

Curriculum Vitae

September 2008

Jenny A. Baglivo

Mathematics Department
Boston College
Chestnut Hill, MA 02467-3806

phone: (617) 552-3772
email: jenny.baglivo@bc.edu
fax: (617) 552-3789

Education

- 1970 B.A. Fordham University, Mathematics
- 1972 M.A. Syracuse University, Mathematics
- 1976 M.S. Syracuse University, Computer and Information Science
- 1976 Ph.D. Syracuse University, Mathematics (Algebraic Topology)

Professional Experience

- 1992- Professor of Mathematics, Boston College
- 1986-1992 Associate Professor of Mathematics, Boston College
- 1981-1986 Associate Professor of Mathematics and Computer Science, Fairfield University
- 1976-1981 Assistant Professor of Mathematics, Fairfield University

- 1992-1993 Visiting Professor of Biostatistics, Harvard University School of Public Health
- June 1992 Visiting Member, Mathematical Sciences Research Institute
- 1984-1985 Visiting Associate Professor of Computer Science, Department of Biostatistics, Harvard University School of Public Health
- 1982-1986 Visiting Member, Sloan-Kettering Institute for Cancer Research
- 1980-1982 Research Fellow in Biostatistics, Sloan-Kettering Institute for Cancer Research

- 1983-1984 Statistical Consultant, Division of Biostatistics, Montefiore Medical Center
- 1978 Technical Consultant, Command and Control Technology
- 1971-1976 Teaching Assistant in Mathematics, Syracuse University
- 1974 Instructor in Mathematics, University College, Syracuse University
- 1971,1973 Management Specialist, National Aeronautics and Space Administration
- 1972 Teaching Assistant in Mathematics, NSF Summer Institute, Syracuse University

Grants and Awards

- 2007-2008 Boston College Eighty Percent Sabbatical,
Statistical Approaches to the Study of Complex Human Diseases
- 2006-2007 Boston College Teaching and Mentoring Grant,
A Course in Principles of Statistics for the Health Sciences
- 1996-2000 National Science Foundation Grant,
*A Course in Computer Intensive Statistical Methods
for Mathematical Sciences Students*
- 1997-1998 Boston College Faculty Fellowship,
Statistical Modelling of Oyster Diseases in the Northeast

- 1996-1998 Northeastern Regional Aquaculture Center Grant, USDA,
*Current and Potential Effects of Dermo and Other Diseases
on Cultured Oysters in the Northeast*, co-principal investigator
- 1994-1995 Boston College Research Grant,
Permutation vs. Bootstrap Methods in Statistics
- 1992-1993 Boston College Eighty Percent Sabbatical,
Theoretical & Computational Issues in Randomization Tests
- 1992 NSF/AWM Travel Grant, Mathematical Sciences Research Institute
- 1989-1990 Boston College Faculty Fellowship,
Methods for the Analysis of Discrete Data
- 1988-1991 Sea Grant, NOAA, U.S. Dept. of Commerce,
Field Mortality Rates of Neoplastic v. Non-neoplastic Soft Shell Clams,
associate investigator.
- 1986-1988 National Cancer Institute Grant, DHHS,
Algorithms for Analyzing Discrete Data, associate investigator.
- 1984-1986 Sea Grant, NOAA, U.S. Dept. of Commerce,
Modelling and Resource Utilization of the Soft-Shell Clam,
co-principal investigator.
- 1984 Alpha Sigma Nu Book Award in Science.
Incidence and Symmetry in Design and Architecture, co-author.
- 1980-1982 Postdoctoral National Research Service Award, DHHS,
Statistical Modeling of CT Scans in Cancer Patients.
- 1975 Syracuse University Summer Fellowship.
- 1970-1971 NDEA Doctoral Fellowship, Syracuse University

Publications

1. Baglivo, J.A. 1976. Equivariant Wall obstruction theory, PhD thesis, Syracuse University, Syracuse, NY, 120 pages.
2. Baglivo, J.A. 1979. An equivariant Wall obstruction theory, *Transactions of the American Mathematical Society*, 256, 305-324.
3. Brousseau, D.J., J.A. Baglivo, and G.E. Lang 1982. Estimation of equilibrium settlement rates for benthic marine invertebrates; its application to *Mya arenaria*, *Fisheries Bulletin* 80, 642-644.
4. Thaler, H.T., J.A. Baglivo, H.C. Lu, and D.A. Rottenberg 1982. Repeated least squares analysis of simulated xenon CT measurements of regional cerebral blood flow, *Journal of Cerebral Blood Flow and Metabolism*, 2, 408-414.
5. Baglivo, J.A., and J.E. Graver 1983. *Incidence and Symmetry in Design and Architecture*, Cambridge University Press, England. Mathematics course for architecture students. Covers topics in mathematical graph theory and group theory with applications in architectural design. ISBN 0 521 23045 8 hard cover, ISBN 521 29784 2 paper back.
6. Cascino, T., J. Baglivo, J. Conti, J. Szewczykowski, J. Posner, and D. Rottenberg 1983. Quantitative CT assessment of furosemide and mannitol induced changes in brain water content, *Neurology*, 33, 893-903.

