

Jonathan P. Doubek

jdoubek@lssu.edu

School of Natural Resources & Environment and the Center for Freshwater Research and Education
Lake Superior State University
650 W. Easterday Ave., Sault Sainte Marie, MI, USA
Last updated: May 2023

RESEARCH INTERESTS

Aquatic ecology; limnology; plankton ecology; fish ecology; community and ecosystem ecology; organismal biology; food web interactions; global change effects on freshwater ecosystems; macrosystems ecology; interdisciplinary and team science

EDUCATION

Virginia Tech (Blacksburg, VA)

- **Doctor of Philosophy, Department of Biological Sciences**, 2018
- Global Lake Ecological Observatory Network (GLEON) Fellow, 2015-2018
- Virginia Tech Interfaces of Global Change (IGC) Fellow, 2013-2018
- Advisor: Dr. Cayelan Carey

University of Michigan, School of Natural Resources and Environment (Ann Arbor, MI)

- **Master of Science**, Ecology, Evolution, & Conservation Biology, 2013
- Master's Thesis: Planktonic Food Web Relations in Laurentian Great Lakes
- Advisors: Dr. John Lehman and Dr. Bradley Cardinale

University of Michigan, College of Literature, Science, and the Arts (Ann Arbor, MI)

- **Bachelor of Science (with distinction)**, Biology and Program in the Environment, 2010
- Honor's Thesis in Biology; James B. Angell Scholar

RESEARCH AND TEACHING POSITIONS HELD

2019 – Present	Assistant Professor, School of Natural Resources & Environment and the Center for Freshwater Research and Education, Lake Superior State University, MI, USA
2018 – 2019	Postdoctoral Research Associate, Rubenstein School of Environment and Natural Resources, University of Vermont, VT, USA. Advisor: Dr. Jason Stockwell
2013 – 2018	Teaching and Research Assistant, Department of Biological Sciences, Virginia Tech, Blacksburg, VA, USA
2008 – 2013	Teaching and Research Assistant, School of Natural Resources and Environment and Ecology and Evolutionary Biology, University of Michigan, Ann Arbor, MI, USA
2011 – 2012	Water Quality Monitoring Coordinator, Huron River Watershed Council, Ann Arbor, MI, USA
2009 – 2010, 2012	Aquatic Sciences Research Assistant, City of Ann Arbor, Ann Arbor, MI, USA

2008 Evolutionary Aquatic Research Assistant, United States Geological Survey, De Pere, WI, USA

LEADERSHIP, FELLOWSHIP, AND SERVICE POSITIONS

- Ecosphere Subject-Matter Editor (Freshwater Ecology Track)** 2020 – Present
- LSSU Society for Fish and Wildlife Chapter Club Mentor** 2021 – Present
- LSSU Society for Conservation Biology Chapter Club Mentor** 2020 – 2021
- GLEON Student Association Chair** 2016 – 2018
- Informed, trained, and mentored students, enabling the next generation of scientists within GLEON to participate in collaborative, international, and interdisciplinary network science
 - Communicated and facilitated opportunities for students within the GLEON network
 - Organized workshops and research projects for GLEON students and postdocs
- GLEON Steering Committee Member** 2016 – 2018
- Participated on a core leadership committee within GLEON consisting of an international group of scientists in discussing and planning current activities and future directions of GLEON
- GLEON Graduate Student Fellow** 2015 – 2018
- This program trained a cohort of graduate students from around the world to analyze large and diverse data sets, operate effectively in diverse international teams, and communicate science to researchers, the public, and managers
 - Participated in three weeklong workshops while completing multiple interdisciplinary, collaborative scientific projects
- IGC Fellow** 2013 – 2018
- Obtained experience and training in the multidimensional aspects of global change through graduate student education
 - Participated in courses, seminars, and special events that bolstered training in my specific academic field, but also at the science-policy interface

COURSES TAUGHT

- Senior Capstone, NRES 499**, Lake Superior State University Spring 2023
- Fish Ecology, NRES 333**, Lake Superior State University Spring 2020-2023
- Principles of Watersheds, NRES 286**, Lake Superior State University Spring 2020-2023
- Field Biology: Fish and Wildlife Ecology and Identification, NRES 107**,
Lake Superior State University Spring 2020, 2021
- Sophomore Seminar, NRES 299**, Lake Superior State University 2020-2022
- Ichthyology, NRES 310**, Lake Superior State University Fall 2019-2023
- Limnology Lab, NRES 345**, Lake Superior State University Fall 2019-2023
- Independent Study in Global Conservation, NRES 290**, Lake Superior State University 2021
- Independent Study in Aquatic Ecology, NRES 290**, Lake Superior State University 2022
- Introduction to Biology Lab**, Virginia Tech Spring 2018
- Freshwater Ecology**, Virginia Tech Fall 2014, 2015, 2016, 2017
- Explorations of a Field Biologist**, University of Michigan Summer 2012, 2013
- Introductory Biology Lab**, University of Michigan May 2011 – Jun. 2012; May – June 2013

MENTORED UNDERGRADUATE STUDENT RESEARCH THESES (30)

