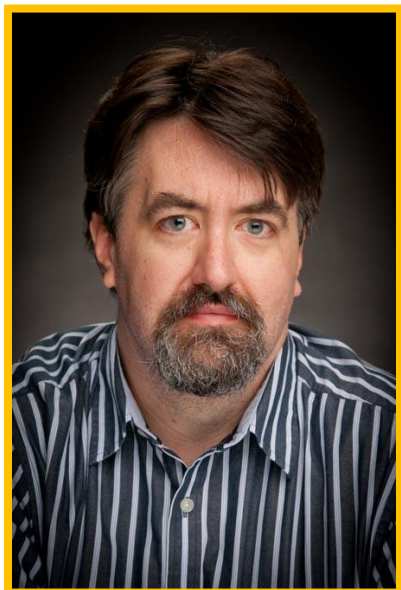


Department of Mathematics and Natural Sciences

Dr. Jonathan Corbett



Associate Professor of Mathematics

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HGA 317

**Degrees
Held:**

Doctor of Philosophy

Washington University
Mathematics

Bachelor of Arts

University of California, Berkeley
Mathematics

Master of Arts

Washington University
Mathematics

Bio:

Jonathan Corbett grew up in a small logging town in rural Northern California. After high school, he attended the University of California at Berkeley where he obtained a B.A. in Mathematics. After this, he attended graduate school at Washington University in St. Louis where he studied harmonic analysis and received his Ph.D. in 1999.

Afterwards, he took a postdoctoral Fellowship in Statistical Genetics in the Department of Psychiatry at the Washington University School of Medicine. At the end of his postdoc, he accepted a faculty position in the Division of Biostatistics at Washington University in 2002 and moved to the Department of Genetics in 2005.

In 2007, he left the Department of Genetics to return to his first love: teaching and studying mathematics. This paid off in 2009 when he accepted a tenure-track position as an Assistant Professor of Mathematics at Harris-Stowe State University.

Courses: At Harris-Stowe:

ALG 0036 and 0038: Developmental Algebra
MATH 0120: Structures of Mathematical Systems
MATH 0135: College Algebra
MATH 0136: Finite Math
MATH 0170: Calculus and Analytic Geometry I
MATH 0203: Applied Calculus for Business Majors
MATH 0240: Foundations of Advanced Math
MATH 0241: Calculus and Analytic Geometry II
MATH 0242: Calculus and Analytic Geometry III
MATH 0320: Introduction to Modern Algebra
MATH 0321: Abstract Algebra
MATH 0327: Introduction to Topology
MATH 0375: Introduction to Real Analysis
MATH 0456: Linear Algebra
MATH 0461: Differential Equations

Publications: (Selected Publications)

J.-P. Leduc, J. Corbett, M.V. Wickerhauser. 1998. "Rotational wavelet transforms for motion analysis, estimation, and tracking." Proceedings of the 1998 International Conference on Image Processing, vol. 2, pp. 195-199

J. Corbett, J.-P. Leduc, M. Kong. 1999. "Analysis of deformational transformations with spatio-temporal continuous wavelet transforms." Proceedings of the 1999 IEEE International Conference on Acoustics, Speech, and Signal Processing, vol. 6, pp. 3189-3192

N.L. Saccone, J.M. Kwon, J. Corbett, A. Goate, N. Rochberg, H.J. Edenberg, T. Foroud, T-K. Li, H. Begleiter, T. Reich, J.P. Rice. 2000. "A genome screen of maximum number of drinks as an alcoholism phenotype." American Journal of Medical Genetics (Neuropsychiatric Genetics) vol. 96, pp.632-637.

J.P. Rice, N.L. Saccone, J. Corbett. 2001. "The lod score method." In Advances in Genetics vol. 42, pp 99-113, (DC Rao ed.)

J. Corbett, A. Kraja, I.B. Borecki, M.A. Province. 2003. "Use of a random coefficient regression (RCR) model to estimate growth parameters." BMC Genetics, vol 4 (Supplement 1), S5.

J. Corbett, C. Gu, J.P. Rice, T. Reich, M.A. Province, D.C. Rao. 2004. "Power loss for linkage due to the dichotomization of trichotomous phenotypes." Human Heredity, vol 57(1), pp. 21-27.

J. Corbett, N.L. Saccone, T. Foroud, A. Goate, H.J. Edenberg, J. Nurnberger Jr., H. Begleiter, T. Reich, J.P. Rice. 2005. "A sex- and age-adjusted genome screen for nested alcohol dependence diagnoses." *Psychiatric Genetics*, vol 15(1), pp. 25-30.

A. Kraja, J. Corbett, P. An, R.S. Lin, P.A. Jacobsen, M. Chrosswhite, I.B. Borecki, M.A. Province. 2007. "Rheumatoid arthritis, item response theory, Blom transformation, and mixed models." *BMC Proceedings 2007 I(Suppl I):S116*

Presentations: Accepted for Presentation:

October 2012: "Formalism and the Transition to Proof-Based Mathematics", National Council of Teachers of Mathematics, Dallas, TX (jointly with Ann Podleski)

Recent Presentations:

April 2012: "Embracing Open Source Materials in the Undergraduate Curriculum," Mathematics Association of America, Missouri Section Meeting, St. Louis, MO (jointly with Ann Podleski)

March 2012: "Modular arithmetic with Applications to Clocks and Calendars," Beginning Teachers Assistance Program, Harris-Stowe State University, St. Louis MO (jointly with Ann Podleski)

November 2011: "Genetics Models to Capstone an Introductory Statistics Course," National Council of Teachers of Mathematics, Albuquerque, NM (jointly with Ann Podleski)

October 2011: "Hands-on Geometry and Topology", National Council of Teachers of Mathematics, St. Louis, MO (jointly with Ann Podleski)

April 2010: "Every Equation Tells a Story", Faculty Research Seminar, Harris-Stowe State University, St. Louis, MO

Also, oral and poster presentations at meetings of:

American Society of Human Genetics
International Genetic Epidemiology Society
Genetic Analysis Workshop
World Congress on Psychiatric Genetics

Certifications: Post-graduate work in Statistical Genetics in the Department of Psychiatry at Washington University, 1999-2002