

CURRICULUM VITAE

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Education:

1976	B.A.	Princeton University (Mathematics - Magna cum laude)
1978	M.S.	Cornell University (Mathematics)
1981	Ph.D.	Cornell University (Mathematical Statistics)

Academic appointments:

1980- 1983	Assistant Professor, Department of Statistics, Rutgers University/New Brunswick.
1983 - 1988	Assistant Professor, Department of Mathematics & Statistics, University of Massachusetts/Amherst.
1986 - 1988	Visiting Assistant Professor, Department of Statistics, Carnegie-Mellon University
1988 - 1993	Assistant Professor, Department of Biostatistics, Harvard School of Public Health.
1988 - 1993	Assistant Professor, Department of Health Care Policy, Harvard Medical School.
1993 - 1994	Associate Professor, Department of Biostatistics, Harvard School of Public Health.
1993 - 1994	Associate Professor, Department of Health Care Policy, Harvard Medical School.
1995 - 1999	Associate Professor (tenured), Department of Community Health .
1999 - 2011	Professor, Department of Community Health
2006 - 2011	Head, Biostatistics Section, Department of Community Health.
2011 - Present	Professor, Department of Biostatistics
1995 - Present	Director, Center for Statistical Sciences .
2011 - 2017	Chair, Department of Biostatistics

Honors:

1976	Phi Beta Kappa
1986 - 1988	National Research Service Award, National Institute of Mental Health.
1997	Fellow, Association for Health Services Research.
1998	Fellow, American Statistical Association
2003 (June)	Spinoza Visiting Professor, Academic Medical Center, University of Amsterdam,
2015	Long-Term Excellence Award, Health Policy Statistics Section, Amer. Stat. Assoc.

Professional positions and activities:

a. Research

1986 - 1988	Program in Psychiatric Statistics, Carnegie-Mellon University and Western Psychiatric Institute and Clinic, University of Pittsburgh.
1988 - 1996	Group Statistician, Radiology Diagnostic Oncology Group (RDOG).
1989 - 1990	Consultant, Division of Mental Health, Global Program on AIDS, WHO.
1989 - 1993	Section Head, Neurology, Statistical and Data Analysis Ctr, AIDS Clinical Trials Group.
1991 - 1995	Consultant, Agence Nationale pour le Developpement de l'Evaluation Medicale, France.
1999 - 2013	Network Statistician, American College of Radiology Imaging Network (ACRIN).
2013 - Present	Group Statistician, ECOG-ACRIN Cancer Research Group

b.1. National committees

2001 - 2004	Member, Immunization Safety Review Committee, Institute of Medicine,
2006 - 2010	Member, Committee on Applied and Theoretical Statistics, National Academies
2007 - 2009	Co-Chair, Committee on Identifying the Needs of the Forensic Sciences Community, National Academies
2008 - 2010	Member, Committee to Study Engineering Aviation Security Environments: False Positives from Explosive Detection System, National Academies
2009	Member, Committee on Comparative Effectiveness Research Prioritization, Institute of Medicine
2011	Scientific Standards for Studies on Reduced Risk Tobacco Products, Institute of Medicine
2001 - 2014	Member, Board on Mathematical Sciences and their Applications, National Academies
2012 - Present	Member, Committee on National Statistics, National Academies
2012 - 2017	Chair, Committee on Applied and Theoretical Statistics, National Academies
2013 - 2017	Member, Committee to Evaluate the Department of Veterans Affairs Mental Health Services, Institute of Medicine
2017 - present	Member, Committee on Reproducibility and Replicability in Science, National Academies

b2. Review and advisory panels

1990 - Present	Member, site visits and review panels, National Cancer Institute
1990 - Present	Member, site visits and review panels, National Institute of Mental Health
1994 - Present	Special review panels, Agency for Health Care Policy Research /AHRQ
1994 - 1998	Member, HSDG Study Section, Agency for Health Care Policy Research
1996- 2000	Member, Data Safety and Monitoring Board, VA Cooperative Studies in Health Services.
1997- 2003	Consultant/Ad hoc Panel Member, Center for Devices & Radiological Health, Food & Drug Administration.
1997- 2003	Member, Commission on Technology Assessment, American College of Radiology.
1998	Member, NCI Screening and Early Detection Advisory Task Force.
1998- 2002	Member, Data Safety and Monitoring Board, NINDS
1999 – 2004	Member, Technical Expert Panels, HCFA/CMS
2000, 2005	Chair, Special Review Panel for Cancer Intervention and Surveillance Network (CISNET) applications, NCI.
2003 May	Member, American College of Radiology Forum on The Future Quality of Medical Imaging.
2006 June	Member, BMRD and Oncology study sections, NIH
2006	Reviewer, National Coordinating Center for Health Technology Assessment, UK
2007	Member, Development and Discovery P01 Special Emphasis Panel, NCI
2007-2008	Member, Institutional Clinical Translational Science Award (CTSA) Center Special Emphasis Panel (NIH)
2007, 2010, 2011	Member, In Vivo Cellular and Molecular Imaging (ICMIC) Centers, Special Emphasis Panel, NCI
2009	Chair, Outside Review Committee of CISNET
2010	Chair, Accelerating Adoption of CER Results, Special Emphasis Panel, NIH
2011	Member, Technical Evaluation Panel, Cancer Prevention Agent Development Program: Early Phase Clinical Trials, NCI
2011 – 2013	Chair, DSMB for Back Pain Outcomes using Longitudinal Data (BOLD) Lumbar Epidural Steroid Injections for Spinal Stenosis (LESS) trial.
2011 – Present	Member, DSMB for Randomized Trial of Behavioral Economic Interventions to Reduce CVD Risk
2012 – Present	Member, Special Emphasis Review Panel, P01 Applications, NCI
2015	Chair, Review Panel for the Information Technology Laboratory, National Institute of Standards and Technology