- Gwendolyn Phillips, Lake Superior State University, Present
- Devin Rath, Lake Superior State University, Present
- Mason Spiess, Lake Superior State University, Present
- Dakota Smith, Lake Superior State University, Present
- Alexandra VanKampen, Lake Superior State University, Present
- Mackenzie Belleville, Lake Superior State University, 2023 (graduation year)
- Ethan DePauw, Lake Superior State University, 2023
- Olivia Jacobs, Lake Superior State University, 2023
- Jacob Lohraff, Lake Superior State University, 2023
- Samuel Mitchell, Lake Superior State University, 2023
- Lucas Chorba, Lake Superior State University, 2022
- Simon Freeman, Lake Superior State University, 2022
- Joshua Heistan, Lake Superior State University, 2022
- Kollin Kemerling, Lake Superior State University, 2022
- Joseph Tolles, Lake Superior State University, 2022
- Tristan Compton, Lake Superior State University, 2021
- Silas Dunn, Lake Superior State University, 2021
- Lucas Glass, Lake Superior State University, 2021
- Callie Kammers, Lake Superior State University, 2021
- Reo Wallace, Lake Superior State University, 2021
- Timothy Boyd, Lake Superior State University, 2021
- Drew Heckman, Lake Superior State University, 2021
- Danielle Scharnowski, Lake Superior State University, 2020
- Samuel Johnston, Lake Superior State University, 2020
- Sadye Goldfarb, University of Vermont, 2020
- Samantha Field, University of Vermont, 2018
- Niall Goard, Virginia Tech, 2018
- Kylie Campbell, Virginia Tech, 2017
- Charlotte Harrell, Virginia Tech, 2016
- Zachary Gajewski, Virginia Tech, 2015

PEER-REVIEWED PUBLICATIONS (* denotes undergraduate student)

2023 Veronica NAVA, Frezzotti ML, Aherne J, Alfonso MB, Antão-Geraldes AM, Attermeyer K, Bah AR, Bao R, Bartrons M, Berger SA, Biernaczyk M, Breider F, Brookes J, Cañedo-Argüelles M, Canle M, Capelli C, Carballeira R, Cereijo J, Christensen ST, Christoffersen KS, Clayer F, de Eyto E, Senerpont Domis LN, Delgado MJ, **Doubek JP**, Eaton A, Erdogan S, Erina O, Ersoy Z, Feuchtmayr H, Fugère V, Galafassi S, Gonçalves V, Grossart H-PF, Hamilton D, Hanson PC, Harris T, Kankılıç GB, Kessler R, Jacquet S, Kangur K, Kiel C, Knoll L, Kokorite I, Lavoie I, Leiva-Presa À, Lepori F, Lusher A, MacIntyre S, Matias M, Matsuzaki SIS, McCarthy V, McElarney Y, McNally D, Mekonen Belay B, Messyas B, Mlambo M, Nandini S, Nodine E, Özen A, Ozkundakci D, Perez RV, Pocięcha A, Raposeiro P, Rõõm EI, Salmaso N, Sarma SSS, Saulnier-Talbot É, Scordo F, Sibomana C, Stepanowska K, Tavşanoğlu ÜN, Tolotti M, Udoh A, Urrutia Cordera P, Valois A, Vandergoes M, Verburg P, Volta P, Wain D, Wesolek B,

Weyhenmeyer G, Wightman R, Wood S, Wu N, Zawiska I, Zawisza E, Zink L, Leoni B. Plastic debris in lakes and reservoirs worldwide. *Nature*, In Press.

Wallace Hoffelt RK*, **Doubek JP**. 2023. Bladderwort Relationship to Zooplankton in Two Northern Michigan Lakes. *Diversity* 15: 171.

2022 Weyhenmeyer GA, Obertegger U, Rudebeck H, Jakobsson E, Jansen J, Zdorovenova G, Bansal S, Block BD, Carey CC, **Doubek JP**, Dugan H, Erina O, Fedorova I, Fischer JM, Grinberga L, Grossart H-P, Kangur K, Knoll LB, Laas A, Lepori F, Meier J, Palshin N, Peterzell M, Pulkkanen M, Rusak JA, Sharma S, Wain D, Zdorovenov R. 2022. Towards critical white ice conditions in lakes under global warming. *Nature Communications* 13: 4974.

2021 **Doubek JP**, Anneville O, Dur G, Lewandowska AM, Patil VP, Rusak JA, Salmaso N, Seltmann CT, Straile D, Urrutia-Cordero P, Venail P, Adrian R, Alfonso MB, DeGasperi CL, de Eyto E, Feuchtmayr H, Gaiser EE, Girdner SF, Graham JL, Grossart H-P, Hejzlar J, Jacquet S, Kirillin G, Llamas ME, Matsuzaki SS, Nodine ER, Piccolo MC, Pierson DC, Rimmer A, Rudstam LG, Sadro S, Swain HM, Thackeray SJ, Thiery W, Verburg P, Zohary T, Stockwell JD. The extent and variability of storm-induced temperature changes in lakes measured with long-term and high-frequency data. *Limnology and Oceanography* 66: 1979-1992.

2020 Stockwell JD, **Doubek JP**, Adrian R, Anneville O, Carey CC, Carvalho L, de Senerpont Domis LN, Dur G, Frassl MA, Grossart H-P, Ibelings BW, Lajeunesse MJ, Lewandowska AM, Llamas ME, Matsuzaki SS, Nodine ER, Noges P, Patil VP, Pomati F, Rinke K, Rudstam LG, Rusak JA, Salmaso N, Seltmann CT, Straile D, Thackeray SJ, Thiery W, Urrutia-Cordero P, Venail P, Verburg P, Woolway RI, Zohary T, Andersen MR, Bhattacharya R, Hejzlar J, Janatian N, Kpodonu ATNK, Williamson TJ, Wilson HL. 2020. Storm impacts on phytoplankton community dynamics in lakes. *Global Change Biology* 26: 2756-2784.

Doubek JP, Goldfarb SK*, Stockwell JD. 2020. Should we be sampling zooplankton at night? *Limnology and Oceanography Letters* 5: 313-321.

