**Project Manager Qualifications and Organization Description**

***Education***

Ph.D. 2011 Miami University, Oxford, OH (Ecology, Evolution, and Environmental Biology)

M.S. 2004 Michigan State University, East Lansing, MI (Fisheries and Wildlife)

B.S. 2001 Miami University, Oxford, OH (Botany, magna cum laude)

***Professional Experience***

2018-present *Adjunct Assistant Professor*, Dept. of Plant and Microbial Biology, University of Minnesota

2016-present *Station Biologist*, University of Minnesota Itasca Biological Station and Labs (Lake Itasca, MN)

2012-2015 *Director of Research and Education*, Lacawac Sanctuary Field Station (Lake Ariel, PA)

***Relevant Publications to Proposal***

Block, B., B.A. Denfeld, J.D. Stockwell, G. Flaim, H.P.F. Grossart, **L.B. Knoll**, D.B. Maier, R.L. North, M. Rautio, J.A.

Rusak, S. Sadro, G.A. Weyhenmeyer, A.J. Bramburger, D.K. Branstrator, and S.E. Hampton. 2019. The unique methodological challenges of winter limnology. *Limnology and Oceanography Methods* 17: 42-57 doi: 10.1002/lom3.10295

**Knoll, L.B**., C.E. Williamson, R.M. Pilla, T.H. Leach, J.A. Brentrup, and T.J. Fisher. 2018. Browning-related oxygen

depletion in an oligotrophic lake. *Inland Waters* 8: 255-263.

Pilla, R.M., C.E. Williamson, J. Zhang, R.L. Smyth, J.D. Lenters, J.A. Brentrup, **L.B. Knoll**, and T.J. Fisher. 2018.

Long-term trends in water temperature and thermal stratification in two small lakes resulting from browning-related decreases in water transparency. *Journal of Geophysical Research: Biogeosciences*: 123. doi: 10.1029/2017JG004321.

Richardson, D.C., S.J. Melles, R.M. Pilla, A.L. Hetherington, **L.B. Knoll**, C.E. Williamson, and others. 2017.

Transparency, geomorphology, and mixing regime explain variability in trends in lake temperature and stratification across northeastern North America (1975 – 2014). Water 9: 442. doi:10.3390/w9060442

**Knoll, L.B.**, A. Morgan, M.J. Vanni, T.H. Leach, T.J. Williamson, and J.A. Brentrup. 2016. Quantifying pelagic

phosphorus regeneration using three methods in lakes of varying productivity. *Inland Waters* 6: 509-522.

Brentrup, J.A., C.E. Williamson, W. Colom-Montero, W. Eckert, E. de Eyto, H.P. Grossart, Y. Huot, P. Isles, **L.B.**

**Knoll**, T.H. Leach, C.G. McBride, D. Pierson, F. Pomati, J.S. Read, K.C. Rose, N.R. Simal, P.A. Staehr, and L.A. Winslow. 2016. The potential of high-frequency profiling to assess vertical and seasonal patterns of phytoplankton dynamics: An extension of the Plankton Ecology Group (PEG) model. *Inland Waters* 6: 565-580.

**Knoll, L.B.**, E.J. Hagenbuch, M.H. Stevens, M.J. Vanni, W.H. Renwick, J.C. Denlinger, R.S. Hale, and M.J. González.

2015. Predicting eutrophication status in reservoirs at large spatial scales using landscape and morphometric variables. *Inland Waters* 5: 203-214.

**Knoll, L.B**., O. Sarnelle, S.K. Hamilton, C.E.H. Kissman, A.E. Wilson, J.B. Rose, and M.R. Morgan. 2008. Invasive

zebra mussels (Dreissena polymorpha) increase cyanobacterial toxin concentrations in low-nutrient lakes. Canadian Journal of Fisheries and Aquatic Sciences 65: 448-455.

**Organization Description**

The proposed research will be performed at both the UMN Itasca Field Station and the University of Minnesota Twin Cities campus. The field station was established in 1909 and has a long and successful history of supporting field-based biological research. The University of Minnesota is a large and renowned public institution producing cutting-edge research products.