VITA

Joseph P. Romano
Stanford University
Department of Statistics
Sequoia Hall
Stanford, CA 94305
(650) 723-6326
e-mail: romano@stanford.edu

Birth: December 16, 1960; Morristown, NJ

Education:

Ph.D., University of California, Berkeley, 1986. Dissertation: On bootstrapping the joint distribution of the location and size of the mode.

M.S., University of California, Berkeley, 1983.

A.B., Princeton University, 1982. Senior Thesis: Counterexamples in probability and statistics. Junior Independent Work: The duality between random convex hulls and random arcs.

Employment: Professor, Department of Statistics, Stanford University, 2000-present; Associate Professor, Department of Statistics, Stanford University, 1994-2000; Assistant Professor, Department of Statistics, Stanford University, 1986-1994.

Grants and Awards:

National Science Foundation Research Grant entitled: *Theory and Methods for Multiple Testing and Inference*, July 2004 - June 2007.

National Science Foundation Research Grant entitled: *Approximate and Exact Inference Via Computer Intensive Methods*, July 2001 - June 2004.

National Science Foundation Research Grant entitled: *Computer-Intensive Methods for the Statistical Analysis of Dependent Data*, September 1997 - August 2000.

National Science Foundation Research Grant entitled: *Mathematical Sciences: Computer Intensive Methods for the Statistical Analysis of Time Series and Random Fields*, September 1994 - August 1997.

Presidential Young Investigator Award, 1989-1994.

The Canadian Journal of Statistics Award, given to DiCiccio, T. and Romano, J. (1989). The automatic percentile method: accurate confidence limits in parametric models. *The Canadian Journal of Statistics* **17**, 155-169.

National Science Foundation Postdoctoral Fellowship, 1986-1988 (while at Stanford University).

National Science Foundation Graduate Fellowship, 1982-1984.

Graduated Summa Cum Laude in Statistics, Princeton University, 1982.

Collegiate Award of the Northern New Jersey Chapter of the American Statistical Association, 1982.

Phi Beta Kappa Society, 1982.

Ph.D. Dissertations Directed:

Leger, Christian. (1988). Use of the bootstrap in an adaptive statistical procedure.

Politis, Dimitris. (1990). A general resampling scheme for time series with weak dependence.

Wolf, Michael. (1996). Subsampling for nonstationary time series with an application to finance.

Chen, Hui. (1996). Bootstrap assisted goodness of fit tests in the frequency domain.

Hochster, Michael. (1998). Adaptive bootstrap L-estimation.

Azeem Shaikh. (2006). Inferernce for partially identified econometric models.

Professional Activities:

Memberships: American Statistical Association; Institute of Mathematical Statistics, became a Fellow of the Institute in July, 2000.

Noether Award Committee (Vice Chairman)

Associate Editor: The Annals of Applied Statistics (2006–2009), The Annals of Statistics (January 2001-2004), The Journal of Statistical Planning and Inference (1996-1999)

Referee for: *Algorithmic Learning Theory, Annals of Statistics, Annals of Probability, Journal of the American Statistical Association, Bernoulli, Technometrics, Biometrika, Journal of the Royal Statistical Society, Annals of the Institute of Statistical Mathematics, Journal of Statistical Computation and Simulation, The American Statistician, Transactions on Signal Processing, The Scandinavian Journal of Statistics, The Journal of Nonparametric Statistics, The British Journal of Mathematical and Statistical Psychology, The Canadian Journal of Statistics, Statistica Sinica, Journal of Time Series Analysis, Statistical Science, Proceedings of the American Mathematical Society, Econometrica, Journal of Econometrics, International Statistical Review, Journal of Statistical Planning and Inference, Biometrics, British Journal of Mathematical and Statistical Psychology, Journal of the Italian Statistical Society, Psychometrika, Communications in Statistics.*

Grant Proposal Panel: Served on panel to review National Science Foundation grants, 2004.

Grant Proposal Reviews: National Science Foundation, National Security Agency Mathematical Sciences Program, Natural Science and Engineering Research Council of Canada.

Organizer: *Workshop on Resampling Methods*, September, 1997 at the Centre de recherches mathematiques, University of Montreal.

Chair of Contributed Papers for the Annual Meeting of the Institute of Mathematical Statistics; Park City, Utah; July 1997.

Books:

Romano, J. P. and Siegel, A. F. (1986). *Counterexamples in Probability and Statistics.* Wadsworth Publishing Company, Monterey, CA.