c. Professional leadership

1991- 2006	Co-organizer "Case Studies in Bayesian Statistics", Biannual Workshop Series, Carnegie Mellon University.
1994 - 1995	Program Chair, Section on Health Policy Statistics, American Statistical Association.

1995 Dec Program Chair, 1995 International Conference on Health Policy Research, Boston, Mass.

1997 Chair, Section on Health Policies Statistics, American Statistical Association.

1997 - 2003 Program and Advisory Committees, International Conference on Health Policy Research.

1997 - 2012 Co-convenor, Diagnostic and Screening Test Methods Working Group, Cochrane Collaboration.

1998 March Co-chair, Workshop on Health Services and Outcomes Research in Radiology, Bethesda MD, Sponsored by DHHS, NCI, and American College of Radiology

1999 January Co-Chair, Workshop on Methodological Issues in Clinical Trials in Radiological Screening and Related Computer Modeling. Washington DC, Sponsored by DHHS, NCI, and American College of Radiology

2000 – 2005 Member, Steering Committee, STARD (Standards for Reporting of Diagnostic Accuracy Project).

2002 - 2006 Member, Scientific Program Committee, Eastern Mediterranean. Region of International Biometric Society

2003 – 2012 Member, Steering Group, Cochrane Diagnostic Reviews initiative. Co-Editor of CDR Handbook.

2004 February Co-chair. NCI-sponsored Image Guided Intervention Trial Design Methods Workshop.

2004 Summer Member, Clinical Evidence Diagnosis Advisory Group, British Medical Journal.

2005 – 2011 Co-Director. Radiology Society of North America Clinical Trials Methodology Workshop.

2008 – Present Member, Quantitative Imaging Biomarkers Alliance (QIBA), Radiology Society of North America (RSNA)

2008 - 2014 Member, Research Development Committee, RSNA.

2010 - Present Member, Advisory Board, International Conference on Health Policy Statistics

2010 April Organizing Committee, RSNA/NIBIB Workshop on Comparative Effectiveness Research for diagnostic imaging.

d. Editorial positions

1993 - 2005 Co-Editor, *Case Studies in Bayesian Statistics Vol I-VI*. New York: Springer-Verlag.

1995, 1999 Guest-Editor, *Academic Radiology*, special issues.

1996 - Present Editorial Board Member, *Academic Radiology*.

1996 - 2005 Editorial Board Member, *Statistics in Medicine*.

1999 - 2002 Editorial Board Member, *Medical Decision Making*

1998 – 2013 Founding Editor in Chief: *Health Services and Outcomes Research Methodology*.

2003 - 2013 Editorial Board Member, *Clinical Trials*

2005 - 2010 Associate Editor, *Bayesian Analysis*

2008 - 2011 Associate Editor, *Probability and Statistics Letters*

2008 - 2017 Editor, Diagnostic Test Accuracy Reviews, Cochrane Collaboration

2008 - Present Associate Editor, *Annals of Applied Statistics*

2011 - Present Editorial Board, *Handbook for Health Services Research*

2016 – Present Statistical Consultant, *New England Journal of Medicine*

e. Professional society memberships:

American Statistical Association
Institute of Mathematical Statistics
Biometric Society
Society for Research Synthesis Methods (elected)
Radiology Society of North America

f. Research grants and contracts

Current support for grants and contracts as PI.

U10 CA180794 (Dual PIs Gray, Gatsonis) NCI ECOG-ACRIN Network Group Statistics and Data Management Center	03/01/14-02/25/19
UG1 CA 189828-01-BRWN1 (Subcontract PI Gatsonis) NCI/ECOG-ACRIN ECOG-ACRIN NCORP Research Base - CT	08/01/14-07/31/19
UG1 CA 189828-01-BRWN2 (Subcontract PI Gatsonis) NCI/ECOG-ACRIN ECOG-ACRIN NCORP Research Base - CCDR	08/01/14-07/31/19
5UG1 CA189828-03-BRWN4 (Subcontract PI Gatsonis) EAMRF/NCI ECOG-ACRIN Tomosynthesis Mammographic Imaging Screening Trial (TMIST) Transition	08/01/16-07/31/25
U01 CA190254 (PI Schnall, CSS Sub PI Gatsonis) ACR/NCI ECOG-ACRIN-Based QIN Resource for Advancing Quantitative Cancer imaging in Clinical Trials	03/20/15-02/29/20
ACR (PI Gatsonis) Biostatistics Center for Imaging Dementia-Evidence for Amyloid Scanning (IDEAS) Study	06/01/15 – 06/30/20

g. Service at Brown University

(Selected appointments)