Dugan HA, Skaff NK, **Doubek JP**, Burke SM, Krivak-Tetley FE, Summers JC, Hanson PC, Weathers KC. 2020. Lakes at risk of chloride contamination. *Environmental Science & Technology* 54: 6639-6650.

Moore MR, **Doubek JP**, Xu H, Cardinale BJ. 2020. Hedonic Price Estimates of Lake Water Quality: Valued Attribute, Instrumental Variables, and Ecological-Economic Benefits. *Ecological Economics* 176: 106692.

Zhikharev VS, Erina O, Tereshina MA, **Doubek JP**, Goldfarb SK*, Shurganova GV, Stockwell JD. 2020. Day-night differences in crustacean zooplankton in Lake Glubokoe and Mozhaysk Reservoir (European Russia). *Limnology and Freshwater Biology* 4: 765-766.

2019 **Doubek JP**, Campbell KL*, Lofton ME, McClure RP, Carey CC. 2019. Hypolimnetic hypoxia increases the biomass variability and compositional variability of crustacean zooplankton communities. *Water* 11:2179.

Carey CC, Ward NK, Farrell KJ, Lofton ME, Krinos AI*, McClure RP, Subratie KC, Figueiredo RJ, **Doubek JP**, Hanson PC, Papadopoulos P, Arzberger P. 2019. Enhancing collaboration between ecologists and computer scientists: lessons learned and paths forward. *Ecosphere* 10:e02753

- Doubek JP**, Carey CC, Lavender M, Winegardner AK, Beaulieu M, Kelly PT, Pollard AI, Straile D, Stockwell JD. 2019. Calanoid copepod zooplankton density is positively associated with water residence time across the continental United States. *PLoS ONE* 14:e0209567.
- Munger ZW, Carey CC, Gerling AB, **Doubek JP**, Hamre KD, McClure RP, Schreiber ME. 2019. Hydrological vs. oxygenation control on iron and manganese mass budgets in a drinking water reservoir. *Lake and Reservoir Management* 35:277–291.
- 2018 Mantzouki E, Beklioğlu M, Brookes JD, de Senerpont Domis LN, Dugan HA, **Doubek JP**, Grossart H-P, Nejtgaard JC, Pollard AI, Ptacnik R, Rose KC, Sadro S, Seelen L, Skaff NK, Teubner K, Weyhenmeyer GA, Ibelings BW. 2018. Snapshot surveys for lake monitoring, more than a shot in the dark. *Frontiers in Ecology and Evolution* 6:10.3389/fevo.2018.00201.
- Doubek JP**, Campbell KL*, Doubek KM, Hamre KD, Lofton ME, McClure RP, Ward NK, Carey CC. 2018. The effects of hypolimnetic anoxia on the diel vertical migration of freshwater crustacean zooplankton. *Ecosphere* 9:e02332.
- McCullough IM, Dugan HA, Farrell KJ, Morales-Williams AM, Ouyang Z, Roberts D, Scordo F, Bartlett SL, Burke SM, **Doubek JP**, Krivak-Tetley FE, Skaff NK, Summers JC, Weathers KC, Hanson PC. 2018. Dynamic modeling of organic carbon fates in lake ecosystems. *Ecological Modelling* 386:71–82.
- Hamre KD, McClure RP, Munger ZW, **Doubek JP**, Gerling AB, Schreiber ME, Carey CC. 2018. In situ fluorometry reveals a persistent, perennial hypolimnetic cyanobacterial bloom in a seasonally anoxic reservoir. *Freshwater Science* 37:483–495.
- Carey CC, Hanson PC, **Doubek JP**, McClure RP. 2018. Oxygen dynamics control the burial of organic carbon in a eutrophic reservoir. *Limnology and Oceanography-Letters* 3:293–301.
- Carey CC, McClure RP, **Doubek JP**, Lofton ME, Ward NK, Scott DT. 2018. *Chaoborus spp.* transport CH₄ from the sediments to the surface waters in a seasonally anoxic reservoir, but their contribution to water column CH₄ concentrations and diffusive efflux is minor. *Environmental Science & Technology* 52:1165–1173.
- 2017 Dugan HA, Bartlett SL, Burke SM, **Doubek JP**, Krivak-Tetley FE, Skaff NK, Summers JC, Hanson PC, Weathers KC. 2017. A database of chloride trends in North America and European freshwater lakes. *Nature: Scientific Data* 4:170101.
- Hamre KD, Gerling AB, Munger ZW, **Doubek JP**, McClure RP, Cottingham KL, Carey CC. 2017. Spatial variation in dinoflagellate recruitment along a reservoir ecosystem continuum. *Journal of Plankton Research* 39:715-728.
- Doubek JP**, Carey CC. 2017. Catchment, morphometric, and water quality characteristics differ between reservoirs and naturally formed lakes on a latitudinal gradient in the conterminous United States. *Inland Waters* 2:171-180.
- Dugan HA, Bartlett SL, Burke SM, **Doubek JP**, Krivak-Tetley FE, Skaff NK, Summers JC, Farrell KJ, McCullough IM, Morales-Williams AM, Roberts D, Scordo F, Ouyang Z, Hanson PC, Weathers KC. 2017. Salting our freshwaters. *Proceedings of the National Academy of Sciences* 114:4453-4458.