Politis, D., Romano, J. and Wolf, M. (1999). *Subsampling.* Springer-Verlag, New York.

Lehmann, E.L. and Romano, J. (2005). *Testing Statistical Hypotheses*, 3rd edition, Springer-Verlag, New York.

Research Publications :

- Jewell, N. P. and Romano, J. P. (1982). Coverage problems and random convex hulls. *J. Appl. Prob.* **19**, 546-561.
- Jewell, N. P. and Romano, J. P. (1985). Evaluating inclusion functionals for random convex hulls. *Z. Wahrscheinlichkeitsth.* **68**, 415-424.

- Ducharme, G., Jhun, M., Romano, J., Truong, K. (1985). Bootstrap confidence cones for directional data. *Biometrika* **72**, 637-645.

- Romano, J. P. (1988). On weak convergence and optimality of kernel density estimates of the mode. *Ann. Statist.* **16**, 629-647.

- Romano, J. (1988). A bootstrap revival of some nonparametric distance tests. *J. Amer. Statist. Ass.* **83**, 698-708.

- DiCiccio, T. J. and Romano, J. P. (1988). A review of bootstrap confidence intervals (with discussion). *The Journal of the Royal Statistical Society, Series B.*, **50**, 338-370.

- DiCiccio, T. and Romano, J. (1988). Discussion of Hall's "Theoretical comparison of bootstrap confidence intervals." *Ann. Statist.* **16**, 965-969.

- Romano, J. (1988). Bootstrapping the mode. *Annals of the Institute of Mathematical Statistics* **40**, 565-586.

- Hall, P., DiCiccio, T. and Romano, J. (1989). On smoothing and the bootstrap, *Ann. Statist.* **17**, 692-704.

- Romano, J. (1989). Bootstrap and randomization tests of some nonparametric hypotheses. *Ann. Statist.* **17**, 141-159.

- DiCiccio, T., Hall, P. and Romano, J. (1989). Comparison of parametric and empirical likelihood functions. *Biometrika* **76**, 465-476.

- Romano, J. P. (1989). Do bootstrap confidence procedures behave well uniformly in P? *The Canadian Journal of Statistics* **17**, 75-80.

- DiCiccio, T. and Romano, J. (1989). The automatic percentile method: accurate confidence limits in parametric problems. *The Canadian Journal of Statistics* **17**, 155-169.

- DiCiccio, T. and Romano, J. (1989). On adjustments to the signed root of the empirical likelihood ratio statistic. *Biometrika* **76**, 447-456.

- DiCiccio, T. and Romano, J. (1990). Nonparametric confidence limits by resampling methods and least favorable families. *Int. Stat. Rev.* **58**, 59-76.

- Leger, C. and Romano, J. (1990). Bootstrap choice of tuning parameters. *Ann. Inst. Statist. Math.* **42**, 709-735.

- Leger, C. and Romano, J. (1990). Bootstrap adaptive estimation: the trimmed–mean example. *Can. J. Statist.* **18**, 297-314.

- Romano, J. (1990). On the behavior of randomization tests without a group symmetry assumption. *J. Amer. Statist. Ass.* **85**, 686-692.

- DiCiccio, T., Hall, P., and Romano, J. (1991). Empirical likelihood is Bartlett-correctable. *Ann. Statist.*, **19**, 1053-1061.

- Politis, D. and Romano, J. (1992). A nonparametric resampling procedure for multivariate confidence regions in time series analysis. In *Computing Science and Statistics*, Proceedings of the 22nd Symposium on the Interface, edited by Connie Page and Raoul LePage, Springer-Verlag, 98-103.

- Politis, D., Romano, J. and Lai, T. (1992). Bootstrap confidence bands for spectra and cross–spectra. *IEEE Trans. Signal Proc.*, **40**, 1206-1215.

- Politis, D. and Romano, J. (1992). A circular block-resampling procedure for stationary data, in *Exploring the Limits of Bootstrap*, edited by Raoul LePage and Lynne Billard, John Wiley, 263-270.

- Leger, C., Politis, D. and Romano, J. (1992). Bootstrap technology and applications. *Technometrics*, **34**, 378-398.

- Politis, D. and Romano, J. (1992). A general resampling scheme for triangular arrays of α-mixing random variables with application to the problem of spectral density estimation. *Ann. Statist.*, **20**, 1985-2007.