1996 – 2003 Director, Graduate Program, Dept. of Community Health.
1995 – Present Chair, various Biostatistics faculty search committees
1996 – 2000 Member, Cancer Center Executive Committee
1997 – 2003 Advisor, Undergraduate Statistics Concentration
1998 – 2003 Member, Center for Gerontology and Health Care Research Executive Committee
1998 – 2001 Member, Committee on Faculty Reappointment and Tenure

2001 – 2004	Member, Faculty Executive Committee
2004 – 2006	Member, Expansion Committee, Program in Public Health
2005 - 2007	Member, Nominations Committee
2006 - 2017	Member, Executive Committee, Program/School of Public Health
2007 – 2008	Chair, Nominations Committee
2011 - Present	Member, University Conflict of Interest Board
2013 – 2016	Member, CCV Steering Committee
2015 - 2017	Member, Data Science Initiative Steering Committee

Major research interests:

Bayesian Inference, Biostatistics

Diagnostic Test and Biomarker Evaluation

Comparative Effectiveness Research

Health Services Research

Publications

a. Original manuscripts:

- Gatsonis, C.A. Estimation of the posterior density of a location parameter, Ph.D. Thesis, Cornell University, 1981.
- Cohen, A., Gatsonis, C.A., Marden, J. Hypothesis testing for marginal probabilities in a 2x2x2 contingency table with conditional independence. *Journal of the American Statistical Association*, 1983; 78: 920-929.
- Cohen, A., Gatsonis, C.A., Marden, J. Hypothesis tests and optimality properties in discrete multivariate analysis. In: Karlin, S. et al., eds. *Studies in Econometrics, Time Series and Multivariate Statistics*. New York: Academic Press, 1983: 379-405.
- Gatsonis, C.A. Deriving posterior distributions for a location parameter. A decision theoretic approach. *Annals of Statistics*, 1984; 12: 958-970.
- Gatsonis, C.A., Hsieh, H.K., Korwar, R. Simple nonparametric tests for a known standard survival based on censored data. *Communications in Stat Theory and Methods*, 1985; 14:2137-2162.
- Gatsonis, C.A., MacGibbon, B., Strawderman, W. On the estimation of a restricted normal mean. *Statistics and Probability Letters*, 1987; 6:21-30.
- Buonaccorsi, J. and Gatsonis, C.A. Bayesian inference for ratios of coefficients in a linear model. *Biometrics*, 1988; 87-101.
- Kovacs, M., Palauskas, S., Gatsonis, C.A., Richards, C. Depressive disorders in childhood. III. A longitudinal study of comorbidity with and risk for conduct disorders. *Journal of Affective Disorders*, 1988; 15:205-217.
- Gatsonis, C.A. and Sampson, A. Multiple correlation: Exact power and sample size calculations. *Psychological Bulletin*, 1989; 106:516-524.
- Jacobs, R., Simons, A., Manuck, S., Rohay, J., Waldstein, S., Gatsonis, C.A. Assessment of ambulatory mood: Development of an instrument. *Journal of Psychopathology and Behavioral Assessment*, 1989; 11:153-173.
- Kovacs, M., Gatsonis, C.A., Palauskas, S., Richards, C. Depressive disorders in childhood. IV. A longitudinal study of comorbidity with and risk of anxiety disorders. *Archives of General Psychiatry*, 1989; 46:776-782.
- Byar, D, ..., Gatsonis, C.A., et al. Design considerations for AIDS trials. *New England Journal of Medicine*, 1990; 323:1343-1348.
- Gatsonis, C.A. and McNeil, B.J. Collaborative diagnostic evaluation studies: the RDOG experience. *Radiology*, 1990; 175:571-575.
- Hollingsworth, C. and Gatsonis, C.A. Sequential sampling plans for green peach aphid on potato. *Journal of Economic Entomology*, 1990; 83:1365-1369.
- Kaplan, J., Manuck, S., Gatsonis, C.A. Heart rate and social status among male cynomolgus monkeys housed in disrupted social groupings. *American Journal of Primatology*, 1990.

