
Professor Adrian E. Raftery, Statistics and Sociology

June 27, 2016

This report covers the 14-month period April 20, 2015–June 27, 2016. I was on sabbatical leave from the University of Washington for the 2015–2016 academic year.

Here are three highlights, as requested. They focus on scholarly publication, grants, and recognition by speaking invitations.

• This was an exceptionally productive year, with 15 scientific articles published or accepted in peer-reviewed journals. Several were in top general science, statistics and demography journals, including two in Proceedings of the National Academy of Sciences and one each in Journal of the Royal Statistical Society—Series A, Annals of Applied Statistics, Demography and Population Studies.

• I obtained a substantial new grant from NOAA on sea ice prediction with Professor Cecilia Bitz of UW Atmospheric Sciences. Four other grants continued during the year.

• My work was recognized by several speaking invitations. I was a keynote speaker at three international conferences, and an invited speaker at a further three. I gave numerous departmental seminars, including at Princeton and the University of Chicago.

1 Publications

1.1 Articles Published in Peer-Reviewed Journals (10)


1.2 Articles Accepted for Publication in Peer-Reviewed Journals (5)

1. Friel, N., Wyse, J. and Raftery, A.E. “Interlocking directorates in Irish companies using bipartite networks: a latent space approach.” Accepted by *Proceedings of the National Academy of Sciences*.

2. Raftery, A.E. “Use and Communication of Probabilistic Forecasts.” Accepted by *Statistical Analysis and Data Mining*.

3. Scrucca, L., Fop, M., Murphy, T.B. and Raftery, A.E. “mclust 5: Clustering, classification and density estimation using Gaussian finite mixture models.” Accepted by *R Journal*.


5. Young, W.C., Raftery, A.E. and Yeung, K.Y. “A posterior probability approach for gene regulatory network inference in genetic perturbation data.” Accepted by *Mathematical Biosciences and Engineering*.

1.3 Chapter Published in Peer-Reviewed Book (1)


1.4 Revision and Resubmission Invited by Peer-Reviewed Journals (6)


1.5 Submitted for Publication in Peer-Reviewed Journals (2)


1.6 Technical Reports, Working Papers and arXiv e-Prints (9)


2 Grants (6)

(Amounts shown are total costs.)

2.1 Grant Proposal Submitted (1)


2.2 New Grant Awarded (1)


2.3 Continuing Grants (4)


4. Co-investigator, NIH U54 grant, UW project. (Principal Investigator: Ka Yee Yeung, UW Institute of Technology). (I’m the PI of the CSSS/Statistics sub-budget.) “DCIC FOR LINCS-BD2Km” 2014–2016. [UW sub-budget $458,000].

3 Teaching

3.1 Courses taught


3.2 Graduate Teaching and Supervision

3.2.1 Chair of Ph.D. Committees (2)


2. William Chad Young, Statistics: Committee formed, October 2015; General exam, December 2015; Final exam expected, August 2016.

3.2.2 Other Ph.D. Committee (1)

3.2.3 Supervision of Graduate Research Assistants (7)


5. Hannah Director, Statistics, Research Assistant, NOAA grant. Predicting sea ice extent.


3.2.4 Informal Seminar organized


4 Service and Recognition

4.1 Departmental and University Service (3)

1. Graduate admissions committee, Department of Statistics.

2. Reader, area exam, Department of Sociology.

3. Tenure and promotion committee, University of Washington Institute of Technology.

4.2 Editorial Boards (2)

- Editorial Board Member, *Proceedings of the National Academy of Sciences.*
  (About 80 manuscripts handled.)

- Editorial Board, *Demography.*

4.3 Articles and Grants Reviewed (21)

- Journal of the American Statistical Association (2)

- Demography (2)

- Annals of Applied Statistics (2)

- Population Studies (2)

- Journal of Business and Economic Statistics

- Journal of Statistical Software
• Journal of Official Statistics (2)
• IEEE Transactions on Automation Science and Engineering
• Empirical Economics
• North American Actuarial Journal (2)
• Climatic Change
• European Economic Review
• Dynamic Demographic Analysis (edited book, published by Springer)
• Austrian Science Foundation

4.4 Promotion and Tenure Reviews (5)
1. University of Chicago
2. University of Massachusetts
3. Texas A&M University
4. Bocconi University, Milan, Italy
5. INRIA Rhône-Alpes, France

4.5 Conference Presentations and University Seminars (17)
1. University of Chicago, Department of Statistics, April 2015
2. University of California Santa Cruz, Department of Statistics, April 2015
6. Invited talk, Joint Statistical Meetings, Seattle, August 2015.
8. International Methods Colloquium, October 2015 (NSF-sponsored Webinar organized by Rice University)

4.6 Professional Service (9)
4. Organizer, Joint Statistical Meetings session on Statistical Demography, August 2015.
5. Ten year review, University of California Berkeley Department of Demography, October 2015.

4.7 Public Impact (1)

4.8 Consulting and Community Service
1. Director, Mary Raftery Journalism Fund, Dublin, Ireland. This organization promotes investigative journalism.
2. Board member, Council for Frontiers of Knowledge. This organization aims to empower African scientists and policy makers.