations in Indiana soils to evaluate patterns of long-term atmospheric mercury deposition. Indiana University.
- James Brice Mabry, MS 2011. *The impact of glaciations and climate change on biogeochemical cycling and landscape development.* Indiana University.
- Deborah Morrison, MS 2011. Block-level relationships between lead sources and blood lead levels in an urban center: Indianapolis, Indiana. Indiana University.
- Angela Robertson, MS 2011. Evaluation of the eastern equatorial Pacific's productivity over Glacial timescales via two geochemical proxies and its relation to the modern ocean's productivity. Indiana University.
- Carrie Hatcher, MS 2009. *Mercury distribution in soils and stream sediments of central Indiana, USA*. Indiana University.
- Sarah Hale, MS 2008. *Paleoproductivity variations in the eastern central equatorial Pacific Ocean on glacial timescales*. Indiana University.
- Cheryl Nazareth, MS 2008. Invasive species and panne ecosystems: The effects of atmospheric pollution. Indiana University.
- Robyn Raftis, MS 2007. *Internal cycling of phosphorus in an urban drinking water reservoir*. Indiana University.
- Kimberly Null, MS 2005. Sediment Geochemistry across six sediment facies from ODP Site 893, Santa Barbara Basin, California. Indiana University.
- Jennifer Latimer, Ph.D., 2004. *Paleo-export production and terrigenous sedimentation in the Southern Ocean*. Indiana University.
- Sara Slater-Atwater, MS 2004. The effects of climate and weathering on terrestrial phosphorus cycling in an alpine system: Coast Mountains, British Columbia. Indiana University.

Rosalice Haberman Buehrer, MS 2003. *Sulfur and carbon in granitic rocks: Analytical techniques for quantitative analysis and implications for the volatile content of magmas.* Indiana University (co-advised with Andrew Barth).

Mark Laidlaw, MS 2001. *Distribution and sources of metals in soils of Marion County, Indiana*. Indiana University.

- Nancy Dollar, MS 2000. Chemical fractionation of metals in wetland sediments: Indiana Dunes National Lakeshore. Indiana University.
- Lynette de Silva, MS 2000. Is there strong evidence supporting natural attenuation of chlorinated solvents at the Uniontown Landfill? Indiana University.
- Jennifer Latimer, MS 1998. Dust inputs and biogeochemical cycling in the Southern Ocean on glacial/interglacial time scales. Indiana University.
- Jeffrey Carnahan, MS 1998. Determination of germanium/silicon in freshwater diatoms: Separation, cleaning, dissolution and analysis of biogenic opal from an alpine lake sediment core. Indiana University.
- Steven Perkins, MS 1998. Trace metal contamination of wetland sediments at Indiana Dunes National Lakeshore, Indiana. Indiana University.
- Michael Yarling, MS 1996. The occurrence and origin of sulfates in a sand gravel aquifer system near Fort Wayne, Indiana. Indiana University.
- Stephen Zins, M.S. 1995. *Phosphorus accumulations rates in a midwestern lake from the last glacial maximum*. Indiana University.

Amber Rollings, PhD student Matthew Smart, PhD candidate Asrah Heintzelman, PhD candidate Leah Wood, PhD candidate Isheka Orr, MS student

#### **MASTER'S OF PUBLIC HEALTH PRECEPTOR**

Deborah Morrison (MPH, 2006) Holly Heindselman (MPH, 2011) Indra Frank (MPH, 2011) Maya Dos (MPH, 2012)

#### **GRADUATE STUDENT COMMITTEES**

Vincent Hernly, MS 1997 Steven Reuter, MS 1997 David Grow, MS 1998 Toby Rickabaugh, MS 1999 Adam Boettner, MS 2000 Mathew Dagon, MS 2001 Dorothea Richardson, MS 2004 Chad Pigg, MS 2004 Brian Vermillion, PhD candidate, University of Illinois, Urbana-Champaign Emerson Palmer, MS 2007 Kristin Hellem-Hughes, MS 2007 Baojuan Zheng, MS 2008 Tamara McPeek, MS 2008 (Biology) Sarah Needy, MS 2010 Jennifer Roell, MS 2010 Andreas Borchers, PhD 2015, University of Potsdam, Germany S. Kjaer, PhD 2014, University of Copenhagen Ryan Sullivan, MS 2014, Indiana University Shiva Laden, PhD 2016 Emmanuel Obang-Gyasi, PhD 2018, Indiana University Evelyn Becerra, MS candidate Martin Kurek, MS candidate

## UNDERGRADUATE SENIOR THESES SUPERVISED

Lauren Kuss, BS 2013. Lead concentrations in soil: Remnants of an industrial boom.

- Julie Crewe, BS 2008. Mercury deposition patterns in central Indiana (funded by the Multidisciplinary Undergraduate Research Initiative).
- Tamara McPeek, BS 2005. Microbial biomass accumulation during soil development in Iceland. (funded by Undergraduate Research Opportunity Program)
- Robyn Atkins, BS 2001. A comparison of lead concentration in soils along two roadways in Marion County, Indianapolis, Indiana (funded by Undergraduate Research Opportunity Program)
- David Glomski, BS 1999. Bulk density and organic carbon content of Luther Pass Bog sediments.
- Billy Belt, BS 1998. Water chemistry and weathering: A comparative study of granitic and metamorphic lithologies (funded by Undergraduate Research Opportunity Program)
- Lariann Rowe, BS 1998. Organic carbon content and sedimentation rate in anoxic sediments during the latest Pleistocene and Holocene: Saanich Inlet, British Columbia.
- Robert Schmidt, BS 1996. Chemical analysis of ground water in central Indiana (funded by Undergraduate Research Opportunity Program)

## PROPOSING AND CHAIRING SESSIONS AT NATIONAL MEETINGS:

American Geophysical Union (1994, 1997, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2010, 2016, 2018, 2019) Geological Society of America (1996, 1999); Pardee Symposium Chair (2006) V.M. Goldschmidt Conference (2013, 2014, 2017, 2020) GEOMED (2013) Ocean Research Conference, ASLO/TOS (1994, 2004)