- 2016 Munger ZW, Gerling AB, Carey CC, Hamre KD, **Doubek JP**, Klepatzki SD, McClure RP, Schreiber ME. 2016. Effectiveness of hypolimnetic oxygenation for preventing accumulation of Fe and Mn in a drinking water reservoir. *Water Research* 106:1-14.
- Gerling AB, Munger ZW, **Doubek JP**, Hamre KD, Gantzer PA, Little JC, Carey CC. 2016. Whole catchment manipulations of internal and external loading reveal the sensitivity of a century-old reservoir to hypoxia. *Ecosystems* 19:555-571.
- 2015 **Doubek JP**, Carey CC, Cardinale BJ. 2015. Anthropogenic land use is associated with N-fixing cyanobacterial dominance in lakes across the continental United States. *Aquatic Sciences* 77:681-694.
- 2014 **Doubek JP**, Lehman JT. 2014. Historical trophic position of *Limnocalanus macrurus* in Lake Michigan. *Journal of Great Lakes Research* 40: 1027-1032.
- 2013 Jackson EW, **Doubek JP**, Schaeffer JS, Lehman JT. 2013. Historical and recent biomass and food web relations of *Limnocalanus macrurus* in Lake Huron. *Journal of Great Lakes Research* 39: 404–408.
- Lehman JT, **Doubek JP**, Jackson EW. 2013. Effect of reducing allochthonous P load on biomass and alkaline phosphatase activity of phytoplankton in an urbanized watershed, Michigan. *Lake and Reservoir Management* 29: 116–125.
- 2011 **Doubek JP**, Lehman JT. 2011. Historical biomass of *Limnocalanus* in Lake Michigan. *Journal of Great Lakes Research* 37: 159–164.
- Lehman JT, Bell DW, **Doubek JP**, McDonald KE. 2011. Reduced additions to river phosphorus for three years following implementation of a lawn fertilizer ordinance. *Lake and Reservoir Management* 27: 390–397.

PUBLISHED DATA PRODUCTS

- Doubek JP**, Goldfarb SK, Stockwell JD. 2019. Zooplankton paired night and day density and biomass estimates, worldwide literature survey, 1900 - 2016. Environmental Data Initiative. DOI: 10.6073/pasta/ec7dc9192af0d9b95d1b0e2411bc4e73.
- Carey C.C., A.B. Gerling, **J.P. Doubek**, K.D. Hamre, R.P. McClure, M.E. Lofton, K.J. Farrell. 2018. Secchi depth data and discrete depth profiles of photosynthetically active radiation, temperature, dissolved oxygen, and pH for Beaverdam Reservoir, Carvins Cove Reservoir, Falling Creek Reservoir, Gatewood Reservoir, and Spring Hollow Reservoir in southwestern Virginia, USA 2013-2017. Environmental Data Initiative. DOI:10.5072/FK2/b31780b17d3d3db6ec6d7df45142501c
- Carey C.C., M.E. Lofton, A.B. Gerling, R.P. McClure, **J.P. Doubek**, B.R. Niederlehner, K.J. Farrell. 2018. Water chemistry time series for Beaverdam Reservoir, Carvins Cove Reservoir, Falling Creek Reservoir, Gatewood Reservoir, and Spring Hollow Reservoir in southwestern Virginia, USA 2013-2017. Environmental Data Initiative. DOI:10.5072/FK2/ea71d3b41d6f9ecc6adb9f2107159fc
- Carey C.C., **J.P. Doubek**, R.P. McClure, P.C. Hanson. 2017. Organic carbon, temperature, oxygen, and inflow volume time series for Falling Creek Reservoir, Vinton, Virginia: Summer 2014.

Environmental Data Initiative. DOI:10.5072/FK2/bbb9fa55889a48cd6ee9e89c0b0636d3

Carey C.C., R.P. McClure, A.B. Gerling, **J.P. Doubek**, S. Chen, M.E. Lofton, K.D. Hamre. 2018. Time series of high-frequency profiles of depth, temperature, dissolved oxygen, conductivity, specific conductivity, chlorophyll a, turbidity, pH, and oxidation-reduction potential for Beaverdam Reservoir, Carvins Cove Reservoir, Falling Creek Reservoir, Gatewood Reservoir, and Spring Hollow Reservoir in Southwestern Virginia, USA 2013-2017. Environmental Data Initiative. DOI: 10.5072/FK2/cc1752d66a6740da3c011d6ba96842ba

Carey C.C., **J.P. Doubek**, K.L. Campbell. 2018. Crustacean zooplankton density and biomass and rotifer density for Beaverdam Reservoir, Carvins Cove Reservoir, Gatewood Reservoir, and Spring Hollow Reservoir in southwestern Virginia, USA 2014-2016. Environmental Data Initiative. DOI: 10.5072/FK2/d6be483c54cda96939a23dd78fe00783

NON PEER-REVIEWED PUBLICATIONS OR REPORTS

Doubek JP. 2017. The probability of zebra mussel invasion in Smith Mountain Lake, VA. Invited report to the Smith Mountain Lake Association.

Lawson R, Riggs E, Weiker D, **Doubek JP.** 2011. Phosphorus Reduction Implementation Plan for the Middle Huron River Watershed. Ann Arbor, MI: Huron River Watershed Council.