- Needleman, H. and Gatsonis, C.A. Low level lead exposure and the IQ of children: A meta-analysis of modern studies. *Journal of the American Medical Association*, 1990; 263:673-678.
- Rifkin, M. Zerhouni, E., Gatsonis, C.A., Quint, L., Paushter, D., Epstein, J., Walsh, P., McNeil B.J. Comparison of MRI and US in staging early prostate cancer. *New England Journal of Medicine*, 1990; 323:621-626.
- Webb, R., Gatsonis, C.A., Zerhouni, E., Heelan, R., Glazer, G., Francis, I., McNeil, B.J. CT and MR imaging in staging non-small cell bronchogenic carcinoma: report of the Radiology Diagnostic Oncology Group. *Radiology*, 1991; 178(3):705-713.
- Gatsonis, C.A. and Greenhouse, J. Bayesian analysis of Phase I clinical trials. *Statistics in Medicine*, 1992; 11:1377-1389.
- Jacob, R., Shapiro, A., Russel, P., Portser, S., Kruger, A., Gatsonis, C.A. and Ding, Y. Relaxation therapy for hypertension: Setting-specific effects. *Psychosomatic Medicine*, 1992; 54:87-101
- McNeil, B., Pedersen, S. and Gatsonis, C.A. Current issues in profiling quality of care. *Inquiry*, 1992; 29:298-307.
- Weissman, J., Gatsonis, C.A. and Epstein, A.M. Rates of avoidable hospitalization by insurance status in MA and MD. *Journal of the American Medical Association*, 1992; 17:2388-2394.
- Udvarhelyi, I.S., Gatsonis, C.A., Epstein, A.M., Pashos, C.L., Newhouse, J.P. and McNeil, B.J. Acute Myocardial Infarction in the Medicare population: process of care and clinical outcomes. *Journal of the American Medical Association*, 1992; 18:2530-2536.
- Fielderman, A., Silvester, G., Gatsonis, C.A., Hoenig, J., Flynn, S. Prognostic significance of flow cytometric DNA analysis and proliferative index in stage I non-small cell lung cancer. *American Review of Respiratory Disease*, 1992; 146:707-710.
- Gatsonis, C.A., Normand, S.L., Liu, C. and Morris, C. Geographic variation of procedure utilization: A hierarchical approach. *Medical Care*, 1993; YS54-59.
- Haas, J., Weissman, J., Cleary, P., Goldberg, J., Gatsonis, C.A., ..., and Epstein, A. The discussion of preferences for life-sustaining care by persons with AIDS: Predictors of failure in the patient-doctor communication. *Archives of Internal Medicine*. 1993; 153:1241-48
- Kovacs, M., Goldstone, D. and Gatsonis, C.A. Suicidal behavior and childhood onset depressive disorders: A longitudinal investigation. *Journal of the American Academy of Child and Adolescent Psychiatry*. 1993 ;32:8-20
- Sidtis, J., Gatsonis, C.A., Price, R. et al. A placebo control trial of ZDV in the treatment of AIDS Dementia Complex. *Annals of Neurology*, 1993; 33:343-349.
- Ayanian, J., Udvarhelyi, S., Gatsonis, C.A., Pashos, C.L., Epstein, A.E. Racial differences in revascularization after coronary angiography. *Journal of the American Medical Association*, 1993; 269:2642-2646.
- Cleary, P., Fowler, J., Weissman, J., Massagli, M., Seage, G., Gatsonis, C.A., Epstein, A. Health related quality of life for persons with AIDS. *Medical Care*, 1993; 31:569-580.
- Irwig, L., Tosteson, A., Gatsonis, C.A., et al. Guidelines for meta-analyses evaluating diagnostic tests. *Annals of Internal Medicine*, 1994;120:667-676.
- Webb, R., Sarin, M., Zerhouni, E., Heelan, R., Glazer G., and Gatsonis, C.A. Interobserver variability in the CT and MR staging of lung cancer. *Journal of Computed Assisted Tomography*, 1993, 17:841-846.

