Nicholas J. Seewald

Curriculum Vitae

Personal Information

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Education

Expected May 2015 | **Master of Science**, Biostatistics
University of Michigan, Ann Arbor, Michigan
GPA: 3.89/4.00

May 2013 | **Bachelor of Science** *cum laude*, Pure Mathematics with Life Science
University of Notre Dame, Notre Dame, Indiana
Glynn Family Honors Program
GPA: 3.75/4.00

Research Experience

Current Jan 2014 | Graduate Student Research Assistant, University of Michigan
Supervisor: Kelley M. Kidwell, Ph.D.

Developed a web application for sizing SMARTs with binary or continuous outcomes in which the primary goal is to compare two embedded dynamic treatment regimes.

Helped derive sample size formulae for SMART designs with binary outcomes, in collaboration with Daniel Almirall, Ph.D.

Collaborated with investigators in the University of Michigan Health System, School of Pharmacy, and Department of Psychology on data analysis projects involving cancer, genetics, and obesity.

Sep 2013 - Jan 2014 | *Supervisor: Gonçalo Abecasis, D.Phil.*

Worked on aligning whole-genome samples from a large-scale case control study on age-related macular degeneration.

Apr 2012 - Apr 2013 | Senior Thesis, Entropy and Counting
Supervisor: David Galvin, Ph.D.

Studied properties of the entropy of a random variable and its combinatorial implications, especially Brégman's Theorem, Dedekind's Problem, and H-Colorings of graphs.

May - Jul 2011 | Summer Experience in Algebra, University of Notre Dame
Supervisor: Francis X. Connolly, Ph.D.

Intensive program in graduate-level group and ring theory based on Dummit and Foote's *Abstract Algebra*.

Jan 2010 - May 2011 | Undergraduate Research in Chemistry, University of Notre Dame
Supervisor: Seth N. Brown, Ph.D.

Studied NMR kinetics of reaction between molybdenum tris(catecholate) and nitrogen-containing compounds to determine a probable reaction mechanism.

Peer-Reviewed Publications

2013 Randolph, A.H.; **Seewald, N.J.**; Rickert, K.; Brown, S.N. Tris(3,5-di-tert-butylcatecholato)molybdenum(VI): Lewis Acidity and Nonclassical Oxygen Atom Transfer Reactions. *Inorg. Chem.* **2013**, *52*, 12587-12598.

2012 Marshall-Roth, T.; Liebscher, S.C.; Rickert, K.; **Seewald, N.J.**; Oliver, A.G.; Brown, S.N. Nonclassical oxygen atom transfer reactions of oxomolybdenum(vi) bis(catecholate). *Chem. Commun.* **2012**, *48*, 7826-7828.

Training Grants

Current | Training Program in Cancer Research
Sep 2014 | *Program Director: Jeremy M G Taylor, Ph.D.*
Financial support is partially funded by NIH Training Grant 5T32CA083654-12.

Teaching Experience

Aug 2010 - May 2013 | Calculus Tutor at Learning Resource Center, University of Notre Dame
Led Collaborative Learning sessions with groups of First Year students. Courses taught include Calculus I and II for business, life science, engineering, and mathematics majors.
Worked with LRC Director to introduce Math Mentoring Night, a program intended to offer First Year students homework help and math-related guidance.

Jan-May 2012 | Undergraduate Teaching Assistant in Biostatistics, Department of Biological Sciences, Univeristy of Notre Dame
Supervisor: Gary Lamberti, Ph.D.
Helped design and facilitate tutorial sessions structured around data analysis in R.
Assisted students with homework, projects, and coding in R

Leadership and Service Experience

Current Sep 2014 | Member of Biostatistics Student Association, University of Michigan
Lead design and sales of department apparel aimed at fundraising for student activities which promote biostatistics among the School of Public Health.

Current Sep 2014 | Member of STATCOM@UMICH, University of Michigan
Assisted in pro-bono statistical consulting projects for non-profit organizations in Washtenaw County, Michigan.

Apr 2012 - May 2013 | Vice President of Math Club of Notre Dame, University of Notre Dame
Planned, organized, and held activities to promote mathematics awareness and to increase camaraderie among mathematics majors.

Apr 2012 - May 2013 | Apparel Chair of Senior Class Council, University of Notre Dame

Computing

Proficiency: LaTeX, SAS, R
Basic Knowledge: C++, Python, Ubuntu Linux, MATLAB, Mathematica