#### **JOURNAL REVIEWING:**

Aquatic Geochemistry (1997, 1998, 2004) American Journal of Preventative Medicine (2020) American Journal of Science (1998, 1999) American Mineralogist (2016)

Anthropocene (2013) Arctic, Antarctic, and Alpine Research (2002, 2005) Applied Geochemistry (multiple as AE; 2003-2017, 2017x2) Biogeosciences (2006, 2010, 2012; 2013, 2021x2) Boreas (2009) Chemical Geology (1998; 2006x2; 2013) Chemosphere (2006, 2013, 2020) City and Environment Interactions (2020) Continental Shelf Research (1995, 2003) Coral Reefs (2005) Deep Sea Research (2003, 2006x4, 2016) Earth and Planetary Science Letters (2006, 2007) Earth Science Reviews (2020x2) Ecological Society of America (2002) Elementa (2017) Elements (2014) Environment International (2021) Environmental Geochemistry & Health (2009, 2012, 2013, 2018)Environmental Health Perspectives (2013) Environmental Justice (2021) Environmental Pollution (2011, 2013, 2015, 2019, 2020) Environmental Science & Technology (2007, 2011, 2013, 2016, 2017, 2020, 2021) Environmental Science: Process & Impacts (2015)Geobiology (2012) Geochemical Journal (2016, 2017) Geochemical Transactions (2012, 2014, 2017) Geochemistry, Geophysics, Geosystems (2006; 2015)Geochimica Cosmochimica Acta (2001, 2002, 2003x2, 2004x2, 2005x3, 2006, 2012; 2013, 2019, 2020x2) GeoHealth (2017; multiple as EiC) Geological Society of America Monographs (2014)Geological Society of America Bulletin (2014, 2018)Geology (1994, 1995, 1999x2, 2000x3, 2001x2, 2002, 2003, 2005, 2009x2, 2010; 2014, 2015, 2016, 2020) Geophysical Research Letters (2003, 2006, 2014, 2018x2, 2021)

Global and Planetary Change (1998, 2000, 2012) Global Biogeochemical Cycles (2007, 2009, 2011, 2012, 2013, 2014, 2015, 2017) Global Change Biology (2000) Global Environmental Change (2011, 2012) International Journal of Environmental Research in Public Health (2014. 2018) Jour. of Environmental Quality (2002, 2006x2, 2011, 2012) Jour. of Environmental Pollution (2013) Jour. Geochemical Exploration (2014) Jour. of Geological Education (2001, 2004) Jour. of Geology (2007) Jour. of Geophysical Research-Earth Surface (2003)Jour. of Geophysical Research-Atmospheres (2015)Jour. of Geophysical Research-**Biogeosciences** (2020) Jour. of Gerontology-Medical Sciences (2011)Jour. of Great Lakes Research (2002) Jour. of Sedimentary Research (1998, 1999, 2004, 2018) Limnology and Oceanography (1996, 2004, 2008) Marine Chemistry (2005, 2008) Marine Geology (1994, 1996, 1997, 2001) Marine Micropaleontology (2009) Nature (2002, 2003, 2004, 2009, 2010) Nature Geoscience (2008, 2012) Nature Communications (2013x2, 2017, 2020x2) Nutrition and Dietary Supplements (2011) Oceanography (2012, 2014, 2020) Ocean Drilling Program (1996, 2003) Paleobiology (2008) Paleoceanography (1995, 1997, 1999, 2000, 2001x2, 2002x2, 2003, 2004, 2005, 2006, 2008x2, 2010, 2012x2, 2015x4) Paleogeography, Paleoclimatology, Paleoecology (2004x3, 2005, 2006)

Philosophical Transactions of the Royal Society B: Biological Sciences (2012)
PLOS One (2015, 2018, 2019)
Proceedings of the National Academy of Sciences (2020)
Quaternary Research (2009, 2010, 2011)
Quaternary Science Reviews (2017)
Remote Sensing (2018)
Risk Analysis (2012) Science (1995, 2003, 2005, 2014) Science of the Total Environment (2014) Scientific Reports-Nature Publishing Group (2016x2) Sedimentology (2006, 2012) Soil and Sediment Contamination (2007) Terra Nova (2011) United States Geological Survey (2010) Water Resources Research (2005x2)

## **BOOK REVIEWS:**

For *Soil Science Society of America Journal*: Soils and Human Health, 2013, Brevik and Burgess (Eds.), CRC Press (Taylor and Francis Group), 391 pp.

For *Palaios*: From Greenhouse to Icehouse: The Marine Eocene-Oligocene Transition, 2003, Prothero, Ivany, Nesbitt (Eds.), Columbia University Press, 541 pp.

## **PROPOSAL REVIEWING:**

National Science Foundation (Chemical Oceanography, Marine Geology and Geophysics, Geology and Paleontology, CAREER, Earth System History, Polar Programs, Instrumentation, Hydrologic Sciences, Ocean Drilling Program) (1994-present) U.S. Environmental Protection Agency (2001-present) American Chemical Society Petroleum Research Fund (1996-present) JOI/USSAC - Ocean Drilling Program (1997, 2001-present) National Academy of Sciences Fellowships program (2014-present) Swiss National Science Foundation (1999) Israel National Science Foundation (2000) NERC (2014, 2017, 2018) National Oceanographic and Atmospheric Administration (2000, 2002) National Geographic Society (2000) Baker Fund, Ohio University (2010) Netherlands National Science Foundation (2012) International Ocean Discovery Program (2013) SERDP-Department of Defense (2013) Estonian Science Foundation (2013, 2014) Romanian Science Foundation (2014)

Typically review 15 proposals/year

## **Review Panel Activities:**

Siemens Science Fair Reviewer and Panel judge, October 2015. External Review Panel, Gulf of Mexico Research Initiative (GoMRI). 2015 Clinical Translational Research review panel. Indiana CTSI, July 2015. Siemens Science Fair. Reviewed 118 Environmental submissions, October 2014. Clinical Translational Research review panel. Indiana CTSI, July 2013.