- Ellis, JH, Tempany, C., Sarin, M., Gatsonis, C., Rifkin, M. and McNeil, B. MR imaging and sonography of early prostatic cancer: Pathologic and imaging features that influence identification and diagnosis. *American Journal of Roentgenology* 1994; 162:865-872.
- Kovacs, M. and Gatsonis, C. Secular trends in age at onset of major depressive disorders in childhood. *Journal of Psychiatric Research*, 1994, 28:319-329.
- Kovacs, M., Gatsonis, C., Pollock, M. and Parrone, PL. A controlled prospective study of DSM- III adjustment disorder in childhood. *Archives of Geneneal Psychiatry*, 1994; 51:535-541.
- Kovacs, M., Akiskal, HS, Gatsonis, C. and Parrone, P. Childhood-onset dysthymic disorder. Clinical features and prospective naturalistic outcome. *Archives of General Psychiatry*, 1994; 51:365-374.
- Weissman, J., Makadon H., Seage, G., Massagli, M., Gatsonis, C. et al. Changes in insurance status and access to care for persons with AIDS in the Boston Health Study. *American Journal of Public Health* 1994; 84:1997-2000.
- Rutter, C. and Gatsonis, C.A. Regression methods for meta-analysis of diagnostic tests. *Academic Radiology*, 1995;2:S48-S56
- Toledano, A. and Gatsonis, C.A. Regression analysis of correlated ROC data. *Academic Radiology*, 1995;2:S30-S36.
- Gatsonis, C.A. Random effects models for diagnostic test accuracy. *Academic Radiology*, 1995; 2:S14-S21
- Epstein, A., Seage, G., Weissman, J., Cleary, P., Fowler, J., Gatsonis, C., et al. Costs of medical care and out of pocket expenditures for persons with AIDS. *Inquiry* 1995; 32(2): 211-221.
- Gatsonis, C.A., Epstein, A.E., Newhouse, J.P. Normand, S-L., and McNeil, B.J. Variations in the utilization of coronary angiography for elderly patient with an acute myocardial infarction. An analysis using hierarchical logistic regression. *Medical Care*, 1995; 33: 625-642.
- Colin, C., Toselli, A., Delahaye, F., Ecochard, R., Rabilloud, M., Excoffier, S., Milon, H., Gatsonis, C., Mabriez J.C. et Matillon, Y. Prise en charge de l' infarctus du myocarde dans la region Rhone-Alpes: Existe-t-il une variation des pratiques? *Arch Mal Coeur Vaiss.* , 1995; 88:307-313.
- Megibow, A., Zhou,X., Rotterdam, H., Francis, I., Zerhouni E., Balfe D., Weinreb, J., Aisen, A., Kuhlman, J., Heiken, J., Gatsonis, C. and McNeil, B. Pancreatic Adenocarcinoma: CT vs MR imaging in the evaluation of resectability- Report of the Radiology Diagnostic Oncology Group. *Radiology*, 1995; 195:327-332.
- Zhou, X and Gatsonis, C.A. A simple method for comparing correlated ROC curves using unbalanced data. *Statistics in Medicine*, 1996; 15:1687-1693.
- Toledano, A. and Gatsonis, C.A. Ordinal regression methodology for ROC curves derived from correlated data. *Statistics in Medicine*, 1996; 15:1807-1826.
- Zerhouni,E.A., Rutter, C., Hamilton, S.R., Balfe, D.M., Megibow, A.J., Francis, I.R., Mos, A.A., Heiken, J.P., Tempany, C.M., Aisen, A.M., Weinreb, J.C., Gatsonis, C., McNeil, B.J. CT and MR Imaging in the Staging of Colorectal Carcinoma: Report of the Radiology Diagnostic Oncology Group II. *Radiology*, 1996; 200:443-451.
- Weissman JS, Cleary PD, Seage GR, Gatsonis C, Haas JS, Chasan-Taber S, Epstein AM. The influence of health-related quality of life and social characteristics on hospital use by patients with AIDS in the Boston Health Study. *Medical Care* 1996 ;34:1037-56
- Panicek, D., Gatsonis, C.A. et al. CT and MR imaging in local staging of malignant musculoskeletal

- neoplasms: Report of the Radiology Diagnostic Oncology Group. *Radiology*, 1997; 202: 237-246.
- Seage, G., Gatsonis, C.A. et al. The Boston AIDS survival score (BASS): A multidimensional AIDS severity adjustment. *American Journal of Public Health*, 1997; 87(4): 567-573.
- Kovacs, M; Obrosky DS; Gatsonis C; Richards C. First-episode major depressive and dysthymic disorder in childhood: clinical and sociodemographic factors in recovery. *Journal of the American Academy of Child and Adolescent Psychiatry*, 1997; 36:777-84.
- Normand, S.L., Glickman, M, Gatsonis, C.A. Statistical methods for profiling providers of medical care. Issues and applications. *Journal of the American Statistical Association*, 1997; 92: 803-814.
- Daniels, M. and Gatsonis, C.A. Hierarchical polytomous regression models with applications to health services research. *Statistics in Medicine*. 1997; 16: 2311-2325
- Pisano, ED, Fajardo, LL, Tsimikas, J, Sneige N, Frable, WJ, Gatsonis CA, Evans, WP, Tocino I., McNeil B. Rate of Insufficient Samples for Fine Needle Aspiration for Nonpalpable Breast Lesions in a Multi-center Clinical Trial: RDOG5 Study. *Cancer*, 1998; 82: 679-688.
- Bernabei, R., Gambassi, G., Lapane, K., Landi, F., Gatsonis, C., Dunlop, R., Lipsitz, L., Steel, K., Mor, V. Management of Pain in Elderly Patients With Cancer. *Journal of the American Medical Association*, 1998; 279(23), 1877-1882.
- Weissman, JS, Haas, JS, Fowler, FJ., Gatsonis C, Massagli, MP., Seage, GR., Cleary P. The stability of preferences for life-sustaining care among persons with AIDS in the Boston Health Study. Toe appear in *Medical Decision Making*, 1999; 19: 16-26.
- Jacob, R., Thayer J., Manuck S., Muldoo, M., Tamres L., Williams D., Ding, Y., and Gatsonis, C. Ambulatory blod pressure response and the circumplex model of mood: A four day study. *Psychosomatic Medicine*. 1999; 61: (3) 319-333.
- Toledano, A. and Gatsonis, C.A. Missing data in ROC curve analysis. *Biometrics* 1999; 55: (2) 488-496.
- Daniels, M. and Gatsonis, C.A. Multilevel Hierarchical Generalized Linear Models with applications to health services research. *Journal of the American Statistical Association*. 1999; 94:29-42.
- Hillman, BJ, Gatsonis C, Sullivan DC American College of Radiology Imaging Network: New National Cooperative Group for Conducting Clinical Trials of Medical Imaging Technologies. *Radiology* 1999; 213: (3) 641-645.
- Ishwaran, H. and Gatsonis, C. A. A general class of hierarchical ordinal regression models with applications to correlated ROC analysis. *Canadian Journal of Statistics*, 2000; 28, 731-750.
- Pisano, ED, Fajardo LL, Caudry D, Sneige N, Frable WJ, Berg WA, Tocino I, Schnitt S, Connolly J, Gatsonis CA, McNeil BJ. Fine Needle Aspiration of Nonpalpable Breast Lesions in a Multicenter Clinical Trial: Results from the Radiologic Diagnostic Oncology Group V. *Radiology* 2001; 219:785-792.
- Schneider, E, Leape L, Weissman J, Piana R, Gatsonis C, and Epstein AE. Racial Differences in Cardiac Revascularization Rates: Does "Overuse" Explain Higher Rates among White Patients? *Annals of Internal Medicine*, 2001;135:328-337.
- Rutter, CM and Gatsonis, CA. A hierarchical regression approach to meta-analysis of diagnostic test accuracy evaluations. *Statistics in Medicine* 2001, 20: 2865-2884.
- Wright, TC, Holinka CF, Ferenczy A, Gatsonis,CA, Mutter GL, Nicosia S, Richart R. Estradiol-induced hyperplasia in endometrial biopsies from women on hormone replacement therapy, *Am J Surg Pathol*

