

Philip Aaron Yates

Saint Michael's College
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Colchester, VT 05439

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EDUCATION

University of South Carolina, Columbia, SC.
Ph.D. in Statistics: December 2006.
Dissertation: *Methods for the Analysis of Flood Frequency Distributions*.
Advisor: John M. Grego

The University of Vermont, Burlington, VT.
M.S. in Biostatistics: May 1999.
Advisor: Larry D. Haugh

DePaul University, Chicago, IL.
B.S. in Mathematical Sciences; Minor in Economics: June 1997.

EMPLOYMENT

Assistant Professor, Saint Michael's College
Department of Mathematics
August 2010 – present

Assistant Professor, California State Polytechnic University, Pomona
Department of Mathematics & Statistics
September 2007 – June 2010

Analytic Services Executive, The Nielsen Group, Glenview, IL
January 2007 – August 2007

Senior Analytic Services Associate, AC Nielsen, Glenview, IL
September 2005 – December 2006

Teacher, Saint Gregory the Great High School, Chicago, IL
June 2004 – June 2005

Graduate Instructor, University of South Carolina
Department of Statistics
August 1999 – May 2004

Graduate Teaching Fellowship, The University of Vermont
Department of Mathematics & Statistics
September 1997 – June 1999

Student Statistician, The University of Vermont
Biostatistics Program and Department of Orthopaedics & Rehabilitation
June 1998 – June 1999

Tutor & Grader, DePaul University
Department of Mathematical Sciences
September 1996 – June 1997

COURSES

SAINT MICHAEL'S COLLEGE

- MA 120: Elementary Statistics.
- MA 251: Probability and Statistics.
- MA 351: Applied Regression Analysis.
- MA 410: Seminar in Mathematics.
- MA 451: Statistical Inference.

CALIFORNIA STATE POLYTECHNIC UNIVERSITY, POMONA

- MAT 114: Analytic Geometry and Calculus I.
- STA 120: Statistics with Applications.
- STA 241: Applied Probability Theory.
- STA 310: Sampling Theory and Applications.
- STA 326: Statistical Methods for Computer Scientists.
- STA 341: Applied Statistics.
- STA 432: Applied Regression Analysis.
- STA 533: Linear Statistical Models I.
- STA 534: Linear Statistical Models II.
- STA 565: Multivariate Analysis.

UNIVERSITY OF SOUTH CAROLINA

- STAT 110: Introduction to Descriptive Statistics.
- STAT 201: Elementary Statistics.
- STAT 516: Statistical Methods II.

HONORS AND
AWARDS

California Delta Chapter of Kappa Mu Epsilon, Honorary Member, 2008
Project NExT Fellow, Sun Dot, 2007–2008
Student Paper Competition Award, American Statistical Association, South Carolina Chapter Annual Meeting, 2004
Outstanding Statistics Graduate Teaching Assistant, University of South Carolina, 2001–2002, 2002–2003
Mu Sigma Rho Honor Society for Statistics, University of South Carolina, 2000
Graduate Award in Biostatistics, The University of Vermont, 1999
Sang Kil Nam Scholarship in Statistics, The University of Vermont, 1999
Graduate with High Honors, B.S., DePaul University, 1997
St. Vincent de Paul Award for Community Service, DePaul University, 1997
Golden Key Honor Society, DePaul University, 1995
Dean's Award for Scholastic Excellence, DePaul University, 1994–1995, 1995–1996

RESEARCH
INTERESTS

Applied statistics, statistical education, statistical consulting.
Applications to environmental science, biology, political science, and sports.