- IODP Topical Review Team. Climate Change Advances and Opportunities from Ocean Drilling Science, August 2007, Bremen, Germany
- Geoscience Panel, National Defense Science and Engineering Graduate Fellowship competition, 2000, 2001, 2003, Washington, DC.

Science Steering and Evaluation Panel, Integrated Ocean Drilling Program. 2001-2003.

United States Science Advisory Committee, Joint Oceanographic Institutions, Inc. 2002-2005.

External Reviewer of "Ecological Impacts of Climate Change in the North American Great Lakes Region," a report prepared for the Ecological Society of America and the Union of Concerned Scientists (2002)

## **Other Professional Service and Positions:**

External Dissertation committee member, Department of Earth, Ocean and Atmospheric Sciences, University of British Columbia (2021) External Dissertation committee member, Department of Geology and Environmental Earth Science, Miami University, Ohio (2021) Midwest Climate Summit 2020, Science & Research Subcommittee External Dissertation committee member, School of Public Health, Indiana University, Bloomington (2020) External Dissertation committee member, School of Public Health, Indiana University, Bloomington (2019) Nominator, AGU Fellow. Awarded to Rita Colwell (2020) Science Committee, Goldschmidt Meeting, Honolulu 2020 (2018-present) Nominator, AGU Science for Solutions award. Awarded to Franziska Landes (2019) Nominator, Faculty member, AGU Macelwane Young Scientist Medal (2017, 2018) Academic Advisor, Youth Power Indiana (2015-present) Nominator, Dr. Christian Maerz, Philip Leverhulme Prize, The Leverhulme Trust (2015) Symposium Mentor, Marine Geosciences Leadership Symposium (2015) Member, Region V Advisory Committee, Region V Great Lakes Public Health Training Collaborative (2015-present) Member, Learning and Leadership Collaborative, Riley Children's Hospital Cystic Fibrosis Center (2012 - 2015)Board Member, The da Vinci Pursuit (2013-2014) Member, Reconnecting to our Waterways Steering Committee (2011-present) Member, Riley Children's Hospital Family Advisory Board, Cystic Fibrosis Center (2011-16) External Program Reviewer, Indiana State University Department of Geology and Environmental Sciences Program (February, 2013) Program Reviewer, IUPUI Department of Psychology (October, 2012) Expert External Review Team member, US EPA "Lead Integrated Science Assessment" (December, 2010). External Program Reviewer, Wayne State University Department of Geology and Environmental Sciences Program (November, 2009) Program Committee member, Geological Society of America, Geology and Health Division (2005-2008)Nominator, Oceanography Society Fellow. Awarded to Margaret L. Delaney (2006)

- Awards Chair and Organizing Committee, American Associate of Petroleum Geologists Sectional Meetings in Indianapolis (1999).
- Technical Program Chair and Organizing Committee, Geological Society of America North Central Section Meeting 2000 (1999-2000).

## **INVITED RESEARCH SEMINARS**

- 2021 Department of Earth, Planetary and Space Sciences, University of California, Los Angeles
  Department of Earth and Environmental Sciences, Vanderbilt University
  Chemical Toxicants in Water: A GeoHealth Perspective in the Context of Climate Change, (Keynote Speaker), hosted by Northern Arizona University
  Goldschmidt Conference (Medalist, Keynote Speaker)
  Goldschmidt Conference (Invited Speaker)
- 2020 Department of Earth, Environmental, and Planetary Sciences, Brown University
   Department of Earth and Ocean Sciences, Duke University
   Department of Earth and Environmental Sciences, University of Pennsylvania
   Department of Sustainability, DePauw University
   Environmental Resilience Institute, Indiana University
- 2019 School of Public and Environmental Affairs, IU Bloomington Department of Public Health, Purdue University Department of Earth and Atmospheric Sciences, IU Bloomington Institute of Geology and Geophysics, Chinese Academy of Sciences, Beijing Beijing Forum, Peking University, Beijing Indivisible Indiana and the Sierra Club Dadabhoy Institute of Higher Education, Karachi Environmental Protection Agency, Karachi, Pakistan COMSATS University, School of Engineering, Lahore N.E.D. University, Karachi Pakistan Inter-University Consortium National Assembly, Lahore COMSATS University, Center for Climate Change, Research, and Development. Islamabad Pakistan Institute of Parliamentary Services, Islamabad National Institute of Health, Pakistan

12/22/2021

US Embassy, Islamabad, Pakistan

"PUAN Talks" Panel Discussion, Islamabad

- 2018 University of Delaware, College of Earth, Ocean, and Environment University of Notre Dame, Department of Geological Sciences
  Guangzhou University, Program in Environmental Geosciences, China Sun Yat Sen University, School of Geological Sciences, China Tsinghua University, School of Environmental Health, China Professional Geologists of Indiana Earth Charter Indiana Macquarie University, Department of Environmental Sciences, Australia
- 2017 University of Notre Dame, Eck Institute for Global Health and Environmental Change Columbia University, Department of Geochemistry Barnard College, Department of Public Health University of California, Berkeley, Berkeley Initiative on Global Change Biology, and Ecology Brown Bag series National Institutes of Health, Global Environmental Health, Research Triangle Park, North Carolina Environment, Energy & Natural Resources Law Symposium "Protecting the Urban Environment", IU McKinney School of Law Kurt Vonnegut Museum and Library, Common Decency in Science Panel Richard G. Lugar Center for Renewable Energy Spring Forum, Energy, Environment, and Economics, the ThrEEEs Ball State University, Dept. of Geological Sciences 2016 Willeke Distinguished Lecture, Institute for the Environment and Sustainability, Miami
  - University, Ohio