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- Bossuyt, PM, Reitsma JB, Bruns DE, Gatsonis CA, Glasziou PP, Irwig LM, Lijmer JG, Moher D, Rennie D, de Vet HC; Standards for Reporting of Diagnostic Accuracy steering group. The STARD statement for reporting studies of diagnostic accuracy: explanation and elaboration, *Clin Chem*. 2003 49(1):7-18
- Leape, L.L., Weissman, J.M., Schneider, E.C., Piana, R.N., Gatsonis, C, Epstein, A.M., Adherence to Practice Guidelines: The role of specialty society guidelines, *Amer. Heart Jnl*, 2003, 145:19-26
- Epstein, AM, Weissman JS, Schneider EC, Gatsonis C, Leape LL, Piana RN. Race and gender disparities in rates of cardiac revascularization: do they reflect appropriate use of procedures or problems in quality of care? *Med Care*. 2003;41(11):1240-55.
- Dukic, V. and Gatsonis C. Meta-analysis of diagnostic test accuracy assessment studies with varying number of thresholds. *Biometrics* 2003; 59: 936-946.
- Fajardo, LL, Pisano ED, Caudry DJ, Gatsonis CA, Berg WA, Connolly J, Schnitt S, Page DL, McNeil BJ; Radiologist Investigators of the Radiologic Diagnostic Oncology Group V. Stereotactic and sonographic large-core biopsy of nonpalpable breast lesions: results of the Radiologic Diagnostic Oncology Group V study. *Acad Radiol*. 2004;11(3):293-308.
- Wahl, RL, Siegel BA, Coleman RE, Gatsonis CA; PET Study Group. Prospective multicenter study of axillary nodal staging by positron emission tomography in breast cancer: a report of the staging breast cancer with PET Study Group. *J Clin Oncol*. 2004; 22(2):277-85.
- Bluemke D, Gatsonis C, Chen MH, et al. Magnetic resonance imaging of the breast prior to biopsy. *JAMA*, 2004; 292: 2735-42.
- Aberle, DR, Chiles C, Gatsonis C, Hillman BJ, Johnson CD, McClennan BL, Mitchell DG, Pisano ED, Schnall MD, Sorensen AG; American College of Radiology Imaging Network. Imaging and cancer: research strategy of the American College of Radiology Imaging Network. *Radiology*. 2005; 235(3):741-51.
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- Lehman, CD, Blume JD, Weatherall P, Thickman D, Hylton N, Warner E, Pisano E, Schnitt SJ, Gatsonis C, Schnall M, DeAngelis GA, Stomper P, Rosen EL, O'Loughlin M, Harms S, Bluemke DA. Screening women at high risk for breast cancer with mammography and magnetic resonance imaging. *Cancer*. 2005; 103(9):1898-905.
- Weissman, JS, Annas CL, Epstein AM, Schneider EC, Clarridge B, Kirle L, Gatsonis C, Feibelman S, Ridley N. Error reporting and disclosure systems: views from hospital leaders. *JAMA*. 2005; 293(11):1359-66.
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b. Books:

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Gatsonis, C. and Sally Morton (eds) *Methods in Comparative Effectiveness Research*. New York, Chapman and Hall, 2017.

c. Book chapters/Editorials/Review Articles/Proceedings:

Kovacs, M. and Gatsonis, C.A. Stability and change in childhood -onset depressive disorders. *In The Validation of psychiatric disorders*, Robbins L. and Barret, J. eds, Raven Press, New York, pp. 57-75. Invited paper delivered at the 78th annual meeting of the American Psychopathological Association, March 1988.