GRANTS AND
CONTRACTS

Junior Faculty Summer Research Grant

Saint Michael's College, Faculty Development Committee

June 2011, \$4,000

United States Department of Agriculture, Forest Service
Pacific Southwest Region, San Bernardino National Forest

Role: "Professional Mathematical and Statistical Services"

October 2009 – March 2014, up to \$270,000 (currently \$3,007)

United States Department of Agriculture, Forest Service

San Dimas Technology & Development Center

Title: "Greater Yellowstone Area Snowmobile Use Monitoring Evaluation"

Contractor, July 2009 – October 2009, \$2,500

The Pew Charitable Trusts: Making Voting Work

Title: "How Does Vote By Mail Affect Voters? A natural experiment examining individual level turnout"

Statistical Consultant, November 2008 – June 2009, \$36,700

United States Department of Agriculture, Forest Service

San Dimas Technology & Development Center

Title: "Black Powder Ignition Study"

Contractor, October 2008 – November 2008, \$2,000

PUBLICATIONS
AND PAPERS

ARTICLES

Philip Yates. (**accepted**, 2011) "The PING Ratings: A Model For Rating NCAA Baseball Teams," *The Baseball Research Journal*.

Michael A. Posner and Philip A. Yates. (**revising for resubmission**, 2011) "Instructor Characteristics Associated With Improved Student Attitudes Toward Statistics," *Statistics Education Research Journal*.

Elizabeth Bergman and Philip A. Yates. (2011) "Changing Election Methods: How Does Mandated Vote By Mail Affect Individual Registrants?" *Election Law Journal: Rules, Politics, and Policy*, 10(2): 115-127.

Rockoff, David and Yates, Philip. (2011) "Joe DiMaggio Done It Again...and Again and Again and Again?" *CHANCE*, 24 (1), 14-18.

Addona, Vittorio and Yates, Philip A. (2010) "A Closer Look at the Relative Age Effect in the National Hockey League," *Journal of Quantitative Analysis in Sports*: Vol. 6: Iss. 4, Article 9.

J. M. Grego and P. A. Yates. (2010) "Point and standard error estimation for quantiles of mixed flood distributions," *Journal of Hydrology*, 391, 289-301.

Rockoff, David M. and Yates, Philip A. (2009) "Chasing DiMaggio: Streaks in Simulated Seasons Using Non-Constant At-Bats," *Journal of Quantitative Analysis in Sports*: Vol. 5:, Iss. 2, Article 4.

Yates, Philip A. (2008) "Estimating Situational Effects on OPS," *Journal of Quantitative Analysis in Sports*: Vol. 4: Iss. 2, Article 2.

BOOKS & MANUALS

Philip Yates. (2010) SPSS Manual to accompany *Discovering Statistics Brief Version* by Daniel T. Larose. W.H. Freeman and Company, New York.

WORKING PAPERS

Parziale, Eric[†] and Yates, Philip. "Keep the Ball! The Value of Possession in Soccer."

Grego, John M. and Yates, Philip A. “Censored Data Methods for Modeling Annual Peak Flood Flows.”

Anne Michele Millar, Michael Posner, and Philip Yates. “Should We Use Gain Scores to Determine Treatment Effect from a Pretest-Posttest Design?: A Simulation Study.”

BOOK REVIEWS

(**Review in progress**) Philip A. Yates. *Wizardry: Baseball’s All-Time Greatest Fielders Revealed* by Michael A. Humphreys, Oxford University Press, 2011. Review in *The American Statistician*.

TECHNICAL REPORTS

Elizabeth Bergman, Philip Yates, and Elaine Ginnold. (2009) *How Does Vote By Mail Affect Voters? A natural experiment examining individual-level turnout*. Pew Charitable Trusts. Pew Center on the States: Make Voting Work. 37 p.

Haston, D. V.; Finney, M. A.; Horcher, A.; Yates, P. A.; Detrich, K. (2009) *Ignition Potential of Muzzle-Loading Firearms: An Exploratory Investigation*. U.S. Department of Agriculture, Forest Service, National Technology & Development Program. 5100–Fire Management; April 2009. 0951 1802–SDTDC; San Dimas Technology & Development Center, San Dimas, California. 28 p.