- Politis, D. and Romano, J. (1993). On the sample variance of linear statistics derived from mixing sequences. *Stoch. Proc. Appl.*, **45**, 155-167.

- Politis, D. and Romano, J. (1993). Nonparametric resampling for homogeneous strong mixing random fields. *J. Multiv. Anal.*, **47**, 301-328.

- Politis, D. and Romano, J. (1993). Estimating the distribution of a studentized statistic by subsampling. *Bulletin of the International Statistical Institute*, 49th Session, Firenze, 315-316.

- Politis, D., Romano, J. and You, L. (1993). Uniform confidence bands for the spectrum based on subsamples. In *Computing Science and Statistics, Proceedings of the 25th Symposium on the Interface*, San Diego, CA, April 14-17, 1993, 346-351.

- Politis, D. and Romano, J. (1993). On a family of smoothing kernels of infinite order. In *Computing Science and Statistics, Proceedings of the 25th Symposium on the Interface*, San Diego, CA, April 14-17, 1993, 141-145.

- Politis, D. and Romano, J. (1994). The stationary bootstrap. *J. Amer. Statist. Ass.*, **89**, 1303-1313.

- Politis, D. and Romano, J. (1994). A general theory for large sample confidence regions based on subsamples under minimal conditions. *Ann. Statist.*, **22**, 2031-2050.

- Politis, D. and Romano, J. (1994). Limit theorems for weakly dependent Hilbert space valued random variables with application to the stationary bootstrap. *Statistica Sinica*, **4**, 461-476.

- DiCiccio, T. and Romano, J. (1995). On parametric bootstrap procedures for second-order accurate confidence limits. *Statistica Sinica*, **5**, 141-160.

- Politis, D. and Romano, J. (1995). Bias-corrected nonparametric spectral estimation. *Journal of Time Series Analysis.* **16**, 67-103.

- Romano, J. and Thombs, L. (1996). Inference for autocorrelations under weak assumptions. *J. Amer. Statist. Ass.* **91**, 590-600.

- Politis, D. and Romano, J. (1996). On flat-top kernel spectral density estimators for homogeneous random fields. *Journal of Statistical Planning and Inference*, **51**, 41-53.

- Politis, D. and Romano, J. (1996). Subsampling for econometric models. *Econometric Reviews*, **15**, Number 2, 169-176.

- Politis, D., Romano, J. and Wolf, M. (1997). Subsampling for heteroskedastic time series. *Journal of Econometrics*, **81**, 281-317.

- Paparoditis, E., Politis, D. and Romano, J. (1998). Large sample inference for irregularly spaced dependent observations based on subsamples, *Sankhya*, Series A, **60**, 274-292.

- Politis, D. and Romano, J. (1999). Multivariate density estimation with general flat-top kernels of infinite order. *J. Mult. Analysis*, **68**, 1-25.

- Bertail, P., Politis, D. and Romano, J. (1999). On subsampling estimators with unknown rate of convergence. *Journal of the American Statistical Association*, **94**, 569-579.

- Romano, J. and Wolf, M. (1998). Subsampling confidence intervals for the autoregressive root. Technical Report 5, Department of Statistics, Stanford University.

- Politis, D., Romano, J. and Wolf, M. (1999). Weak convergence of dependent empirical measures with application to subsampling in function spaces. *The Journal of Statistical Planning and Inference.* **79**, 179-190.

- Chen, H. and Romano, J. (1999). An invariance principle for triangular arrays of dependent variables with application to autocovariance estimation. *The Canadian Journal of Statistics*, to appear.

- Chen, H. and Romano, J. (1999). Bootstrap goodness of fit tests in the frequency domain. *The Journal of Time Series,* **20**, 619-654.

- Paparoditis, E., Politis, D. and Romano, J. (1999). Resampling marked point processes. In *Multivariate Analysis, Design of Experiments, and Survey Sampling*, ed. Subir Ghosh, Marcel Dekker, New York, 163-185.

- Romano, J. and Wolf, M. (1999). Inference for the mean in the heavy-tailed case. *Metrika*, **50**, 55-69.

- Romano, J. and Wolf, M. (2000). A more general central limit theorem for m-dependent random variables with unbounded m. *Statistics and Probability Letters*, 115-124.

- Romano, J. and Wolf, M. (2000). Finite sample nonparametric inference and large sample efficiency. *Annals of Statistics*, **28**, 756-778

- Politis, D., Romano, J. and Wolf, M. (2000). Subsampling, symmetrization, and robust interpolation. *Communications in Statistics - Theory and Methods*, **29**, 1741-1758.

