

September 2009

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Assistant Professor of Actuarial Science
Department of Mathematics
University of Illinois at Urbana-Champaign

Contact Information

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Education

- **Ph.D. (Actuarial Science, Risk Management and Insurance)**
University of Wisconsin – Madison, 2008
- **M.S. (Actuarial Science)**
University of Wisconsin – Madison, 2003
- **B.S. (Chemistry and Mathematics)**
University of Wisconsin – Eau Claire, 2001

Society of Actuaries (SOA)/Casualty Actuarial Society (CAS) Examinations Passed

- SOA/CAS Course 1
- SOA/CAS Course 2
- SOA Exam M
- SOA/CAS Exam C

Current Position

Assistant Professor, Actuarial Science, Department of Mathematics
University of Illinois at Urbana-Champaign, 2008 – present

Current Research

- **Affiliations**
 - Department of Mathematics, University of Illinois at Urbana-Champaign
 - Department of Kinesiology and Community Health, University of Illinois at Urbana-Champaign
 - Department of Actuarial Science, Risk Management and Insurance, School of Business, University of Wisconsin-Madison

- **Areas**
 - Racial disparities in mental health care
 - Multilevel regression models, with a focus on the mitigation of endogeneity
 - Health care affordability at both the national and stakeholder-levels
 - Cost-effectiveness of cervical cancer screening among the elderly

Academic Positions

- **Assistant Professor, Actuarial Science, Department of Mathematics**
University of Illinois at Urbana-Champaign, 2008 – present
Courses:
 - MATH 471: Actuarial Theory I (Fall 2008, Fall 2009)
 - MATH 472/567: Actuarial Theory II/Topics in Actuarial Theory I (Spring 2009)
 - MATH 597: Actuarial Science Seminar for Graduate Students (Fall 2009)
 - MATH 390: Independent Study in Actuarial Science (Fall 2009)

- **Teaching Assistant, School of Business**
University of Wisconsin – Madison, 2002 - 2008
Courses:
 - AS 300: Actuarial Science Methods: Course 1 Review (Spring 2002)
 - Developed all lectures, taught students the subject material.
 - Instruction facilitated through homework assignments and quizzes.
 - Held office hours outside of class for individual or group mentoring.

 - AS 300: Actuarial Science Methods: Course 2/Exam FM Review (Fall 2002 – Spring 2006)
 - Similar to AS 300: Actuarial Science Methods: Course 1 Review.

- GB 304: Intermediate Business Statistics (Fall 2003 – Spring 2004)
 - Led discussion sections in which students applied techniques for data analysis using real-life management problems/case studies.
 - Helped develop materials used in discussion sections.
 - Graded homework.
 - Helped students become proficient in *Microsoft Excel* and *Minitab*.

- Math Camp (Summer 2003)
 - Part of an orientation program for incoming M.B.A. students, designed as a basic review of pre-calculus, calculus, statistics, and financial mathematics.
 - As course instructor, prepared and delivered all lectures and facilitated ``break-out" sessions where groups of students worked on problem sets and case studies.

Industry Positions

Northwestern Mutual

Extended Internship Position, 2001

- Applied Visual Basic skills to add additional useful functionality to the company's premium pricing and expense analysis program for the QuietCare long term care insurance product.

Publications

Articles in Refereed Journals:

- Rosenberg, Marjorie A, Paul H. Johnson, Jr., and Ian G. Duncan. 2009. Exploring Stakeholder Perspectives on what is Affordable Health Care. Accepted for publication, to appear in *Risk Management and Insurance Review*.

- Rosenberg, Marjorie A., Edward W. Frees, Jiafeng Sun, Paul H. Johnson Jr., and James M. Robinson. 2007. Predictive Modeling with Longitudinal Data: A Case Study of Wisconsin Nursing Homes. *North American Actuarial Journal* 11(3): 54-69.

Other Articles:

- Rosenberg, Marjorie A., and Paul H. Johnson, Jr. 2007. Health Care Predictive Modeling Tools. *Health Watch* 54: 24-27.

Working Papers:

- Johnson, Paul H. Jr., Edward W. Frees, and Marjorie A. Rosenberg. 2009. A Three-Level Regression Model Analysis of Racial Disparities in U.S. Inpatient Mental Health Treatment. *Dissertation Paper*.
- Johnson, Paul H. Jr., Edward W. Frees, and Marjorie A. Rosenberg. 2009. Multilevel Model Analysis of Racial/Ethnic Disparities in U.S. Inpatient Mental Health Treatment in the Presence of Endogeneity. *Dissertation Paper*.

Presentations

- “Exploring Stakeholder Perspectives on what is Affordable Health Care” presented at the 44th Actuarial Research Conference, Madison, WI, July 2009.
- “Racial Disparities in US Healthcare” presented at the Society of Actuaries’ Health Spring Meeting (Section 70: Disparities in Health Care), Los Angeles, CA, May 2008.
- “Mitigating the Impact of Endogeneity in Mental Healthcare Data via Multilevel Models” presented at the 42nd Actuarial Research Conference, Moon Township, PA, August 2007. *Earned 2nd place for best student presentation.*
- “Is the U.S. Health Care System In or Near Crisis?” presented at the Society of Actuaries’ Annual Meeting, New York, NY, November 2005 (with Marjorie A. Rosenberg).

Awards, Grants, and Scholarships

- University of Illinois at Urbana-Champaign: “Excellent Teacher,” 2008-2009.
- National Institutes of Health: Ruth L. Kirschstein National Research Service Award No. T32 MH18029-22 from the National Institute of Mental Health, 2006-2008.
- University of Wisconsin – Madison: Henry C. Naiman Teaching Award, 2005.
- University of Wisconsin – Madison: Reggie Tate Excellence in Teaching Award, 2003.
- University of Wisconsin – Eau Claire: Scholarship for Outstanding Achievement in Mathematics by a Junior Student, 1999.
- University of Wisconsin – Eau Claire: Diversity Scholar, 1996 – 2000.

Academic and Scholarly Activities

- **Math Elections Committee**
University of Illinois at Urbana-Champaign, 2008-2009.
- **Undergraduate Affairs Committee**
University of Illinois at Urbana-Champaign, 2009-Present.
- **Math Area Chair (Actuarial Science)**
University of Illinois at Urbana-Champaign, 2009-Present.