Student co-authors: † indicates work done as an undergraduate; # indicates work done as a graduate.

PRESENTATIONS AND TALKS

“Keep the Ball! The Value of Possession in Soccer.”

Poster Presentation, New England Symposium on Statistics in Sports, Harvard University, 2011

Discussant, “From the Diamond to the Rink: Applications of Statistics in Sports.”

Joint Statistical Meetings, Miami, Florida, 2011

“Instructor Characteristics Associated with Improved Student Attitudes Toward Statistics.”

Poster Presentation with Michael Posner

United States Conference On Teaching Statistics, Cary, North Carolina, 2011

“Instructor Characteristics Associated with Improved Student Attitudes Toward Statistics.”

Statistics Colloquium, The University of Vermont, November 30, 2010

“Instructor Characteristics Associated with Student Appreciation of Statistics.”

Joint Statistical Meetings, Vancouver, British Columbia, Canada, 2010

“A Closer Look at the Relative Age Effect in the National Hockey League.”

Poster Presentation with Vittorio Addona

Joint Statistical Meetings, Vancouver, British Columbia, Canada, 2010

“How High’s the Water, Mama? Statistical Methods For Flood Frequency Distributions.”

Mathematics REU Colloquium, The Claremont Colleges, July 1, 2010

“Technology for the K-12 Classroom: Using Microsoft Excel for Teaching Math.”

San Gabriel Valley California Mathematics Project, Cal Poly Pomona, May 8, 2010

“How High’s the Water, Mama? Statistical Methods For Flood Frequency Distributions.”

Mathematics Colloquium, Saint Michael’s College, January 18, 2010

“Hitting Streaks in Seasons Using Non-Constant Batting Averages.”

Poster Presentation with David Rockoff

New England Symposium on Statistics in Sports, Harvard University, 2009

“Chasing DiMaggio: Streaks in Simulated Seasons Using Non-Constant At-Bats.”

Poster Presentation, Northern California Symposium on Sports and Operations Research in Sports, Menlo College, 2008

- “Mixture Methods for the Analysis of Flood Frequency Distributions.”
WNAR-IMS Meeting, University of California, Davis, 2008
- “Methods for the Analysis of Flood Frequency Distributions.”
Mathematics Colloquium, California State University, San Bernardino, April 16, 2008
- “Methods for the Analysis of Flood Frequency Distributions.”
Statistics Colloquium, Pomona College, April 1, 2008
- “Using Gibbs Sampling to Estimate the Situational Effects on OPS.”
Poster Presentation, New England Symposium on Statistics in Sports, Harvard University, 2007
- “Methods for the Analysis of Flood Frequency Distributions.”
Mathematics Colloquium, Oberlin College, March 14, 2007.
- “Methods for the Analysis of Flood Frequency Distributions.”
Mathematics Colloquium, University of Alaska-Anchorage, March 9, 2007.
- “Methods for the Analysis of Flood Frequency Distributions.”
Mathematics & Statistics Colloquium, Cal Poly Pomona, February 22, 2007.
- “Estimation of a Mixture of Two Three-Parameter Gammas.”
American Statistical Association, South Carolina Chapter Annual Meeting, University of South Carolina, 2004
- “Cost-Effectiveness of Treatments for First-Time Ankle Sprains.”
Graduate Student Research Day, The University of Vermont, 1999

COLLEGE &
DEPARTMENT
SERVICE

SAINT MICHAEL'S COLLEGE

- Institutional Review Board, 2011 – present
- Institutional Animal Use and Care Committee, 2011 – present
- Faculty Affiliate, Men's Cross Country Team, 2011 – present
- Faculty Affiliate, Men's Tennis Team, 2011 – present