Lawson R, Weiker D, **Doubek JP.** 2011. Phosphorus Reduction Implementation Plan for Brighton Lake. Ann Arbor, MI: Huron River Watershed Council. Accessible online: http://www.hrwc.org/wp-content/uploads/2011/10/Brighton_Lake_plan_FINAL.pdf

Lawson R, Weiker D, **Doubek JP.** 2011. Phosphorus Reduction Implementation Plan for Strawberry Lake. Ann Arbor, MI: Huron River Watershed Council. Accessible online: http://www.hrwc.org/wp-content/uploads/2011/10/Strawberry_Lake_plan_FINAL.pdf

GRANTS & AWARDS

- The Cooperative Ecosystem Studies Units (CESU) with the United States Geological Survey (USGS). \$107,637. 2023. Age-0 lake whitefish and zooplankton relations in the North Channel of Lake Huron. **Doubek JP (PI)**, and KL Kapuscinski (co-PI).
- National Science Foundation. \$197,808. 2022. Kolomyjec SH (PI), Wright D, Southwell B, Kandel HP, Clause HK, Teymorian S, Garvon J, Li J, Evans B, **Doubek JP**, Zimmerman G, Kelso P. MRI: Acquisition of a low vacuum scanning electron microscope (SEM) with EDS detector and STEM capability to advance research and undergraduate research training.
- The Cooperative Ecosystem Studies Units (CESU) with the United States Geological Survey (USGS). \$81,454. 2022. Age-0 lake whitefish and zooplankton relations in the North Channel of Lake Huron. **Doubek JP (PI)**, and KL Kapuscinski (co-PI).
- Great Lakes Fishery Trust. 2022. \$194,739. Spatial, temporal, and diel relations between zooplankton and age-0 lake whitefish in the Upper Great Lakes. **Doubek JP (PI)**, J Smith (co-PI), N Barton, B Diffin, K Donner, SDD Freeman, I Harding, C Hessel, A Honsey, S Johnston, J Jonas, KL Kapuscinski, C LaFaver, K McDonnell, S McNaught, E Olsen, S Rayford, P Ripple, J Tuomikoski, and JB Weldon, Jr.
- Project for a CESAB AFTER by the group GEISHA: Global Evaluation of the Impacts of Storms on freshwater Habitat and structure of phytoplankton Assemblages. ~€10,500. 2021. O.

- Anneville (PI), JD Stockwell (PI), VP Patil (PI), JA Brentrup, R Bruel, **JP Doubek**, JA Rusak, P Venail, G Dur, AM Lewandowska, P Urrutia-Cordero, R Adrian, RI Woolway, SJ Thackeray.
- Fish and oxygen-induced alterations to the migration of zooplankton, part II. ~€10,000. 2021. JD Stockwell (PI), **JP Doubek (co-PI)**
 - US Department of Commerce, Economic Development Administration. \$956,658. Building capacity at LSSU's Center for Freshwater Research and Education. PIs: A. Moerke (lead), K. Kapuscinski, **J. Doubek**, A. Molina-Moctezuma, 2021-2022.
 - LSSU Foundation's Enrichment Grant, \$1510, 2020
 - Fish and oxygen-induced alterations to the migration of zooplankton. ~€10,000. 2019. J.D. Stockwell (co-PI), **J.P. Doubek (co-PI)**
 - Virginia Tech College of Science Outstanding Doctoral Student, 2017
 - Virginia Tech Global Change Center Interdisciplinary Research Grant, \$5000, December 2016 – 2017
 - National Science Foundation Doctoral Dissertation Improvement Grant, \$20,880, June 2016 – June 2018
 - Mary and George Schaeffer Stream Team Excellence Award, \$500, October 2016
 - Noel Krieg Graduate Fellowship for Research and Teaching Excellence, \$1200, June 2016
 - GLEON Travel Grants, 2013-2018: ~\$15,000
 - Virginia Water Resources Research Center Graduate Student Research Grant: \$5000, May 2015 – May 2016
 - Virginia Lakes and Watershed Association Leo Bourassa Scholarship: \$3000, July 2015
 - Noel Krieg Graduate Fellowship for Research and Teaching Excellence: \$1200, May 2015
 - PRAGMA Travel Grant: \$1200, October 2014
 - Rackham Graduate Student Research Grant: \$1000, 2012

INVITED SEMINARS

Doubek JP. Full moon fever: why not sampling at night should give you the shivers. Invited Research Seminar, Department of Biological Sciences, Virginia Tech, Blacksburg, VA, February 2023.

Doubek JP. Reservoir characteristics and hypoxia as important drivers of zooplankton community structure. Invited Seminar, School of Natural Sciences and Mathematics, Ferrum College, Ferrum, VA, November, 2016.

SELECTED CONTRIBUTED PRESENTATIONS Underlined name refers to presenter

2023 Freeman SDD, Brant CO, **Doubek JP**, Kapuscinski KL, Tingley RW. Early-season succession of zooplankton in the North Channel of Lake Huron. Poster Presentation, Michigan American Fisheries Society Conference, Bellaire, MI, March 2023.

2022 Kandel HP, Wright DD, **Doubek JP**, Southwell B. Uranium in groundwater wells in Sugar Island, Michigan: a water supply and public health concern. Poster Presentation, American Geophysical Union Meeting, Chicago, IL, December 2022.

Dur G, Yusuke K, Anneville O, Stockwell J, Patil V, Adrian R, Brentrup J, Bruel R, **Doubek JP**, Lewandowska A, Matsuzaki SI, Rusak JA, Salamazo N, Straile D, Thackeray SJ, Venail P. Does solar activity affect the dynamics of cyanobacteria community worldwide and how? Poster Presentation, International Society of Limnology, Berlin, Germany, August 2022.

Straile D, Adrian R, Anneville O, Arnott SE, Beisner BE, Beklioğlu M, de Senerpont Domis LN, **Doubek JP**, Gal G, Hayes NM, Horn W, Iglesias C, Jeppesen E, Korponai J, Leavitt PR, Mackay EB, Meerhoff M, Romo S, Rudstam LG, Rusak JA, Sarvala J, Schindler DE, Stockwell J, Thackeray SJ. Zooplankton dynamics in lakes of different trophic state, depth and climatic region. A test of the PEG model. Oral Presentation, International Society of Limnology, Berlin, Germany, August 2022.