Miami University, Ohio, Department of Geology & Environmental Earth Sciences

Lyceum Lecture, Western Michigan University

Climate Leadership Summit, Indianapolis (Keynote)

**Butler University** 

2015 Indiana Geologists Scientech Club University of Akron Environmental Health and Healthy Homes Conference (Plenary)

- 2014 Namibian Science Society, Windhoek
   Jefferson Science Fellow Distinguished Lecture, U.S. Department of State
   Rivers of the Anthropocene, Indiana University
   International Association of Geochemists, Columbus, Ohio
   Macalester College, Department of Earth and Environmental Sciences
- 2013 Science on Tap, Indianapolis Urbanization and Health Working Group, U.S. Department of State
- 2012 Georgia State University
  National Council on Science and the Environment, Washington, DC
  Indiana University, Bloomington, Department of Geography
  American Geophysical Union Lecture, National Conference on Science Education
  Indiana Council on World Affairs
  The Culver Academies
  International Conference on Phosphorus Chemistry (Plenary Speaker)
  Greening the Statehouse Forum, Indianapolis
- 2011 Pennsylvania State University, Department of Geosciences Endurance Lecture Series, Indiana State Museum Third Indiana Environmental Summit
- 2010 The University of Chicago, Department of Geophysical Sciences
   Brown University, Department of Earth and Planetary Sciences
   IUPUI Dean's Day Seminar
   Indiana Historical Society, Climate Impacts Town Hall
- 2009 Aspen Global Change Institute
- 2008 University of Salamanca (Spain), Department of Geology

IUPUI Dean's Day Highlight talk IUPUI Department of Earth Sciences IU School of Medicine Center for Environmental Health

- 2007 Duke University, Division of Earth and Ocean Sciences
   Indiana State University, Department of Environmental Sciences
   IUPUI Cutting Edge Lecture Series
   Indiana Council on World Affairs
   Indiana Geologists
- Bowling Green State University, Department of Geology
  California State University East Bay, Department of Geological Sciences
  Keene State College, Department of Geology
  Albany State College, School of Natural Sciences
  Savannah State University, Department of Natural Sciences
  Indiana University, Bloomington, Department of Geological Sciences
  University of Dayton, School of Natural Sciences
  Indiana University School of Medicine, Department of Public Health
  IUPUI, Department of Chemistry and Chemical Biology
- 2005 University of Illinois, Chicago, Department of Geological and Environmental Sciences University of Chicago, Department of the Geophysical Sciences
  University of Chicago, Environmental Studies Program
  Texas A&M University, Department of Oceanography
  University of Texas, Arlington, Department of Geology
  University of Texas, Dallas, Department of Geosciences
  Boston University, Department of Earth Sciences
  Kent State University, Department of Geology
  Muskingum College, Department of Geology
- 2004 Indiana University School of Medicine, Department of Public Health Northern Illinois University, Department of Geological Sciences

- 2003 The Ohio State University, Department of Geology
   Distinguished Five College Lecturer in Geosciences, Williams College
   University of Cincinnati, Department of Geology
   Miami University, Ohio, Department of Geology
   University of Illinois, Urbana Champaign, Department of Geological Sciences
- 2002 University of Salamanca (Spain), Department of Geology
   Mineralogical Society of America Workshop Speaker: Phosphate Minerals, Denver, CO
   IUPUI Alumni Association colloquium: Heavy Metal Madness.
- 2001 Ball State University, Department of Geology
- 2000 Western Michigan University, Department of Geology
- 1999 University of Minnesota, Large Lakes Observatory Indiana State University, Department of Chemistry IUPUI, Department of Physics
- 1998 Miami University, Ohio, Department of GeologyUniversity of South Florida, Department of Marine Sciences
- 1997 University of Tennessee, Knoxville, Department of Geological Sciences
   University of Illinois, Urbana-Champaign, Dept. of Natural Resources and Environ. Sciences
- 1996 Indiana University, Bloomington, Department of Geological Sciences
- 1995 University of Cincinnati, Department of Geology
- 1994 University of Missouri, Columbia, Department of Geological Sciences Indiana Geologists, Indianapolis

#### SOCIETY AFFILIATIONS

American Geophysical Union
Geochemical Society
Geological Society of America

Indiana Academy of Sciences The Oceanography Society Sigma Xi, The Scientific Research Society

# **ADDITIONAL APPOINTMENTS**

Director, IUPUI Center for Urban Health (July 2010—present)
Adjunct Professor of Global Health, Richard G. Fairbanks School of Public Health, IUPUI
Member, Protocol Development Team (Urban and Community Health), Indiana Clinical Translational Science Institute (July 2011-present)
Member, Policy, Economics and Law Working Group, Richard G. Lugar Center for Renewable Energy, IUPUI (2010-present)
Chairman, Department of Earth Sciences (July, 2003 – July 2010)
Core Faculty Member, IU Center for Environmental Health (2005-2010).
Full Member, IU Graduate Faculty (2001-present).

# **UNIVERSITY SERVICE**

Departmental

Departmental Colloquium Coordinator (1996-2004) CEES Executive Committee (1996-2004) Search and Screen Committees (1996, 1998, 1999, 2000, 2003. 2004; 2007; 2008; 2010; 2011; 2014) Applied Earth Sciences PhD Program Chair (2004-2014) Director, BS Environmental Sciences program (2012-present)

School

Urban Health and Wellbeing Grand Challenge Steering Committee Member (2014-present) Awards and Nominations Committee (2014-present) Chair, Department of Earth Sciences (2003-2010) Unit Committee (2004-7; 2011-12; 2014-15; 2017-18) Forensic Chemistry Search and Screen Committee (2006-2007) Strategic Planning Committee, Chair, Research and Graduate Education (2007) SOS Steering Committee (1998-2003; 2011-present) Search and Screen Committee, Director of Major Gifts (2003) Academic Appeals Committee (1997-8) Teaching Committee (1996-7) Science Apprentice Camp (1998, 1999) Chemistry Chair Review member, School of Science (2000) Dean Stocum Review member, School of Science (2000) Recruitment and Outreach Committee, School of Science (2000)