CALIFORNIA STATE POLYTECHNIC UNIVERSITY, POMONA

- Assessment Committee, 2008 – 2010
- Coordinator, 2008 – 2010
- Advisor, Kappa Mu Epsilon/Math-Stat Club, 2008 – 2010
- Recruitment Outreach Committee, 2007 – 2010
- Co-chair, 2007 – 2008
- Statistics Group, 2007 – 2010
- Chair Evaluation Committee, 2010
- Honorary Doctorate Committee, Co-chair, 2009
- Computer Committee, 2009
- Supervisor, Putnam Mathematical Competition, Cal Poly Pomona Team, 2008 – 2009
- Graduate Committee, 2007 – 2008

PROFESSIONAL
SERVICE

- Referee, *European Journal of Sports Science*, 2011
- Referee, *PRIMUS: Problems, Resources, and Issues in Mathematics Undergraduate Studies*, 2011
- Referee, *Journal of Quantitative Analysis in Sports*, 2008 – present

Philip Aaron Yates

Session Chair, Probability, Hudson River Undergraduate Mathematics Conference, Skidmore College, 2011

Reviewer, Pearson Education, *Practicing Statistics, 1st edition* by Shonda Kuiper, 2010

Judge, Student Poster Session, Spring Meeting, Southern California-Nevada Section of the MAA, Harvey Mudd College, 2010

Panelist, "Path to Ph.D. Programs," Mathematics & Statistics Department, Cal Poly Pomona, 2010

Reviewer, Elsevier Science/Academic Press, *Statistical Modeling: A Fresh Approach* by Daniel T. Kaplan, 2009

Member, USCOTS: United States Conference on Teaching Statistics, Student Attitudes Research Cluster, 2009

Judge, Southern California Chapter of the American Statistical Association, High School Poster Competition, Duarte, California, 2009

Judge, Student Poster Contest, Spring Meeting, Southern California-Nevada Section of the MAA, California Lutheran University, 2009

Moderator, Pacific Coast Undergraduate Mathematics Conference, University of California, Riverside, 2009

Department Representative, CAUSE: Consortium for the Advancement of Undergraduate Statistics Education, 2008 – 2010

Facilitator, Probability & Statistics Breakout Session, Project NExT Meeting, University of Wisconsin, Madison, 2008

Co-organizer, "Recruiting Mathematics Majors for Your Institution." Project NExT Meeting, University of Wisconsin, Madison, 2008

Judge, High School Poster Competition, Careers Day in Statistics, Southern California Chapter of the American Statistical Association, Duarte, California, 2008

Judge, Undergraduate Student Poster Session, Joint AMS-MAA Mathematics Meeting, San Diego, California, 2008

OTHER
SERVICE

Grader, MATHCOUNTS Vermont State Chapter Competition, 2011

Grader, MATHCOUNTS Northwest Vermont Chapter Competition, 2011

DJ, WWPV 88.7 The Mike, Colchester/Burlington, Vermont, 2010 – present

Educator.com, AP Statistics Instructor, 2008–2009

Emcee, MATHCOUNTS East San Gabriel Valley Chapter Competition, 2008 – 2010

Member, California Partnership for Achieving Student Success (Cal-PASS) Mathematics Professional Learning Council, Los Angeles Consortium, 2007 – 2009

Secretary, Mu Sigma Rho, University of South Carolina Chapter, 2000 – 2001

President, Statistics-Biostatistics Journal Club, The University of Vermont, 1998 – 1999

Amate House, DePaul University House, Young Adult Volunteer Program, Archdiocese of Chicago, 1995 –1996, 1996 – 1997

STUDENTS

CALIFORNIA STATE POLYTECHNIC UNIVERSITY, POMONA

Tiffany Chao, M.S. in Mathematics, Statistics Emphasis, June 2010

Maria M. Perez, M.S. in Mathematics, Statistics Emphasis, June 2010

Edward A. Reyes, M.S. in Mathematics, Statistics Emphasis, August 2009

MEMBERSHIP

American Statistical Association

ENAR: Eastern North American Region, International Biometric Society

Mathematical Association of America

The Society For American Baseball Research