

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

Associate Professor, Saint Michael's College
Department of Mathematics
May 2014 – present

Assistant Professor, Saint Michael's College
Department of Mathematics
August 2010 – May 2014

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 150: Calculus I.
- MA 160: Calculus II.
- MA 251: Probability and Statistics.
- MA 351: Applied Regression Analysis.
- MA 410: Seminar in Mathematics.
- MA 451: Applied Statistical Methods.

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

Vermont Alpha Chapter of Pi Mu Epsilon, Honorary Member, 2014

CAUSE: Consortium for the Advancement of Undergraduate Statistics Education, A- μ -Sing! Competition, Honorable Mention, 2013

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

Phi Kappa Phi Honor Society, DePaul University, 1996

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, \$3,000

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** 2015) "Margin of Error" in *The SAGE Encyclopedia of Communication Research Methods*, Mike Allen (Ed.), SAGE Publications, Thousand Oaks, CA.
- John M. Grego, Philip A. Yates, and Kaiwen Mai. (2015) "Standard Error Estimation for Mixed Flood Distributions with Historic Maxima," *Environmetrics*, 26(3), 229–242, DOI: 10.1002/env.2333.
- John A. Trono and Philip Yates. (2014) "How Predictable is the Overall Voting Pattern in the NCAA Men's Basketball Post Tournament Poll?" *CHANCE*, 27(2), 4–12.
- Kawika Pierson, Vittorio Addona, and Philip Yates. (2014) "A Behavioural Dynamic Model of the Relative Age Effect," *Journal of Sports Sciences*, 32(8), 776–784.
- Eric J. Parziale[†] and Philip A. Yates. (2013) "Keep the Ball! The Value of Ball Possession in Soccer," *Reinvention: an International Journal of Undergraduate Research*, Volume 6, Issue 1. http://www2.warwick.ac.uk/fac/cross_fac/iat1/ejournal/issues/volume6issue1/parzialeandyates/.
- Philip Yates. (2011) "The PING Ratings: A Model For Rating NCAA Baseball Teams," *The Baseball Research Journal*, Vol. 40, No. 2, 107–113.
- 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. DOI: 10.2202/1559-0410.1227.

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. DOI: 10.2202/1559-0410.1167.

Yates, Philip A. (2008) “Estimating Situational Effects on OPS,” *Journal of Quantitative Analysis in Sports*: Vol. 4: Iss. 2, Article 2. DOI: 10.2202/1559-0410.1095.

BOOKS & MANUALS

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

BOOK REVIEWS

Philip A. Yates. *Wizardry: Baseball’s All-Time Greatest Fielders Revealed* by Michael A. Humphreys, Oxford University Press, 2011. Review in *The American Statistician*, Vol. 66, No. 1, 72, 2012.

TECHNICAL REPORTS

John A. Trono and Philip Yates. (2015) “Predicting the NCAA Men’s Postseason Basketball Poll More Accurately,” Saint Michael’s College, Colchester, Vermont, Tech Report: SMC-2015-CS-001, 11 p.

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

Panelist, “Evaluating Some Popular Introductory Applied Statistics Textbooks: What We Like About Them and What Would We Like Them to Do Differently”
Joint Statistical Meetings, Chicago, Illinois, 2016

Panelist and Chair, “Faculty Recruitment and Retention”
Pedagogy Day, Saint Michael’s College, 2016

Panelist, “A Frabjuous Day! A panel celebrating the 150th anniversary of Lewis Carroll’s *Alice’s Adventures in Wonderland*”
Saint Michael’s College, October 2015

“&#%!@? – Censoring and the Analysis of Partially Known Data.”
Pi Mu Epsilon Lecture, Saint Michael’s College, October 2014

“Where Have You Gone, Joe DiMaggio? Probability and Hitting Streaks”
The Governor’s Institutes of Vermont, Mathematical Sciences, June 2014

Panelist, “Expanding the Job Search.”
Joint Statistical Meetings, San Diego, California, 2012

Host, *Moneyball*, Saint Michael’s College Film Series, 2012

“Historic Floods and 1% Chance Flood Estimation.”
Mathematics Colloquium, Norwich University, March 6, 2012

- “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
- Panelist, “Path to Ph.D. Programs,” Mathematics & Statistics Department, Cal Poly Pomona, 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

Coordinator, MA 120: Elementary Statistics, 2010 – present
Institutional Animal Care and Use Committee, 2011 – present
– Interim Chair, 2014
Dispute Resolution Panel, 2015 – present
Chair, Search Committee, Mathematics Department, Assistant Professor, 2015 – present
Faculty Advisor, WWPV 92.5 FM The Mike, 2015 – present
Faculty Welfare Committee, 2016 – present
Institutional Review Board, 2011 – 2016
– Chair, 2014 – 2016
Davis Fellow for Liberal Studies Curriculum Assessment,
Quantitative Reasoning, 2014 – 2016
Search Committee, Mathematics Department, Visiting Assistant Professor/Instructor, 2015
Faculty Affiliate, Men’s Tennis Team, 2011 – 2014
Faculty Affiliate, Men’s Cross Country Team, 2011 – 2012
Community Manners Planning Committee, 2012
Film Series Planning Committee, 2012 – present
United Way Campaign Planning Committee, 2013
Supervisor, Putnam Mathematical Competition, Saint Michael’s Team, 2012

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

Treasurer, SIGMAA on Statistics Education, Mathematical Association of America,
2016 – present
Treasurer, Statistics in Sports Section, American Statistical Association, 2016 – present
Co-organizer, DataFest Vermont, 2016
Referee, *Journal of Applied Statistics*, 2016
Referee, *Perceptual & Motor Skills*, 2015

- Judge, Student Poster Competition, New England Symposium on Statistics in Sports, Harvard University, 2015
- Session Chair, Probability, Hudson River Undergraduate Mathematics College, Union College, 2015
- Judge, Statistics in Sports Undergraduate Research Competition, Joint Statistical Meetings, Boston, Massachusetts, 2014
- Referee, *Scandinavian Sport Studies Forum*, 2014
- Reviewer, John Wiley & Sons, *Stats: Data and Analytics*, by Peter C. Bruce, 2013
- Session Chair, Geologic, Atmospheric, and Weather-Related Events, Joint Statistical Meetings, Montréal, Québec, Canada, 2013
- Referee, *Journal of Statistics Education*, 2013
- Session Chair, Statistics, Hudson River Undergraduate Mathematics Conference, Williams College, 2013
- Session Chair, Statistics, Hudson River Undergraduate Mathematics Conference, Western New England University, 2012
- Referee, *The Baseball Research Journal*, 2012
- Referee, *European Journal of Sports Science*, 2011 – present
- Referee, *PRIMUS: Problems, Resources, and Issues in Mathematics Undergraduate Studies*, 2011
- Referee, *Journal of Quantitative Analysis in Sports*, 2008 – present
- 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
- 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

Philip Aaron Yates

OTHER
SERVICE

DJ, WWPV 92.5 The Mike, Colchester/Burlington, Vermont, 2010 – 2012, 2015 – present
Grader, MATHCOUNTS Vermont State Chapter Competition, 2011
Grader, MATHCOUNTS Northwest Vermont Chapter Competition, 2011 – 2015
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

SAINT MICHAEL'S COLLEGE

Mackenzie Edmondson, B.S. in Mathematics, Spring 2016
Eric J. Parziale, B.S. in Mathematics, Spring 2013
Maura E. O'Riordan, B.S. in Mathematics and Secondary Education, Fall 2012

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