7. Potter, V.P., M. Sorrell, J.A. Baglivo, H. Sather, and D.R. Miller 1984. Prognostic significance of vacuoles in L1 lymphoblasts in childhood lymphoblastic leukemia, *British Journal of Haematology*, 56, 215-222.
8. Brousseau, D.J. and J.A. Baglivo 1984. Sensitivity of the population growth rate to changes in single life history parameters; its application to *Mya arenaria*, *Fisheries Bulletin* 82, 537-541.
9. Portenoy, R., C. Abissi, R. Lipton, A. Berger, M. Meyer, J. Baglivo, and S. Solomon 1984. Headache in cerebrovascular disease, *Stroke*, 15, 1009-1012.
10. Baglivo, J., D. Olivier and M. Pagano 1985. Computing Fisher and likelihood ratio exact tail probabilities for contingency tables, *Proceedings of Statistical Computing Section, American Statistical Association*, 70-77.
11. Kuban, K., A. Leviton, K. Krishnamoorthy, E. Brown, R. Teele, J. Baglivo, K. Sullivan, K. Huff, S. White, R. Cleveland, E. Allred, K. Spritzer, H. Skoutelli, P. Cayea, and M. Epstein 1985. Neonatal Intracranial Hemorrhage and Phenobarbital, *Pediatrics*, 77, 443-450.
12. Brousseau, D.J. and J.A. Baglivo 1987. A comparative study of Age and Growth in *Mya arenaria* (soft-shell clam) from three populations in Long Island Sound, *Journal of Shellfish Research*, 6,17-24.
13. Kuban, K., A. Leviton, K. Krishnamoorthy, E. Brown, J. Baglivo, K. Sullivan, E. Allred 1987. Respiratory complications in low birthweight babies who receive phenobarbital, *American Journal of Diseases of Children*, 141,996-999.
14. Leviton, A., J.A. Baglivo, K. Kuban, E. Brown and K. Krishnamoorthy 1987. The prophylactic clinical trial as an epidemiologic resource, *Controlled Clinical Trials*, 8,243-254.
15. Brousseau, D.J. and J.A. Baglivo 1988. Life tables for two field populations of *Mya arenaria* from Long Island Sound, *Fisheries Bulletin*, 86, 567-579.
16. Baglivo, J.A., D. Olivier and M. Pagano 1988. Methods for the Analysis of Contingency Tables with Large and Small Cell Counts, *Journal of the American Statistical Association*, 83, 1006-1013.
17. Skouteli, H., K. Kuban, A. Leviton, E. Brown, K. Krishnamoorthy, M. Pagano, E. Allred, K. Sullivan, J. Baglivo, K. Huff, M. Epstein 1988. Arterial blood gas derangements associated with death and intracranial hemorrhage in premature babies, *Journal of Perinatology*, VIII, 336-341.
18. Brousseau, D.J. and J.A. Baglivo 1991. Field and laboratory comparisons of mortality in normal and neoplastic *Mya arenaria*, *Journal of Invertebrate Pathology*, 57, 59-65.
19. Baglivo, J.A., D. Olivier and M. Pagano 1992. Methods for Exact Goodness-Of-Fit Tests, *Journal of the American Statistical Association*, 87, 464-469.
20. Brousseau, D.J. and J.A. Baglivo 1991. Disease progression and mortality rates in neoplastic *Mya arenaria* under field conditions, *Marine Biology*, 110, 249-252.
21. Baglivo, J.A., D. Olivier and M. Pagano 1993. Analysis of discrete data: rerandomization methods and complexity, *Computational Statistics and Data Analysis*, 16, 175-184.

