

CURRICULUM VITAE

Andrew John McDougall

Education:

1989 PhD Statistics, The Australian National University
1985 MSc (Honors I) Statistics, University of Auckland (NZ)
1982 BSc Mathematics and Statistics, University of Auckland (NZ)

Appointments:

Current: *Associate Professor* (2002–)
Assistant Professor (1997–2001)
Montclair State University, Department of Mathematical Sciences
Director (1997–)
Statistical Consulting Program (SCP) at Montclair

Previous: Visiting Assistant Professor (1996)
Graduate School of Business, The University of Chicago
Assistant Professor (1989–95)
Department of Statistics, Rutgers University

Grants:

2012 Researcher for NIH Obesity Grant: (\$200,000)
2008–12 Researcher for NSF GK-12 Grant: *Fellows in the Middle* (\$2,700,000)
1993–96 NSF Research Grant: *New Directions in Time Series* (\$60,000)
1991 NSF SCREMS DMS Computing Equipment Grant
1989 NSF Post Doctoral Research Grant: Principal Investigator – Y. Vardi

Professional Activity:

Fellowships: Hong Kong University, Hong Kong, June 1999
Rutgers University, New Brunswick, 1998
Auckland University, New Zealand, August 1995
RMIT, Melbourne, Australia, August 1995
University of Pittsburgh, March 1995

Committees: Treasurer: NJ Chapter of the ASA. Symposium Committee, 2003–2006
NJ Chapter of the ASA Symposium Committee, (*June 16, 2003*)
Chair: NJ Chapter of the ASA Symposium Committee, June 4, 2002

Referee: JRSS(C): Applied Statistics; The American Statistician; JCGS: Journal of Computational and Graphical Statistics; IIE Transactions, NSF: National Science Foundation, Probability and Statistics

Societies: IMS: Institute of Mathematical Statistics; ASA: American Statistical Association; New Zealand/Australian Statistical Association

Talks:

Statistical Consulting

Temple University, Philadelphia, March 21, 2003
NVHS District Workshop, New Jersey, July 6, 2001
JSM Workshop, Indianapolis, August 14, 2000
SMUG Workshop, Montclair State University, March 24/April 14, 2000

Exploratory Time Series and the Spectral Envelope

Hong Kong University, Hong Kong, June 17, 1999
Contributing Paper, Interface '99, Chicago, June 10, 1999
Invited Paper, Data Visualization, Drew University, NJ, July 6, 1998

Service:

Consulting: Director, Statistical Consulting Program (1997–)
Responsible for all activities associated with SCP operations

Selected Clients:

Merck Pharmaceuticals: Obesity Study (2009)
Budd-Larner: Analysis for Litigation (2002–2005)
Novartis Pharmaceuticals: Consultant (1998–2003)
Pharmacare: Study Protocol (1999–2001)
Stevens Institute of Technology: Expert Witness (1998)
North Community Health Centers: Analysis for Litigation (1996, 2000)

Ed.D Clients: (Dissertation Topics)

Jeannie Ryan, LSI and 3rd–8th grade ITBS performance. (2000–2002)
Helen Friedland, School Referendums. (1999–2001)
Patrice Roberts, LSI/SDS in 7th and 10th grade Science. (1998)
Robrt Searson, LSI/SDS in 3rd grade Science Units. (1998)
Patricia Rauper, LSI in Teacher Training. (1997)

Course Development (with B. Ray, NJIT):

Statistical Consulting Practice (Spring 98) Graduate course with emphasis on communication and analysis of real-data problems.

Thesis Committees:

Steven Spero (2008–, STAT); Jennifer Reynolds(2008, EES); Arpi Lajinian (2008, Math Ed.); Tracy Abar (2007, MathEd.); Irene Lin (2007, Audiology); Eric Sandler (2005, Audiology); Brett Callanan (2006, SOC)

Thesis Candidates (2009–):

Joy Brokes (MathEd.); Marius Petric (MathEd.); Yunfang Zheng (Audiology); Kristen Olsen (Audiology); Rob Scherr (Biology)

Publications:

Refereed

- [1] Thomas, D.M., Das, S., Levine, J.A., Martin, C.K., Mayer, L., McDougall, A.J., Strauss, B., Heymsfield, S.B. (2010) Why Bigger is not Better-A Mathematical Relationship between Fat Free Mass and Fat Mass. *Nutrition & Metabolism*, **7:39**
- [2] Reid, R.J., Garcia-Reid, P., Klein, E., and McDougall, A.J. (2008). Violence-Related Behaviors Among Dominican Adolescents: Examining the Influence of Alcohol and Marijuana Use. *Journal of Ethnicity in Substance Abuse*, **7(4)**, 404–427
- [3] Prezant, R.S., Chapman, E. J., and McDougall, A.J. (2006). In utero predator-induced responses in the viviparid snail *Bellamyia chenensis*. *Can. J. of Zoology*. **84**, 600–608
- [4] Cabrera, J. and McDougall, A.J. (2002). *Statistical Consulting*. Springer-Verlag, 380pp.
- [5] Manchester, L., Field, C. and McDougall, A.J. (1999) Regression for overdetermined systems. A fisheries example. *The Canadian Journal of Statistics*, **27**, 25–39
- [6] McDougall, A.J., Stoffer, D.S. and Tyler, D.E. (1997). Optimal transformations and the spectral envelope for real-valued time series. *Journal of Statistical Planning and Inference*, **57**, 195–214.
- [7] McDougall, A.J. (1994). Robust Methods for Recursive ARMA Estimation. *JRSS(B)*, **56**, 189–207.
- [8] Stoffer, D.S., Tyler, D.E. and McDougall, A.J. (1993). Spectral analysis for categorical time series: Scaling and the spectral envelope. *Biometrika*, **80**, 611–622.
- [9] Hannan, E.J., McDougall, A.J. and Poskitt, D.S. (1989). Recursive Estimation of Autoregressions. *JRSS(B)*, **51**, 217–233.
- [10] Hannan, E.J. and McDougall, A.J. (1988). Regression Procedures for ARMA Estimation. *JASA*, **83**, 490–498. Correction (1989). *JASA*, **84**, 636.

Proceedings

- [11] McDougall, A.J. and Ronches, M. (1999). Exploratory Time Series and the Spectral Envelope. *Proc. of the 31st Symposium on the Interface: Computing Science and Statistics*, 32–37.
- [12] McDougall, A.J., Buyske, S., Williams, K. and Dolbec, M. (1995). An X Application for the Spectral Envelope. *Proc. of the 27th Symposium on the Interface: Computing Science and Statistics*, 235-239.
- [13] Stoffer, D.S., Tyler, D.E., McDougall, A.J. and Schachtel, G. (1993). Spectral Analysis of DNA Sequences. (Invited paper with discussion). *Proc. of the International Statistical Institute*, 49th Session, 345–361.
- [14] McDougall, A.J. and Cook, D.H. (1993). An Interactive Approach to Exploratory Time Series Analysis. *Proc. of the 25th Symposium on the Interface: Computing Science and Statistics*, 366–370.