Scharnowski DE, **Doubek JP**, Moerke AH. Zooplankton community phenology shifts in the St. Marys River under climate change. Oral presentation, Joint Aquatic Sciences Meeting, Grand Rapids, MI, May 2022.

Tolles JJ*, **Doubek JP**. Winter versus summer prey preferences of piscivorous fish in Michigan bays. Poster presentation, Joint Aquatic Sciences Meeting, Grand Rapids, MI, May 2022.

Freeman SDD*, Barton NT, Diffin BJ, Donner K, Grulke* HN, Hessel CR, Jonas J, LaFaver CJ, Olsen EJ, Rayford SV, Smith JD, **Doubek JP**. Day versus night relations between larval lake whitefish and zooplankton in the Upper Great Lakes. Oral presentation, Joint Aquatic Sciences Meeting, Grand Rapids, MI, May 2022.

2021 Bruel R, Brentrup J, Anneville O, Carvalho L, **Doubek J**, Dur G, Lewandowska A, Rusak J, Salmaso N, Thackeray S, Urrutia-Cordero P, Woolway I, Stockwell J, and many other contributors. Impact of extreme weather events frequency and intensity in shaping phytoplankton communities. Virtual Oral Presentation, Symposium for European Freshwater Sciences, July 2021.

Stockwell J, Adrian R, Anneville O, Brentrup J, Bruel R, Carvalho L, **Doubek J**, Dur G, Lewandowska A, Patil V, Rusak J, Salmaso N, Thackeray S, Urrutia-Cordero P, Woolway RI, and many other contributors. A global dataset on weather, lake physics, and phytoplankton dynamics. Virtual Oral Presentation, Symposium for European Freshwater Sciences, July 2021.

Stockwell J, Chapina R, **Doubek J**, Fiorini S, Goldfarb S, Lacroix G, Rickwood J, Wander H, Zigic S. 2021. Fish and oxygen-induced alterations to the migration of zooplankton (FOAMZ). Virtual Oral Presentation, AQUACOSM: 2nd International Aquatic Mesocosm Research Symposium, April 2021.

2020 **Doubek JP**, Johnston SJ, Slater BD, Kapuscinski KL, Moerke AH. 2020. Environmental and morphometric drivers of zooplankton community composition in lakes across the eastern Upper Peninsula of Michigan. Virtual Oral Presentation, Michigan Inland Lakes Convention, September 2020.

2019 Goldfarb SK, **Doubek JP**, Antão-Geraldes A, Bartrons M, Berger S, Brentrup JA, Brucet S, Burnet S, Galarce LC, Carey CC, de Eyto E, Dur G, Erdoğan S, Erina O, Grossart HP, Kainz M, Kankılıç GB, Khan S, Leoni B, Lepori F, McCarthy V, Nava V, Nejstgaard J, Ogorelec Z, Ozen A, Pascual M, Paterson M, Patelli M, Qiu Q, Richardson D, Rusak J, Sepulveda-Jauregui A, Pinheiro-Silva L, Straile D, Tartarotti B, Tavşanoğlu UN, Tereshina M, Umaña-Villalobos G, Walles T, Wander HL, Wurtsbaugh W, Stockwell JD. Day 'N' NightZ: The effects of hypoxia on pelagic zooplankton population estimates and migration patterns. Poster presentation at GLEON 21, Huntsville, Ontario, Canada, 2019.

2018 **Doubek JP**, Adrian R, Alfonso MB, Anneville O, Bhattacharya R, DeGasperi CL, de Eyto E, Feuchtmayr H, Dur G, Gaiser EE, Girdner SF, Graham JL, Grossart HP, Hejzlar J, Ibelings BW,

Jacquet S, Lewandowska A, Llamas ME, Shin-ichiro SM, Nodine ER, Nöges P, Patil VP, Rimmer A, Rudstam LG, Rusak JA, Seltmann CT, Swain HM, Thackeray SJ, Thiery W, Urrutia-Cordero P, van Lipzig NPM, Verburg P, Woolway RI, Zohary T, Stockwell JD. The extent and variability of storm-induced epilimnetic temperature changes in lakes worldwide using long-term and high-frequency data. Poster presentation at GLEON 20, Rottneest Island, Australia, 2018.

Doubek JP, Campbell KL, Lofton ME, McClure RP, Carey CC. Hypolimnetic anoxia intensifies the variability of crustacean zooplankton communities across four reservoirs. Poster presentation at the Department of Biological Sciences Research Day 2018, Blacksburg, Virginia, February 2018.

2017 **Doubek JP**, Campbell KL, Lofton ME, McClure RP, Carey CC. Hypolimnetic anoxia intensifies the variability of crustacean zooplankton communities across four reservoirs. Poster presentation at GLEON 19, Mohonk Lake, NY, December 2017.

Doubek JP, Campbell KL, Doubek KM, Hamre KD, Lofton ME, McClure RP, Ward NK, Carey CC. Oxygen-induced trade-offs on zooplankton diel vertical migration: caught between fish and an anoxic place. Oral presentation at the Ecological Society of America, Portland, OR, August 2017.

Doubek JP, Lavender M, Winegardner AK, Beaulieu M, Kelly PT, Carey CC, Pollard AI, Straile D, Stockwell JD. Reservoir discharge and management are important drivers of zooplankton community structure across the continental United States. Oral presentation at Virginia Water Conference, Richmond, VA, March 2017.

Doubek JP, Campbell KL, Doubek KM, Hamre KD, Harrell CW, Lofton ME, McClure RP, Ward NK, Carey CC. Hypoxia-induced trade-offs on zooplankton vertical distribution and community structure in reservoirs. Invited oral presentation at Department of Biological Sciences Research Day 2017, Blacksburg, Virginia, February 2017.