### University

Search and Screen Committee, Executive Vice President and Chancellor, IUPUI (2021-2022) Planetary Health Report Card, Faculty Advisor (2021-) Sustainable Development Goals Working Group member (2020-) Offshore Programs and International Affiliations Committee, Indiana University (2020-present) Search and Screen Committee, Vice Chancellor for International Affairs, IUPUI (2018-2020) Research Committee, Richard G. Fairbanks School of Public Health, IUPUI (2018-present) Curriculum Internationalization Advisory Committee (2017-2018) Environmental Resilience Institute, Senior Leadership Team member, Indiana University (2017present) Panelist, William M. Plater Institute on the Culture of Learning (November 2017) Program Review Committee member, IUPUI Department of Geography (October, 2016) IU Collaborative Research Grants Review Team member (2015) **IUPUI** Promotion and Tenure Committee (2014-15) Reviewer, BS/MS degree proposals, Graduate Affairs Committee, IU Graduate School (2012) Program Review Committee member, IUPUI Department of Psychology (October, 2012) IUPUI Faculty Council Nominating Committee (2011-2013) **IUPUI** Sustainability Steering Committee (2011-present) Search and Screen Committee, Department of Public Health, IU School of Medicine (2011-12) Search and Screen Committee, Department of Public Health, IU School of Medicine (2010-11) Search and Screen Committee, Director of the Richard G. Lugar Center for Renewable Energy, School of Engineering and Technology (2010-11) Executive Committee, IU Energy Institute (2010-present) Co-Chair, Environmental Issues section of IU Energy Workshop (2009) Search Committee for Dean, IU School of Public and Environmental Affairs (2007-8) **IUPUI** Promotion and Tenure Committee (2006-7) Search Committee for Dean, School of Science (2003-4) **IUPUI** Faculty Council (2001-3) Woodrow Wilson Foundation project: The Responsive Ph.D. (2001-2) Board of Trustees, University Faculty Club (2006-9) **IUPUI Bio-Hazard Committee (2001-2)** University Review Committee for Dean of School of Science (2001) Strategic Planning Committee for Graduate Education at IUPUI (2001) Science Olympiad Committee member and Event Coordinator (1999) Public Health Program Committee (1997-present) Science Olympiad Event Coordinator (1995)

# COMMUNITY SERVICE AND PUBLIC OUTREACH

### 2021

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https://www.indystar.com/story/news/environment/2021/08/25/indianapolis-weather-signs-of-heat-stroke-symptoms-index-exhaustion/8254308002/

#### Interview

https://www.wrtv.com/weather/changing-climate-could-lead-to-more-extreme-weather

#### Interview

https://wpta21.com/2021/08/19/digging-deeper-climate-matters/

https://www.usatoday.com/story/money/reviewed/2021/08/16/what-know-n-95-masks-and-respirators-protecting-against-wildfire-smoke-smog/8121603002/

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https://pakusalumninetwork.org/voices-of-the-climate-crisis/

### Article Source

https://www.forbes.com/sites/marshallshepherd/2021/08/08/wearing-masks-undermines-thevaccine-narrative-highlights-a-key-science-literacy-challenge/?sh=14b9edd063e7

## Article Source

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### Article Source

https://www.freep.com/story/news/investigations/2021/08/10/hundreds-u-s-cities-already-adopted-climate-plans-what-happened/5541049001/

### Article Source

https://www.indystar.com/story/news/environment/2021/07/13/fireworks-smoke-laced-toxinscan-have-impact-your-health/7912908002/

### Article Source

https://www.indystar.com/story/news/environment/2021/06/15/lead-testing-indianapolis-offerediupui-church-communities/7619564002/

### Article Source

https://www.heraldtimesonline.com/story/news/2021/07/03/natural-disaster-weather-climate-change-flood-rain-infrastructure-cities-politics/7842894002/

### Article Source

https://www.indianaenvironmentalreporter.org/posts/new-law-restricts-local-governments-ability-to-address-climate-change

Medical Geology Workshop, GSA

Early Career Publication workshop, Goldschmidt

#### First Paper Editor Roundtable, AGU

Editor Roundtable, increasing impacts, AGU

Wiley Science talks

ERI Symposium—COVID and Climate Change

SDP Panel

Article Source https://www.greenbiz.com/gabriel-filippelli

Article Source <a href="https://news.nau.edu/cher-virtual-workshop/#.YNyFfBNKg0o">https://news.nau.edu/cher-virtual-workshop/#.YNyFfBNKg0o</a>

Interview

https://www.wthr.com/article/news/local/churches-iupui-indianapolis-home-lead-testing/531a7df67a2-06a3-47e4-bcbd-a61397fcc591

Article Source

https://bsquarebulletin.com/2021/06/24/climate-scientist-on-last-weekends-bloomington-rain-its-not-like-this-was-an-absolute-fluke/

Profile

https://news.iu.edu/stories/2021/05/iupui/inside/05-filippelli-goodspeed-chadwick-named-chancellorsprofessors.html

#### Article Source

https://www.usatoday.com/restricted/?return=https%3A%2F%2Fwww.usatoday.com%2Findepth%2Fnews%2Fhealth%2F2021%2F06%2F13%2Fbiden-plan-eliminate-lead-pipes-highlightslingering-toxic-problem%2F4977615001%2F

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https://www.indystar.com/get-

access/?return=https%3A%2F%2Fwww.indystar.com%2Fstory%2Fopinion%2F2021%2F01%2F12%2Fop-ed-indianas-drinking-water-faces-flint-like-risk%2F4064026001%2F

Article Source

https://research.nd.edu/news/notre-dame-iupui-to-provide-free-home-lead-screening-kits-to-marionand-vigo-counties/

### Profile

https://www.insideindianabusiness.com/story/43777675/iu-appoints-environmental-change-initiativeleaders