22. Baglivo, J., M. Pagano and C. Spino 1993. Rerandomization Inference: Theory and Practice, in *Proceedings of the 25th Symposium on the Interface* (Vol. 25), eds. M.E. Tarter and M.D. Lock, Berkeley USA: Interface Foundation of North America, 422-431.
23. Baglivo, J., M. Pagano and C. Spino 1993. Symbolic Computation of Permutation Distributions, *Proceedings of the Statistical Computing Section, American Statistical Association*, 218-223.
24. Brousseau, D.J. and J.A. Baglivo 1994. Notes on Epizootiological Aspects (Sex and Age) of Disseminated Neoplasia in *Mya Arenaria*, *Journal of Invertebrate Pathology*, 63, 214-216.
25. Baglivo, J.A. 1995. Computer algebra systems: Maple and Mathematica, *The American Statistician*, 49, 86-92.
26. Baglivo, J., M. Pagano and C. Spino 1996. Permutation Distributions via Generating Functions with Applications to Sensitivity Analysis of Discrete Data, *Journal of the American Statistical Association*, 97, 1037-1046.
27. Ford, S., Smolowitz, R., Brousseau, D. and J. Baglivo 1999. Current and Potential Effects of Dermo and Other Diseases on Cultured Oysters in the Northeast: Implications for Animal Health Management, final technical report, *Northeast Regional Aquaculture Center*, 56 pages.
28. Brousseau, D. and J. Baglivo 2000. Modeling Seasonal Proliferation of the Parasite, *Perkinsus marinus*, in Field Populations of the Oyster *Crassostrea virginica*, *Journal of Shellfish Research*, 19, 133-138.
29. Brousseau, D., Filipowicz, A., and J. Baglivo 2001. Laboratory investigations of predator sex and size on prey selection by the Asian shore crab, *Hemigrapsus sanguineus* *Journal of Experimental Marine Biology and Ecology*, 262, 199-210.
30. Brousseau, D., Filipowicz, A., and J. Baglivo 2002. An experimental field study of site fidelity and mobility in the Asian shore crab, *Hemigrapsus sanguineus*, *Northeastern Naturalist*, 9, 381-390.
31. Baglivo, J. 2002. Teaching permutation and bootstrap methods, *Proceedings of the Joint Statistical Meetings*, American Statistical Association, 6 pages, CD: JSM 2001.
32. Brousseau, D., Kriksciun, K., and J. Baglivo 2003. Fiddler crab burrow usage by the Asian crab in a Long Island salt marsh, *Northeastern Naturalist*, 10(4), 415-420.
33. Baglivo, J. 2005. *Mathematica* laboratories for mathematical statistics: emphasizing simulation and computer intensive methods, *ASA-SIAM Series on Statistics and Applied Probability*, volume 14, 277 pages (text) and 685 pages (CD). Project presents an integrated approach to using technology throughout the mathematical statistics sequence (probability theory, introductory and intermediate mathematical statistics), and includes introductions to modern computationally intensive statistical methods. Text introduces important concepts and techniques. CD includes introductions to built-in and custom *Mathematica* commands and more than 230 laboratory problems. ISBN 0 89871 566 0.
34. Baglivo, J. 2005. Instructor's supplement to *Mathematica* laboratories for mathematical statistics: emphasizing simulation and computer intensive methods, *ASA-SIAM Series on Statistics and Applied Probability*, volume 14, 560 pages (CD). CD includes complete solutions

to all laboratory problems, additional problem ideas, and additional instruction on the use of technology to support mathematical statistics courses. ISBN 0 89871 570 9.

35. Brousseau, D. and J. Baglivo 2005. Laboratory studies of food selection by the Asian crab, *Hemigrapsus sanguineus*, algal versus animal preference, *Journal of Crustacean Biology*, 25(1), 130-134.
36. Brousseau, D. and J. Baglivo. Modelling cycles of infection in a field population of the oyster *Crassostrea virginica* in Long Island Sound, *in preparation*.
37. Ebel, J., Chambers, D., Kafka, A. and J. Baglivo 2007. Non-Poissonian earthquake clustering and the hidden Markov model as bases for earthquake forecasting in California, *Seismological Research Letters*, 78(1):47-55.
38. Baglivo, J. Mathematics for statistics: all the math you never had, *in preparation*. Applied mathematics course for graduate students in the behavioral and social sciences and the professional schools. Covers topics in combinatorics, probability, single and multivariable calculus, and linear algebra with applications in statistics. Third draft (2006), 251 pages.
39. Baglivo J. Principles of statistics for the health sciences, *in preparation*. Mathematics core course for nursing and other health sciences students. Presents statistics as a liberal discipline, emphasizing general methods of inquiry that apply in a wide variety of settings, and including applications in the health sciences. First draft (2007), 207 pages.
40. Baglivo J. Research notes in statistical genetics, *in preparation*. Concepts and techniques needed for research projects in statistical genetics, including ties to algebraic statistics. Report on 2007-2008 sabbatical activities, 150 pages.