2016 **Dugan HA**, Bartlett SL, Burke SM, **Doubek JP**, Krivak-Tetley FE, Skaff NK, Summers JC, Farrell KJ, McCullough IM, Morales-Williams AM, Roberts D, Scordo F, Ouyang Z, Hanson PC, Weathers KC. Salting our freshwaters. Poster presentation at GLEON 18, Gaming, Austria, July, 2016.

Doubek JP, Bierlein KA, Campbell KL, Gerling AB, Hamre KD, McClure RP, Munger ZW, Figueiredo RJ, Hanson PC, Carey CC. Hypoxia-induced trade-offs on zooplankton vertical distribution and community structure in reservoirs. Poster presentation at GLEON 18, Gaming, Austria, July, 2016.

Doubek JP, Burke SM, Summers JC, Bartlett SL, Dugan HA, Krivak-Tetley FE, Skaff NK, Farrell KJ, McCullough IM, Scordo F, Hanson PC, Weathers KC. Cyanobacteria like it hot, nutrient-rich, and a little salty: increased chloride alters phytoplankton and zooplankton community structure in lakes and reservoirs. Poster presentation at GLEON 18, Gaming, Austria, July, 2016.

Burke SM, **Doubek JP**, Dugan HA, Ewing HA, MacDonald LA, Morales-Williams AM, **Skaff NK**, Stockwell JD, Summers JC. Global trends and drivers of lake primary production. Poster presentation at GLEON 18, Gaming, Austria, July, 2016.

Doubek JP, Bierlein KA, Gerling AB, Hamre KD, McClure RP, Munger ZW, Figueiredo RJ, Hanson PC, Carey CC. Hypoxia-induced trade-offs on zooplankton vertical distribution and community structure in Virginia reservoirs. Oral presentation at Virginia Water Conference, Richmond, VA, March 2016.

Doubek JP, Bierlein KA, Gerling AB, Hamre KD, McClure RP, Munger ZW, Carey CC. Hypoxia-induced trade-offs on zooplankton vertical distribution and community structure in reservoirs. Oral presentation at Department of Biological Sciences Research Day 2016, Blacksburg, Virginia, February 2016.

- 2015 **Doubek JP**, Lavender M, Winegardner AK, Beaulieu M, Kelly PT, Stockwell JD. Drivers of zooplankton abundance and richness across the continental USA. Poster presentation, GLEON 17, Chuncheon, South Korea, October 2015.

Dugan HA, Bartlett SL, Burke SM, **Doubek JP**, Krivak-Tetley FE, Skaff NK, Summers JC, Farrell KJ, McCullough IM, Morales-Williams AM, Roberts D, Scordo F, Ouyang Z, Hanson PC, Hong G, Weathers KC. A macroscale study of global chloride trends, drivers, and ecological impacts in lakes. Poster presentation, GLEON 17, Chuncheon, South Korea, October 2015.

Doubek JP, Bierlein KA, Gerling AB, Hamre KD, McClure RP, Munger ZW, Carey CC. Effects of reservoir hypoxia on zooplankton community composition and vertical distribution in Virginia reservoirs. Poster presentation, International Water Association (IWA) Symposium on Lake and Reservoir Management 2015, Pembroke, Virginia, August 2015.

Doubek JP, Hamre KD, Gerling AB, Munger ZW, Gantzer PA, Little JC, Schreiber ME, Carey CC. Effects of hypolimnetic oxygenation on the plankton community of a drinking water reservoir. Oral presentation, Virginia Water Conference, Richmond, VA, March 2015.

- 2014 **Doubek JP**, Carey CC, Cardinale BJ. Anthropogenic land use increases N-fixing cyanobacterial dominance in lakes across the continental United States. Poster presentation, Pacific Rim Applications and Grid Middleware Assembly (PRAGMA), Indiana University, Bloomington, IN, October 2014.

Doubek JP, Carey CC, Cardinale BJ. Anthropogenic land use is associated with N-fixing cyanobacterial dominance in lakes across the continental United States. Poster presentation, GLEON 16, Orford, Canada, October 2014.

Doubek JP, Gerling AB, Carey CC. Importance of long-term water quality monitoring in Carvin's Cove, Roanoke. Oral presentation, Coca Cola, Roanoke, VA, June 2014.

Doubek JP, Carey CC. Phytoplankton communities are more likely to positively respond to increased temperatures and nutrients in natural lakes than in man-made reservoirs. Oral presentation, Joint Aquatic Sciences Meeting, Portland, OR, May 2014.

Doubek JP, Carey CC. Temperature and nutrients interact to promote the dominance of potentially toxic, nitrogen-fixing cyanobacteria in man-made reservoirs. Poster presentation, Research Day, Virginia Tech, Blacksburg, VA, February 2014.

- 2013 **Doubek JP**, Carey CC. Temperature and nutrients interact to promote the dominance of potentially toxic, nitrogen-fixing cyanobacteria in man-made reservoirs. Poster presentation, GLEON 15, Bahía Blanca, Argentina, November 2013.

Doubek JP, Lehman JT. Historical and seasonal food web relationships of zooplankton in Lake Michigan. Oral presentation, School of Natural Resources and Environment, Ann Arbor, MI, April 2013.

Doubek JP, Cardinale BJ. Land use change is associated with cyanobacterial dominance in U.S. Lakes. Poster presentation, Midwest Ecology and Evolution Conference (MEEC) 2013, University of Notre Dame, South Bend, IN, March 2013.