Article Source <u>https://www.ecowatch.com/epa-secret-science-rule-health-2649767248.html</u> Article Source <u>https://www.indianaenvironmentalreporter.org/posts/biden-infrastructure-plan-includes-45-billion-to-replace-nations-lead-pipes-sewer-lines</u>

Indiana University Environmental Resilience Institute podcast host In This Climate <a href="https://climatepodcast.indiana.edu/">https://climatepodcast.indiana.edu/</a>

# 2020

Provided testimony for "Environmental Injustice: Lead Poisoning in Indiana-A Report of the Indiana Advisory Committee to the U.S. Commission on Civil Rights" https://www.usccr.gov/files/2020-11-12-Report-Lead-Poisoning-in-Indiana.pdf

Article Source, The National News, "The 2020s could be the world's last chance to halt climate change." <u>https://www.thenationalnews.com/world/the-2020s-could-be-the-world-s-last-chance-to-halt-climate-change-1.957901</u>

Article Source, Durango Herald, "La Plate County targets gun range contamination" <u>https://durangoherald.com/articles/350255-la-plata-county-targets-gun-range-contamination</u>

Article Source, C&E News, "Consumer Safety: Rise is quats observed during coronavirus crisis" <u>https://pubs.acs.org/doi/full/10.1021/cen-09835-scicon7</u>

Article Source, MedIndia:

https://www.medindia.net/news/cleaning-products-used-to-stop-the-spread-of-covid-may-be-harmful-on-their-own-197163-1.htm

Article Source, Chicago Tribune:

https://www.chicagotribune.com/suburbs/post-tribune/ct-ptb-ozone-lake-winds-st-0831-20200828-h5f5csjjrbe2bonxtubuy3fwn4-story.html

Article Source, WDBJ media:

https://www.wdbj7.com/2020/08/25/smoke-from-the-california-wildfires-has-made-its-way-to-the-east-coast/

Article Source, Indianapolis Star:

https://www.indystar.com/story/news/environment/2020/07/30/ozone-action-days-do-not-dropthis-year/5409345002/

Article Source, Tribuna Noticias:

https://tribunanoticias.mx/microorganismos-elementos-que-acompanan-a-cada-persona-pese-ala-extrema-higiene/

Article Source, Indianapolis Star

https://www.indystar.com/story/news/environment/2020/01/10/digindy-tunnel-might-not-bigenough-keep-sewage-out-river/4181373002/

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Live TV Interview, BNN Bloomberg: <u>https://www.bnnbloomberg.ca/video/world-behind-the-eight-ball-amid-dire-climate-change-warnings-climate-expert~1841250</u>

Live TV Interview, CTV News: <u>https://vancouverisland.ctvnews.ca/video?clipId=1797527</u>

Article Source, The Guardian:

https://www.theguardian.com/world/2019/oct/17/g7-summit-2020-trump-climate-crisis

Live radio segment, All IN GMOs: <u>https://www.wfyi.org/programs/all-in/radio/GMOs-in-Indiana</u>

Featured Profile, Indianapolis Star: <u>https://www.indystar.com/in-depth/news/environment/2019/09/23/how-indystar-examined-white-river-indianapolis/2273043001/</u>

Live radio segment, All IN White River: https://www.wfyi.org/programs/all-in/radio/The-White-River

Article Source, Indianapolis Star: <u>https://www.indystar.com/get-</u> <u>access/?return=https%3A%2F%2Fwww.indystar.com%2Fstory%2Fnews%2F2019%2F04%2F2</u> <u>2%2Fsandorf-park-industrial-waste-leaves-future%2F2301418002%2F</u>

Live radio segment, All IN Spirit & Place Festival: https://www.wfyi.org/programs/all-in/radio/Spirit--Place-Festival

TV Interview, Indy Channel: <u>https://www.theindychannel.com/news/call-6-investigators/environmental-expert-chemical-levels-at-sandorf-park-a-major-concern-more-testing-needed</u>

Article Source:

https://www.idsnews.com/article/2019/05/indiana-leaders-on-climate-change-react-to-most-recent-federal-opposition

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https://www.newswise.com/articles/climate-expert-shares-perspective-on-us-political-polarizationaround-climate-change

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Keynote Speaker, Bartholomew County Indivisible and Sierra Club (March 7, 2019). "Climate change and public health." <u>https://www.bcindivisible.org/events.html</u>

Radio interview and podcast source, WBEZ Chicago (March 2, 2019). How do you find out if your neighborhood is contaminated with lead pollution?" <u>https://www.wbez.org/shows/curious-city/how-do-you-find-out-if-your-neighborhood-is-contaminated-with-lead-pollution/156e3042-56e4-425d-a6a8-a7345aed1c6e</u>

Article source, Medill Reports (March 3, 2019). "How can I test my soil for lead? Citizen science Q&A with Gabriel Filippelli." <u>https://news.medill.northwestern.edu/chicago/how-can-i-test-my-soil-for-lead-citizen-science-qa-with-gabriel-filippelli/</u>

Article source and TV Interview, News 5 Cleveland (February 12, 2019). "The Hidden Danger at Gun Ranges" <u>https://www.news5cleveland.com/the-hidden-danger-at-gun-ranges-5-on-your-side-investigation-shows-the-government-agency-thats-supposed-to-help-you-has-not</u>

Article Source, Mashable (Jan. 18, 2019). "Blame a wobbly polar vortex for why you're so damn cold." <u>https://mashable.com/article/polar-vortex-2019/?utm\_campaign=hp-h-3&utm\_source=internal&utm\_medium=onsite&fbclid=IwAR2aZRu-</u> Yy7UH2Ck3zwcG4sGzVO4UEhSnIh-1gThDbIVzmEdnUAdcK69biw#

Article Source, Indianapolis Star (Jan. 16, 2019). "Here's why our winter went from being mild and pleasant, to snowy." <u>https://www.indystar.com/get-</u> access/?return=https%3A%2F%2Fwww.indystar.com%2Fstory%2Fnews%2F2019%2F01%2F1 6%2Findianapolis-weather-why-winter-went-being-mild-snowy%2F2584949002%2F

