BRIAN JOSEPH DINGMANN, PH.D.

2900 University Avenue ♦ Crookston, Minnesota 56716-5001 ♦ (218) 281-8249 ♦ dingm021@umn.edu

EDUCATION

GEORGIA INSTITUTE OF TECHNOLOGY – Atlanta, Georgia 2001 Doctorate of Philosophy in Applied Biology, minor in Biochemistry. GAANN Fellow Additional coursework in Chemistry, Biochemistry, Ecology and Physiology provided for a broad-based training in Biology.

<u>Thesis</u>: Studies of a Mate Recognition Gene and Its Product From the Rotifer <u>Brachionus plicatilis</u>, characterized a surface membrane glycoprotein and its gene involved in mate recognition in rotifers.

SAINT JOHN'S UNIVERSITY – Collegeville, Minnesota Bachelor of Arts in Biology with All College Honors and minor in Philosophy. Siehl Scholar, graduated cum laude.

TEACHING RELATED EXPERIENCE

UNIVERSITY OF MINNESOTA CROOKSTON- Crookston, Minnesota Associate Professor of Biology

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Honors Program Coordinator

Founded and direct all activities related to the Honors Program and the Alpha Lambda Delta First Year Honor Society.

UNIVERSITY OF MINNESOTA CROOKSTON- Crookston, Minnesota

Assistant Professor of Biology

Tenured instructor for the following courses: a general biology course with laboratories; a general zoology course with laboratory; a general microbiology course with laboratory; an evolution course, limnology and ecotoxicology field courses.

ROCHESTER COMMUNITY AND TECHNICAL COLLEGE- Rochester, Minnesota

Adjunct Instructor

Full-time instructor for both an introductory biology and a microbiology course with laboratories. Biology1101: Elements of Biology with a laboratory was a general biology course for non-majors. Biology 2021: General Microbiology with a laboratory was a required course for health-science majors.

MINNESOTA STATE UNIVERSITY, MANKATO - Mankato, Minnesota

Adjunct Instructor

Instructor for a general zoology course with a laboratory. Course consisted of a comprehensive review of the animal phyla with a comparative anatomy dissection laboratory. Biology 316: Animal Diversity was a required course within the zoology concentration at Minnesota State University.

ACADEMY OF NATURAL SCIENCES - Philadelphia, Pennsylvania

Mentor for Research Experience for Undergraduates

Supervision of a 10-week summer intern that involved documentation and imaging to facilitate a web-based search inventory of the rotifer collection at the Academy of Natural Sciences. Mentoring encompassed taxonomic and microscopic techniques needed to develop the rotifer database.

Research Experience

MAYO CLINIC – Rochester, Minnesota

Postdoctoral Fellow

Study of the structure/function dynamics of a plasma membrane calcium pump that involves site-directed mutagenesis of the calcium binding site and biochemical transport characterization of the resultant mutants.

2001 - 2004

2002

2001

1994

2008-present

2004-2010

2003-2004

2010-present

ACADEMY OF NATURAL SCIENCES – Philadelphia, Pennsylvania Postdoctoral Fellow

Internationally selected grant at the Academy awarded to study aquatic invertebrates. Fellowship was restricted to one year by donor. Research involved the molecular systematics of rotifers at the genus/family level within the phylum Rotifera using the rDNA gene complex.

GEORGIA INSTITUTE OF TECHNOLOGY – Atlanta, Georgia1994 - 2000Graduate Teaching/Resesarch Assistant - Giving Assistance in Areas of National Need (GAANN) Fellow1998 - 2000Fellowship required three quarters of teaching, with subsequent videotaping and critical evaluation1998 - 2000

of teaching techniques. Experience with nucleic acids, protein chemistry and antibody affinity purification, rotifer mating bioassays, and characterization of a mate recognition gene.

PUBLICATIONS

Dingmann, B. J., Armstrong, V., and Naplin, E. (2014). The expression of heat-shock protein in a rotifer under various sub-optimum nutritional states. <u>Hydrobiologia</u> (in preparation).

