

2011 Scientific Papers – Wisconsin Sea Grant Funded

Inhibition of Cortisol Metabolism by 17 α , 20 β -P: Mechanism Mediating Semelparity in A Dominant Negative Zebrafish Ahr2 Partially Protects Developing Zebrafish from Dioxin Toxicity Lanham KA Prasch AL Weina KM Peterson RE and Heideman W PLoS One 6(12):e28020, published online [doi: 10.1371/journal.pone.0028020] (2011)

The Effect of Dreissenid Invasions on Chlorophyll and the Chlorophyll:Total Phosphorus Ratio in North-temperate Lakes Higgins SN Vander Zanden MJ Joppa LN and Vadeboncoeur Y Canadian Journal of Fisheries and Aquatic Sciences, 68:319-329 (2011)

The Chicago Sanitary and Ship Canal Aquatic Nuisance Species Dispersal Barrier Moy PB Polls I and Dettmers JM In Invasive Asian Carps in North America, Duane C. Chapman and Michael H. Hoff, editors, 2011, pp. 121-137, American Fisheries Society. (Proceedings of AFS Symposium 74 held August 22-23, 2006 in Peoria, Illinois)

Induction of Reactive Oxygen Species in Chlamydomonas reinhardtii in Response to Contrasting Trace Metal Exposures Stoiber TL Shafer MM and Armstrong DE Environmental Toxicology, doi: 10.1002/tox.20743 (2011)

Role of Zebrafish Cytochrome P450 CYP1C Genes in the Reduced Mesencephalic Vein Blood Flow Caused by Activation of AHR2 Kubota A Stegeman JJ Woodin BR Iwanaga T Harano R Peterson RE Hiraga T and Teraoka H Toxicology and Applied Pharmacology, 253:244-252 (2011)

Evaluating the Growth Potential of Sea Lampreys (*Petromyzon marinus*) Feeding on Siscowet Lake Trout (*Salvelinus namaycush*) in Lake Superior Moody EK Weidel BC Ahrenstorff TD Mattes WP and Kitchell JF Journal of Great Lakes Research 37:343-348 (2011)

Linking Emergent Midges to Alewife (*Alosa pseudoharengus*) Preference for Rocky Habitat in Lake Michigan Littoral Zones Kornis MS and Janssen J Journal of Great Lakes Research 37:561-566 (2011)

Historical and Contemporary Trophic Niche Partitioning Among Laurentian Great Lakes Coregonines Schmidt SN Harvey CJ and Vander Zanden MJ Ecological Applications 21(3):888-896 (2011)

Lachnospiraceae and Bacteroidales Alternative Fecal indicators Reveal Chronic Human Sewage Contamination in an Urban Harbor Newton RJ Vandewalle JL Borchardt MA GorelickMH and Mclellan SL Applied and Environmental Microbiology 77(19):6972-6981(2011) Assessing Ecosystem Vulnerability to Invasive Rusty Crayfish (*Orconectes rusticus*) Olden JD Vander Zanden MJ and Johnson PT Ecological Applications 21(7):2587-2599 (2011)

Formation of Tussocks by Sedges: Effects of Hydroperiod and Nutrients Lawrence BA and Zedler JB Ecological Applications 2(5):1745-1759 (2011)

Functional Responses and Scaling in Predator-Prey Interactions of Marine Fishes: Contemporary Issues and Emerging Concepts Hunsicker ME Ciannelli L Bailey KM.; Buckel JA and White J et al Ecology Letters 14(12):1288-1299 (2011)

Molecular Targets That Link Dioxin Exposure to Toxicity Phenotypes Yoshioka W Peterson RE and Tohyama C Journal of Steroid Biochemistry and Molecular Biology 127(1-2):96-101 (2011)

A Dominant Negative Zebrafish Ahr2 Partially Protects Developing Zebrafish From Dioxin Toxicity
Lanham KA Prasch AL Weina KM Peterson RE Heideman W PLoS One, 6(12):e28020,
DOI:10.1371/journal.pone.0028020

Rip Currents in the Great Lakes: An Unfortunate Truth Meadows G Purcell H Guenther D Meadows L
Kinnunen RE Clark G In Rip Currents: Beach Safety, Physical Oceanography, and Wave Modeling,
Stephen Leatherman and John Fletemeyer, editors, 2011, pp. 199-214, CRC Press

Foraging, Bioenergetic and Predation Constraints on Diel Vertical Migration: Field Observations and
Modeling of Reverse Migration by Young-of-the-year Herring *Clupea harengus* Jensen OP Hansson D
Didrikas Y Stockwell JD Hrabik TR Axenrot T and Kitchell JF Journal of Fish Biology 78:449-465 (2011)

Development of Yellow Perch (*Perca flavescens*) Broodstocks: Initial Characterization of Growth and
Quality Traits Following Grow-out of Different Stocks Rosauer DR Biga PR Lindell SR Binkowski FP
Shepherd BS Palmquist DE Simchick CA and Goetz FW Aquaculture 317:58-66 (2011)

Multi-scale Temporal and Spatial Variation in Genotypic Composition of Cladophoraborned *Escherichia*
coli Populations in Lake Michigan Badgley BD Ferguson J Vanden Heuvel A Kleinheinz GT McDermott CM
Sandrin TR Kinzelman J Junion EA Byappanahalli MN Whitman RL and Sadowsky MJ Water Research
45:721-731 (2011)

Water Use and Acute Diarrhoeal Illness in Children in a United State Metropolitan Area Gorelick MH
McLellan SL Wagner D and Klein J Epidemiology and Infection 139:295-301 (2011)

Round Goby, *Neogobius melanostomus* Kornis MS and Mercado-Silva N In Fishes of Wisconsin E-book
John Lyons editor (2011)

Mercury in the Aquatic Environment: Sources, Releases, Transport and Monitoring. The Joint Group of
Experts on the Scientific Aspects of the Marine Environmental Protection (GESAMP), Working Group 37
Keenan, H, S Bangkedphol, A Babajide, C Davidson, J Guimeraes, M Horvat, J Hurley, J Leaner, R Mason,
A Songsasen, T Takashi and E Vasileva-Veleva United Nations Environment Programme. Geneva,
Switzerland. 114 p. (2011)

Water Resources Working Group Report. Wisconsin's Changing Climate; Impacts and Adaptation.
Wisconsin Initiative on Climate Change Impacts Betz, C, Asplund, T and J Hurley Nelson Institute for
Environmental Studies, University of Wisconsin-Madison and Wisconsin Department of Natural
Resources (2011)