TV Interview, WFYI (Dec. 29, 2018). "Courage, Brains, and Muscle: Our Environmental Champions." <u>https://www.wfyi.org/programs/courage-brains-and-muscle-our-environmental-champions/television/courage-brains-and-muscle-our-environmental-champions</u>

Letter to the Editor, Indianapolis Star (Nov. 28, 2018). "Political leaders must address climate change." <u>https://www.indystar.com/story/opinion/2018/11/28/letters-u-s-must-act-reduce-danger-climate-change/2114445002/</u>

Article Source, Indiana Daily Student. (November 11, 2018) "Mold is coming back to some rooms cleaned multiple times: IU doesn't know why." <u>https://www.idsnews.com/article/2018/11/mold-is-coming-back-to-rooms-cleaned-multiple-times-iu-doesnt-know-why</u> Guest on call-in show, No Limits, WFYI (June, 2018).

TV Interview, Fox59 (June 6, 2018). "Carmel Schools to Phase out Diesel Buses for a Healthier Environment for Students"

TV Interview, WISH TV (May 16, 2018). "Preparing for tornado season." http://www.wishtv.com/news/local-news/preparing-for-tornado-season/1182213351

Featured Paper, NSF Discoveries (May 14, 2018). "Pollution-related disease presents global environmental challenge" <u>https://www.nsf.gov/discoveries/disc\_summ.jsp?cntn\_id=245332</u>

Radio Interview WFYI (April 5, 2018). "Report: Hoosier health may be impacted by climate change" <u>https://www.wfyi.org/news/articles/report-hoosier-health-may-be-impacted-by-climate-change</u>

Article Source, Indianapolis Star (April 6, 2018). "This is why Hoosiers may soon have to worry about diseases such as malaria and Zika" <u>https://www.indystar.com/story/news/2018/04/06/why-hoosiers-may-soon-have-worry-diseases-such-malaria-and-zika/487389002/</u>

Guest on call-in show, No Limits, WFYI (January, 2018).

Article source, Indianapolis Star (Sept. 15, 2017). "Indy mayor vows city will act on climate change." <u>https://www.indystar.com/story/news/2017/09/15/indy-mayor-vows-city-act-climate-change/663771001/</u>

Primary Article source, Indianapolis Star (May 8, 2017). "IUPUI prof warns about danger of gunsand it's not what you think." <u>https://www.indystar.com/story/news/2017/05/08/iupui-prof-warnsdanger-guns-and-s-not-what-you-think/101175424/</u>

Article source, The Allegheny Front (March 31, 2017). Lead-tainted water is a big problem in Pittsburgh. So is lead in the city's soil. <u>http://www.alleghenyfront.org/lead-tainted-water-is-a-big-problem-in-pittsburgh-so-is-lead-in-the-citys-soil/</u>

Featured on HBO Vice News Tonight (Dec. 1, 2016) for the West Calumet Lead Crisis. https://news.vice.com/story/west-calumet-lead-crisis

Article source, Scientific American Climate Wire (July 15, 2016). "Trump's VP doubts climate change" <u>http://www.scientificamerican.com/article/trump-s-vp-doubts-climate-change1/</u>

Letter to the Editor, Indianapolis Star (July 5, 2015). "Continue state progress on clean energy."

Newspaper Interview, The Namibian (May, 2014). "Guru warns about risks of climate change"

Guest on call-in show, No Limits, WFYI (April, 2014).

Primary article source, LiveScience (March, 2014). "Fossils put dent in geoengineering claims" <u>http://www.livescience.com/44242-iron-fertilization-climate-change-fossils.html</u>

TV Interview, Indy Style (April, 2013). "How to Avoid Lead Contaminated Dust." http://www.wishtv.com/dpp/indy\_style/health/how-to-avoid-lead-contaminated-dust

Article Source, NPR health blog (April, 2013). "Lead in Soil May be an Overlooked Threat to Kids' Health."

Article Source, Time Magazine (February 2013). "The Legacy of Lead: How the Metal Affects Academic Achievement."

Letter to the Editor, Indianapolis Star (August 23, 2012). "Carefully weigh floodwall options."

Feature Story, Indiana Living Green (July, 2012). "Ill Wind: How coal-fired power plants poison Indiana's air, soil and water."

Letter to the Editor, Indianapolis Star (June 27, 2012). "Unhealthy pollution vs. cheap electricity."

Radio Interview, Sound Medicine, WFYI (June 10, 2012). "Safe Urban Soils"

Article Source, WebMD (June 5, 2012). "Urban Gardening" <u>http://www.webmd.com/a-to-z-guides/video/urban-gardening</u>

Article Source, Indiana Living Green (June 8, 2012). "Mercury in fish is a danger to humans"

Article Source, Associated Press (story picked up by 10 media outlets, including USA Today, Chicago Tribune; September, 2011). "Indiana Activists urge feds to approve mercury limits"

Radio Interview (Live), Lakeshore Public Radio (August, 2011). "Mercury Emissions and Human Health Risks."

Article Source, Louisville Courier, Indianapolis Star, Science Daily (July, 2011). "Coal-Fired Plants Get Some Heat."

Article Source, Indianapolis Star (July 2011). "Where Health, Science Intersect."

Television Profile, WTHR 13 (May, 2011). "Urban Gardeners Beware"

Article Source, Associated Press (story picked up in over 100 media outlets; March 2011). "Tainted soil is urban gardener's new challenge"

Television Interview, WTHR 13 (February 2011). "Ice quakes"

Article Source, *Scientific American* (February, 2011). "When Earth was a Snowball: Global glaciers may have sparked evolutionary burst"

Green Living Column, Indianapolis Star (November 6, 2010). "Urban gardeners need soil tests"

Article Source, NPR Health Blog (September, 2010). "Grow your own vegetables, city dwellers, but do mind the lead."