- Politis, D., Romano, J. and Wolf, M. (2001). On the asymptotic theory of subsampling. *Statistica Sinica*, **11**, 1105-1124.

- Romano, J. and Wolf,M. (2001). Subsampling intervals in autoregressive models with linear time trend. *Econometrica*, **69**, 1283-1314.

- Hochster, M. and Romano, J. (2002). Automatic adaptive estimation via the bootstrap. Technical Report 2000-01, Department of Statistics, Stanford University, submitted to Annals of the Institute of Mathematical Statistics.

- Romano, J. and Wolf, M. (2002). Explicit nonparametric confidence intervals for the variance with guaranteed coverage. *Communications in Statistics – Theory and Methods*, **31**, 1231-1250.

- Politis, D., Romano, J. and Wolf, M. (2004). Inference for Autocorrelations in the possible presence of a unit root. *Journal of Time Series Analysis*, **25**, 251–263.

- Romano, J. (2004). On nonparametric testing, the uniform behavior of the t-test, and related problems. *Scandinavian Journal of Statistics*, **31**, 567–584.

- Romano, J. (2005). Optimal testing of equivalence hypotheses. *Annals of Statistics* **33**, 1036–1047.

- Lehmann, E.L., Romano, J. and Shaffer, J. (2005). On optimality of stepdown and stepup procedures. *Annals of Statistics* **33**, 1084–1108.

- Romano, J. and Wolf, M. (2005). Stepwise multiple testing as formalized data snooping. *Econometrica* **73**, 1237–1282.

- Lehmann, E. L. and Romano, J. (2005). Generalizations of the familywise error rate. *Annals of Statistics* **33**, 1138–1154.

- Romano, J. and Wolf, M. (2005). Exact and approximate stepdown methods for multiple hypothesis testing. *Journal of the American Statistical Association*, **100**, 94–108.

- Romano, J. and Wolf, M. (2005). Control of generalized error rates in multiple testing. Technical Report 2005-12, Department of Statistics, Stanford University.

- Romano, J., Shaikh, A. and Wolf, M. (2005). Formalized data snooping based on generalized error rates. Technical Report 2005-28, Department of Statistics, Stanford University.

- Romano, J. and Shaikh, A. (2006). On stepdown control of the false discovery proportion. Appeared in IMS Lecture Notes–Monograph Series, *2nd Lehmann Symposium–Optimality*, edited by J. Rojo, 33–50.

- Romano, J. and Shaikh, A. (2006). Stepup procedures for control of generalizations of the familywise error rate. *Annals of Statistics*, to appear.

- Romano, J. and Wolf, M. (2006). Improved nonparametric confidence intervals in time series regressions. *Nonparametric Statistics* **18**, 199–214.

- Romano, J. and Shaikh, A. (2006). Inference for identifiable parameters in partially identified econometric models. Technical Report 2006–9, Department of Statistics, Stanford University.

- Romano, J. and Shaikh, A. (2006). Inference for the identified set in partially identified econometric models. Technical Report 2006–10, Department of Statistics, Stanford University.

- Guo, W. and Romano, J. (2006). A generalized Sidák procedure and control of generalized error rates under independence. Technical Report 2006–12, Department of Statistics, Stanford University.

- Bittman, R., Romano, J., Vallarino, C. and Wolf, M. (2006). Testing multiple hypotheses with common effect direction using the closure method. Technical Report 2006–19, Department of Statistics, Stanford University.

Unpublished Reports:

Bossard, P. and Romano, J. (1982). Monte Carlo results of comparing linear fitting mechanisms when errors are contaminated. Technical Memorandum 82-52221-9, Bell Laboratories, Murray Hill, NJ.

Romano, J. P. (1986). A note on uniform convergence of the empirical measure with applications to simulation techniques. Technical Report No. 263, Department of Statistics, Stanford University.

Romano, J. P. (2000). The Pitman estimator is the UMVU in a location model.

Committees:

1986-1987: Ph.D. exam committee, Seminar chairperson.

1987-1988: Masters students advising.

1988-1989: Curriculum committee, Ph.D. exam committee.

1989-1990: Ph.D. student selection, Masters students advising.

1990-1991: Ph.D. exam committee, Affirmative action.

1991-1992: Masters students advising, Ph.D. exam committee.

1992-1993: Ph.D. students advising.

1993-1994: Ph.D. exam committee.