Gatsonis, C.A. Multi-institutional clinical studies of diagnostic imaging: Potential methodology for clinical PACS evaluation. Invited paper in *Medical Imaging IV: PACS system design and evaluation*, 1990; 1234: 218-222.

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Gatsonis, C.A. Invited Discussion of "Scientific Inference and Predictions; Multiplicities and Convincing

Stories: A Case Study of Breast Cancer Therapy”, by D. A. Berry, A. Thor et al, in *Bayesian Statistics 5*, J. Bernardo, J.O. Berger, A.P. Dawid, and AFM Smith (Eds), Oxford U. Press, 1996.

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Gatsonis, C.A. Design of Evaluations of Imaging Technologies: Development of a paradigm. *Academic Radiology*, 2000; 7: 681-683.

Irwig L., Bossuyt P., Glasziou P., Gatsonis C., and Lijmer J. Designing studies to ensure that estimates of test accuracy will travel. In *The Evidence Base of Clinical Diagnosis* JA Knottnerus (Ed.). BMJ Books, London, 2002.

Gatsonis, C. Do we need a checklist for reporting the results of diagnostic test evaluations? The STARD proposal. *Acad Radiol*. 2003;10(6):599-600.

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Gatsonis C, Paliwal P. Meta-analysis of diagnostic and screening test accuracy evaluations: methodologic primer. *Am J Roentgenol*. 2006; 187(2):271-81.

Hillman B, Gatsonis C. When is the Right Time to Conduct a Clinical Trial of a Diagnostic Imaging Technology? *Radiology*. 2008; 248(1):12-5

Hillman BJ, Gatsonis C. The American College of Radiology Imaging Network--clinical trials of diagnostic imaging and image-guided treatment. *Semin Oncol*. 2008;35(5):460-9.

Gatsonis, CA. Receiver operating characteristic analysis for the evaluation of diagnosis and prediction. *Radiology*. 2009 Dec; 253:593-6

Macaskill P, Gatsonis C, Deeks JJ, Harbord R, Takwoingi Y. Chapter 10: *Analysing and presenting results*. In: Deeks JJ, Bossuyt PM, Gatsonis C, eds. *Cochrane Handbook for Systematic Reviews of Diagnostic Test Accuracy* Version 1.0.0. The Cochrane Collaboration. 2010. Available from <http://srdta.cochrane.org/handbook-dta-reviews>.

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Dahabreh IJ, Gatsonis C. A Flexible, Multifaceted Approach Is Needed in Health Technology Assessment of PET. *J Nucl Med*. 2014 Jul 21;55(8):1225-1227. PMID: 25047328

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d. Reports

Institute of Medicine, *Immunization Safety Review*. 8 reports (2001-2004)

National Research Council, *Strengthening Forensic Science in the United States: A path forward*, 2009

Institute of Medicine, *Initial National Priorities for Comparative Effectiveness Research*, 2009

Institute of Medicine, *Scientific Standards for Studies on Modified Risk Tobacco Products*, 2011

NAS, Committee on Theoretical and Applied Statistics (CATS) :

Training Students to Extract Value from Big Data: Summary of a Workshop (2015)

Statistical Challenges in Assessing and Fostering the Reproducibility of Scientific Results: Summary of a Workshop (2016)

Refining the Concept of Scientific Inference When Working with Big Data: Proceedings of a Workshop (2017)

Invited presentations (*selection* from presentations given since 2001):

- 2001 Mar Department of Biostatistics, Yale University
- 2001 June Academy for Health Services Research and Health Policy, Annual Meeting, Atlanta GA
- 2001 June 23rd International Technology Interfaces Conference, Pula, Croatia.
- 2001 Nov Thought Leaders Conference, Medical Society of Georgia, Atlanta GA.
- 2002 Mar Spring Biometric Society (ENAR) Meetings, Arlington VA (Invited Tutorial)
- 2003 Feb 4th National Forum on Biomedical Imaging in Oncology. Bethesda MD.
- 2003 Mar Spring Biometric Society (ENAR) Meetings, Tampa FL.
- 2003 Apr Dept of Epidemiology, University of Ioannina, Ioannina, Greece.
- 2003 June Spinoza Lecture, Amesterdam Medical Center
- 2003 June Department of Social Medicine, University of Bern, Switzerland.
- 2004 Mar 2nd International Workshop in Applied Probability, Pireaus, Greece.
- 2004 May 25th Annual Meeting, Society for Clinical Trials, N. Orleans, La.
- 2004 May Bayesian Approaches. FDA Sponsored Workshop, Bethesda Md.
- 2004 July Dept of Epidemiology, University of Sydney, Sydney, Australia
- 2004 July International Biometric Society Conference, Kearns, Australia.
- 2004 Dec Department of Biostatistics, Columbia University.
- 2005 Mar Spring Biometric Society (ENAR) meetings, Austin Tx.
- 2005 May 3rd Conf, Eastern Medit. Region of Intern. Biometric Society, Corfu, Greece.
- 2005 June Dept of Biostatistics, Erasmus University, Rotterdam, Netherlands
- 2005 Nov Pfizer Corporation, New London CT
- 2006 May CT Chapter of the American Statistical Association
- 2006 June Dept of Quantitative Health Sciences, Cleveland Clinic
- 2007 Mar Spring Biometric Society (ENAR) meeting, Atlanta Ga.
- 2007 May Dept of Biostatistics, Johns Hopkins University
- 2007 July Joint Statistical Meetings, Salt Lake City
- 2007 Nov Dept of Mathematics, Boston University
- 2008 Jan Bayesian Biostatistics 2008, Houston Texas (Discussion)
- 2008 Mar Spring Biometric Society (ENAR) meeting, (Discussion)
- 2008 Aug Joint Statistical Meetings, Denver CO
- 2009 March Department of Biostatistics, Duke University
- 2009 Mar Spring Biometric Society (ENAR) meeting
- 2009 Oct Drug Information Agency Conference, Bethesda MD
- 2009 Dec IBM Medical Informatics Day
- 2010 Jan 8th International Conference on Health Policy Statistics, Washington DC
- 2010 March Grand Rounds, Dept of Radiology, University of Massachusetts
- 2010 Mar Spring Biometric Society (ENAR) meeting
- 2010 June International Cancer Screening Network, Oxford UK