Dingmann, B. J., Armstrong, V. and Naplin, E. (2014). The Effect of three putative endocrine disruptors on the reproduction of the rotifer *Brachionus calyciflorus* (Rotifera). Journal of Environmental Biology (submitted).

Dingmann, B. J., and Webster, M. (2014). Open Season on Cormorants on Leech Lake, Minnesota. <u>National Center</u> for Case Studies in Science (submitted, peer-review system).

Jersabek, C., Dingmann, B. J., and Garcia, R. (2003). Taxonomic review and digital imaging of the rotifer collection at the Academy of Natural Sciences, a special Academy of Natural Sciences CD publication (peer-reviewed).

Snell, T. W., Dingmann, B. J., and Serra, M. (2001). Density-dependence in natural rotifer populations. <u>Hydrobiologia</u> 446:39-44.

Preston, B., Snell, T. W., Robertson, T., and Dingmann, B. J. (2000). Use of freshwater rotifer *Brachionus* calyciflorus in screening assay for potential endocrine disruptors. <u>Environ. Toxicol. Chem</u>. 19:2923-2928.

Rico-Martinez, R., Dingmann, B. J., and Snell, T. W. (1996). Surface glycoproteins potentially involved in mate recognition in nine freshwater rotifer species. <u>Arch. Hydrobiologia</u> 138:1-5.

PRESENTATIONS

February 2009, The Collaboration for the Advancement of College Teaching and Learning, St. Paul, MN Oral presentation entitled, "Promoting and Experiencing Collaborative Learning" by Kevin Thompson, Brian J. Dingmann, and Marilyn Grave

October 2007, Biocomplexity Research Group, Woods Hole, MA

Oral presentation entitled, "Site-directed Mutagensis of a Mate Recognition Protein in a Rotifer" by Brian J. Dingmann

October 2006, Biocomplexity Research Group, Woods Hole, MA Oral presentation entitled, "Insect Cell Expression of a Mate Recognition Protein in a Rotifer" by Brian J. Dingmann

March 2006, International Rotifer Symposium XI, Mexico

Poster presentation entitled, "The effect of three putative endocrine disruptors on the reproduction of the rotifer *Brachionus calyciflorus* (Pallas)" by Brian J. Dingmann and Vanessa Armstrong

February 2006, National Conferences for Undergraduate Research, Asheville, NC Poster presentation entitled, "Disruption of sexual reproduction in the rotifer *Brachionus calyciflorus* (Pallas)" by Vanessa Armstrong and Brian J. Dingmann

February 2001, National meeting, ASLO, Albuquerque, New Mexico

Oral presentation entitled, "A comparison of morphological and molecular phylogenies of the Asplanchnidae (phylum Rotifera)" by Brian J. Dingmann, Elizabeth Walsh and Robert Wallace

January 2000, International Rotifer Symposium IX, Thailand Oral presentation entitled, "Species and speciation in the phylum Rotifera" by Brian J. Dingmann and Terry W. Snell

January 2000, International Rotifer Symposium IX, Thailand

Oral presentation entitled, "Density-dependence in natural rotifer populations" by Terry W. Snell, Brian J. Dingmann and Manuel Serra

November 1999, National meeting, SETAC, Philadelphia, Pennsylvania Poster presentation entitled, "Effects of endocrine disruptors on asexual and sexual reproduction of the rotifer Brachionus calyciflorus" by Ben Preston, Terry W. Snell, Tish W. Robertson, and Brian J. Dingmann

June 1997, International Rotifer Symposium VIII, Collegeville, Minnesota

Oral presentation entitled, "Carbohydrate Structure of the Mate Recognition Pheromone: Comparison of three rotifer species" by Brian J. Dingmann and Terry W. Snell

REFERENCES

Terry W. Snell, Ph.D. Thesis advisor Professor of Biology Georgia Institute of Technology 404-894-8906 terry.snell@biology.gatech.edu

Pamela Elf, Ph.D. Associate Professor Dept. of Math, Science and Technology University of Minnesota, Crookston 218-281-8263 pelf@umn.edu Bill Peterson Chair Dept. of Math, Science and Technology University of Minnesota, Crookston 218-281-8268 <u>alixx299@umn.edu</u>