1994-1995: Ph.D. advisor to first year students, Qualifying Exam.

1995-1996: Advisor to Ph.D. students without thesis advisors, Search Committee.

1996-1997: Ph.D. advisor to first and second year Ph.D. students.

1997-1998: Ph.D. advisor to first and second year Ph.D. students, Chair of Student Selection Committee.

1998-1999: Ph.D. advisor to first and second year Ph.D. students, Chair of Qualifying Exam Committee.

1999-2000: Ph.D. advisor to first and second year Ph.D. students.

2000-2001: Chair of Qualifying Exam Committee, Served on the Judicial Panel.

2001-2002: Ph.D. program Committee, Chair of the Qualifying Exam Committee.

2002-2004 Advisor to all students in the Master's Degree and Ph.D. Minor programs.

2004-2005 Advisor to all students in the Master's Degree and Ph.D. Minor programs. Chair of Qualifying Exam Committee.

2005-2006 Master's Degree Advisor, Ph.D. admissions.

Select Technical Addresses:

Error control and optimality in multiple testing. Columbia University, April 2006.

Resampling based error control in multiple testing. Rutgers University, March 2006.

Generalized error control in multiple testing. University of New Mexico, February 20, 2006.

Generalized error control of stepwise methods in multiple testing. U.C. Santa Barbara, November 2, 2005.

Three lectures on multiple testing: optimality and generalized error control of stepwise methods. Distinguished Lecture Series, U.C. San Diego, May 2–6, 2005.

Optimality and error control of stepwise methods in multiple testing. Invited lecture, U.C. Berkeley Department of Biostatistics, October, 2004.

Error control of stepwise methods in multiple testing. Invited lecture, U.C. Davis Department of Statistics, September 2004.

Optimality of stepwise tests and a general resampling construction. Invited lecture and The Second Erich L. Lehmann Symposium, Rice University, May 2004.

Finite Sample Nonparametric Inference. Special invited speaker XXV Congreso Seio, Vigo, Spain, March 2000.

Subsampling in some hard problems. Universidad Carlos III, Madrid, March 2000.

Finite Sample Nonparametrics and Large Sample Efficiency. May, 1998. Rutgers Bootstrap Conference, New Brunswick, NJ.

Subsampling with unknown rates of convergence. September, 1997. Centre de recherches mathematiques, Montreal.

Asymptotics of Subsampling. August, 1996. Department of Statistics, Rutgers University.

Resampling and Subsampling for Time Series Models. A series of lectures presented in spring, 1996. Department of Mathematics, University of California, San Diego.

Estimating the distribution of a studentized statistic by subsampling. August, 1993. 49th Session of the International Statistical Institute, Firenze.

Resampling methods for dependent data. August, 1993. Special Contributed Paper, Joint Statistical Meetings, San Francisco, CA.

Uniform confidence bands for the spectrum based on subsamples. April, 1993. 25th Symposium on the Interface , San Diego, CA.

A general theory for the construction of large sample confidence regions. May, 1993. U.C. Berkeley Department of Statistics Colloquium Series.

Limit theorems for Hilbert space valued random variables with application to the stationary bootstrap. August, 1992. Joint Statistical Meeting. Boston, MA.

Bootstrapping time series. May, 1992. Bell Laboratories, Murray Hill, NJ.

The stationary bootstrap. May, 1992. University of Montreal Department of Operations Research and Computer Science Seminar Series.

Nonparametric resampling procedures for problems in time series. August, 1990. Invited Lecture, 2nd World Congress of the Bernoulli Society for Mathematical Statistics and 53rd Annual Meeting of the Institute of Mathematical Statistics, Uppsala, Sweden.

Bootstrap and randomization tests. October, 1990. University of Chicago Department of Statistics Seminar Series.

Bootstrap choice of tuning parameters. December, 1989. Invited participant, Asymptotic methods for computer-intensive procedures in statistics, Oberwolfach, Germany.

Bootstrap construction of hypothesis tests. November, 1989. University of North Carolina Department of Statistics Seminar Series.

The automatic percentile method. January, 1988. U.C. Berkeley, Department of Statistics Colloquium Series.

Bootstrapping functionals of a density. November, 1987. U.C. Davis Department of Statistics Seminar series.

A bootstrap revival of some nonparametric tests. April, 1986. U.C. Berkeley Neyman Seminar.

Bootstrapping the mode. January, 1986. Bell Laboratories, Murray Hill, NJ.