2012 **Doubek JP**. How humans influence the recruitment of cyanobacteria: implications for water quality. Oral presentation, Program in the Environment, Ann Arbor, MI, November 2012.

Doubek JP. Predicting causes for blue green algal blooms, and resulting impacts on the phytoplankton community structure. Oral presentation, School of Natural Resources and Environment, Ann Arbor, MI, October 2012.

Doubek JP. The importance in understanding phyto- and zooplankton interactions as indicator species of water quality. Oral presentation, Department of Mathematics, Ann Arbor, MI, July 2012.

Lawson R, Weiker D, Doubek JP. The procedures and effective means to collect and process water quality samples. Invited seminar, Huron River Watershed Council, Ann Arbor, MI, April 2012.

Doubek JP, Lehman JT. Seasonal changes in zooplankton biomass and food web relations in Lake Michigan. Oral presentation, School of Natural Resources, Ann Arbor, MI, February 2012.

2011 **Doubek JP**, Lehman JT. Recent proportional changes in zooplankton biomass in Lake Michigan, and the resulting bioenergetic consequences for the zooplankton community. Oral presentation, Department of Ecology and Evolutionary Biology, Ann Arbor, MI, November 2011.

Doubek JP, Lehman JT. Reduced river phosphorus following a local ordinance to reduce phosphorus in fertilizers. Oral presentation, School of Natural Resources, Ann Arbor, MI, March 2011.

2009 **Doubek JP**, Lehman JT. Role of hydrology and spring diatom bloom on *Dreissena polymorpha* (zebra mussel) recruitment. Poster presentation, Department of Biology, Ann Arbor MI, December 2009.

Doubek JP, Gale S. Genetic and geographic differences of an invasive snail species, *Bithynia tentaculata*, in North America. Poster presentation, 23rd National Conference on Undergraduate Research, La Crosse, WI, April 2009.

PROFESSIONAL MEMBERSHIPS

- Global Lake Ecological Observatory Network (GLEON)
- Association for the Sciences of Limnology and Oceanography (ASLO)
- Ecological Society of America (ESA)
- Pacific Rim Applications and Grid Middleware Assembly (PRAGMA)
- International Society of Limnology (SIL)

OUTREACH AND SERVICE ACTIVITIES

Gatewood Reservoir Water Quality Report

2017

- An undergraduate student and I designed an educational pamphlet for Gatewood Reservoir that highlighted the water quality of the reservoir from 2014-2016

Spring Festival (SEEDS Nature Center, Blacksburg, VA)

April 2017

- Created interactive activities and visual displays to educate the community in aquatic sciences

Virginia Tech Biological Graduate Student Association (BGSA)-Treasurer

Sep. 2014 – Dec. 2015

- Organized and participated in BGSA meetings and events and overseeing the monetary transactions within the organization

GLEON zUSA Working Group Workshop

Sep. 2015

- Co-led the organization of a three-day workshop for a research working group (six members) within GLEON at the University of Vermont
- Face-to-face workshop where we solidified research questions, performed statistics, created figures, outlined a manuscript, and prepared a poster that I presented at the GLEON 17 meeting

IGC Professional Development Committee

Dec. 2013 – Dec. 2014

- Facilitate monthly discussion meeting groups for IGC students at Virginia Tech
- Organized a workshop where IGC students and six scientists met and discussed job differences between different scientific fields
- Acquired an interdisciplinary scientist to be a seminar speaker through the Ecology, Evolution, and Behavioral Biology seminar series in Winter 2015

Passport to Discovery (SEEDS Nature Center, Blacksburg, VA)

2013, 2014

- Organized outreach event for public through Interfaces of Global Change (IGC) at Virginia Tech
- Educated individuals on how multiple factors such as nutrient concentrations and climate change can influence plankton and lake water quality

OTHER POSITIONS HELD

U.S. Geological Survey, Aquatics Technician (Ann Arbor, MI)

Aug. 2011 – May 2013

- Quantified zooplankton abundance, biomass and distribution for 17 sampling sites during three sampling seasons in Lake Huron

Huron River Watershed Council, Water Quality Monitoring Coordinator (Ann Arbor, MI)

Apr. – Oct. 2011; Apr. – Jul. 2012

- Trained 60 volunteers over two seasons on water quality monitoring techniques and the collection of nutrient samples
- Assisted with field reconnaissance of new sampling sites, data entry, review and analysis in a larger effort to develop watershed management plans and promote environmental stewardship
- Solely directed and coordinated the Livingston County, MI monitoring program in 2012

City of Ann Arbor, Aquatics Research Assistant (Ann Arbor, MI)

Aug. – Oct. 2009; May – Oct. 2010, Aug. – Oct. 2012

- Collected weekly water samples from historical sites on the Huron River, and measured nutrient concentrations (total phosphorus, dissolved phosphorus, soluble reactive phosphorus, nitrate, ammonium, silicate, pH, and conductivity)
- Measured chlorophyll, phycocyanin, and alkaline phosphatase concentrations of algal communities
- Studied how nutrient run-off affected riverine water quality, and subsequent changes in the planktonic community

Evolution/Parasitology Research Assistant, U.S. Geological Survey (De Pere, WI)

May – Aug. 2008

- Extracted and amplified DNA using PCRs to identify the ITS regions of DNA in the snails *Bithynia tentaculata*
- Conducted gel electrophoresis to view amplified DNA, and sent DNA to GenBank to assess against current research
- Selected to present results at the National Conference on Undergraduate Research in La Crosse, WI

SKILLS

R, ArcGIS, MATLAB, plankton taxonomy, programming, Spanish (moderate), sensor/equipment repair and maintenance, electrofishing certified