Television Interview, TV6 @ 6 (September, 2010). "City looks for gardeners to green vacant lots: Soil safety crucial in urban gardening."

Union of Concerned Scientists Green Energy Summit, February 2010 (Washington, DC). Scientific representative from Indiana in Washington DC event. Conducted educational meetings for senior staff in the offices of Senator Lugar, Senator Bayh, and two Indiana Representatives, as well as senior officials with the USDA.

Television Interview, WISH-TV Indianapolis (December, 2009). "Climate Change."

Article Source, New York Times (November, 2009). "Indiana Power Plants 4th Dirtiest in US."

Article Source, Indianapolis Star (November, 2009). "Report: It's Time to Clear the Air."

Article Source, Huffington Post (July, 2009). "The Only Thing Toxic About The White House Kitchen Garden Is The Misinformation: Scientists Correct The Record On Contamination."

Article Source, New York Times (May, 2009). "For Urban Gardeners, Lead is a Concern."

Op-Ed, Indianapolis Star (March 2009). "Keep Goal in Focus: Reduce Emissions" with Dan Cole.

Article Source, National Geographic News (March 2009). "Huge Man-Made Algae Swarm Devoured—Bad for Climate?"

Rotary Club of Greenwood (February 2009). "Climate Change in Indiana"

Article Source, Indianapolis Star (December, 2008). "Local Groups Rally Support for Climate Change Issues."

Article Source, *Environmental Health Perspectives* Forum (December 2008). "Soil in the City: A Prime Place for Lead."

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Radio Interview, Your Health First, KTRH Houston (October, 2008). "Lead in Soils and Lead Poisoning."

Radio Interview, Sound Medicine, WFYI 90.1 NPR affiliate (September 2008). "Lead in Urban Soils."

Letter to the Editor, *Indianapolis Star* (June 2008). "Capitol Meetings Focus on Carbon Emissions"

Union of Concerned Scientists Climate Education Event, June 2008. Scientific representative from Indiana in Washington DC event. Conducted educational meetings for senior staff in the offices of Senator Lugar, Senator Bayh, and three Indiana Representatives, as well as an in-person meeting with Rep. Baron Hill.

St. Luke's Catholic Church (January, 2008). "Rapid Climate Change"

Riley Research Working Group; Community Health Sciences (January, 2008). "Childhood Lead Poisoning: A New Focus on the WESCO Community, Indianapolis"

Television Interview, FOX59 (May, 2007). "Global Warming and Cat Populations."

Scientech Club of Indianapolis Speaker (November, 2007). "Rapid Climate Change"

Spirit and Place Speaker (November, 2007). "Climate Change and Society"

Radio Interview, WIBC (Feb. 2006). "Abrupt Climate Change."

Article Source, Science Now (April 2006). "Antarctic Glaciation"

Television Interview, FOX59 (May, 2006). "Benzene in Sodas."

Nominator: Successful nomination of Dr. Margaret Delaney to The Oceanography Society first class of Fellows (2006).

AP Feature source and profile (March 2005). "Study finds urban soil may fuel childhood lead poisoning"

Rotary Club of Carmel (June 2005). "Global Warming"

Television Interview, WISH TV 8 (July, 2005). "The Science of Global Warming."

Article Source, Delicious Living (February 2005). "Plastic Planet."

Television Interview, WISH TV (June, 2004). "Scientific relevance of the Hollywood blockbuster *The Day After Tomorrow*"

Feature profile, Indianapolis Men's Magazine (December, 2004). "Men of Indy."

Radio Interview, Deutschlandfunk (April, 2003). "Upwelled iron and iron fertilization proposals."

Television Interview, FOX59 (September, 2003). "Extreme weather and climate change."

Headline Story source, National Geographic Web (January, 2002). "Study challenges idea of seeding ocean with iron to curb global warming."

Article Source, Science News (January 5, 2002). "It's bottoms up for iron at the sea's surface."

Article Source, GeoTimes (March, 2002). "Iron from below, not above."

Research Mentor, Sycamore School (June, 2002).

Article Source, Science magazine web page (November, 2002). "Leads Lingering Legacy."

Letter to the Editor, Indianapolis Star (March 14, 2001). "The vote is in: Global warming is real."

Letter to the Editor, Indianapolis Star (June 19, 2001). "Report reinforces global warming threat."

Union of Concerned Scientists Climate Education Event, June 23-26, 2001. Scientific representative from Indiana in Washington DC event and press conference. Conducted educational meetings for senior staff in the offices of Senator Lugar, Senator Bayh, and three Indiana Representatives.

Feature Story source, Indianapolis Star (July 20, 2001; C1 and C2). "Weather trend is preview, scientists warn lawmakers."

Classroom Lecture, Mary E. Nicholson School (5<sup>th</sup> grade—Gifted and Talented program) "Underwater Volcanoes." October, 2001.

Letter to the Editor, Indianapolis Star (February 6, 2000). "Researcher says global warming problem is real."

Radio Interview, WIBC-AM, Lead in soils and children's blood lead levels in Indianapolis, April, 2000.

Science Fair Judge, Harriet Beecher Stowe Elementary School, Indianapolis, April, 2000 and February, 2001.

Feature Story source, Indianapolis Star (May 12, 2000; C1 and C2). "The Legacy of Lead."

Classroom Lecture, Immaculate Heart of Mary School (4<sup>th</sup> grade) "Fossils and oceanography." October, 2000.

Union of Concerned Scientists Global Warming Awareness Event, June, 1999. One of 54 scientists selected from throughout the country to participate in Washington DC event and press

conference. Conducted educational meetings for staff in the offices of Rep. Julia Carson, Senator Evan Bayh, and conducted an educational meeting with Senator Lugar himself.

Radio Interview, WENS-FM, Indianapolis Issues and Community Connections, July 1999. Subject was Global Warming.

Television Interview, WGGR-FM, The Amos Brown Show, July, 1999. Show was live Q&A with call-ins, and subject was Global Warming.