2010 Nov Radiology Society of North America 2010, Chicago Illinois
 2010 Dec NIH-AHRQ Conference on Methodologic Challenges in CER, Bethesda MD (Discussion)
 2011 Jan Einstein/Montefiore Medical Center, Bronx NY
 2011 April Dalhousie University, Halifax, Canada
 2011 May 6th EMR-IBS Conference, Crete, Greece
 2011 May American Thoracic Society, Denver CO
 2011 June European Society for Thoracic Imaging – Fleischner Society Joint Meeting, Heidelberg, Germany
 2011 Sept CCOP/MB-CCOP & Research Base Meeting, National Cancer Institute
 2011 Nov Radiology Society of North America, Annual Meeting
 2012 Feb Dept of Biostatistics, Dana-Farber Cancer Institute
 2012 Feb Dept of Biostatistics, Columbia University
 2012 Nov Dept of Biostatistics, University of North Carolina, Chapel Hill
 2013 April 7th EMR-IBS Conference, Tel Aviv, Israel
 2013 Aug Joint Statistical Meetings 2013, Montreal, Quebec, Canada
 2014 March Spring Biometric Society (ENAR) Meetings, Baltimore Md
 2014 July International Biostatistics Society conference, Florence Italy
 2015 March Canadian Statistical Sciences Institute (CANSSI), Toronto, Ontario, Canada
 2015 May Forensic Science Research Evaluation Workshop, Washington DC
 2015 Oct Plenary Address, International Conference on Health Policy Statistics, Providence
 2016 March Spring Biometric Society (ENAR) Meetings, Austin Tx
 2016 Aug Joint Statistical Meetings, Chicago Il.
 2017 Feb American Association for the Advancement of Science, Boston Ma.
 2017 March Department of Biostatistics, Boston University School of Public Health
 2017 May Workshop in honor of Marvin Zelen, EMR-IBS Conference, Thessaloniki, Greece
 2017 Nov Department of Statistics, University of Virginia

Short courses (Selection since 2000):

2000 Apr “Statistical Methods for Evaluating Screening and Diagnostic Tests”, (with A. Toledano and C. Beam). Toronto, CA. Society for Clinical Trials Annual Meeting.
 2000 June “Hierarchical Modeling in Health Services Research”, (with M. Daniels). Edmonton, Alberta, CA. Conference on Statistics and Health.
 2000 Aug “Hierarchical Modeling in Health Services Research”, (with M. Daniels). Centers for Disease Control, Hyattsville, MD
 2000 Aug “Hierarchical Modeling in Health Services Research”, (with M. Daniels). Joint Statistical Meetings, Indianapolis, IN.
 2001 Jan “Hierarchical Modeling in Health Services Research”. Lister Hill Center for Health Policy,

University of Alabama at Birmingham.

- 2001 Aug "Design and Analysis of Studies of Screening and Diagnostic Tests" (with A. Toledano and J. Blume) Joint Statistical Meetings, Atlanta, GA
- 2001 Oct "Introduction to research synthesis of diagnostic test evaluations" (with F. Buntinx). International Cochrane Colloquium, Lyon, France.
- 2002 May "Hierarchical Models in Health Services and Outcomes Research", Boston Chapter of the American Statistical Association, Boston MA.
- 2002 July "Statistical methods for diagnostic test evaluation", International Biometric Conference, Freiburg, Germany.
- 2002 Sept "Hierarchical Models in Health Services and Outcomes Research", Centers for Disease Control, Atlanta GA.
- 2003 March "Statistical methods for diagnostic test evaluation", Biometric Society (ENAR), Spring Meetings, Tampa FL.
- 2003 April "Statistical methods for diagnostic test evaluation", Greek Statistical Institute, Annual Meeting. Kavalla, Greece.
- 2003 June "Statistical methods for diagnostic test evaluation", Amsterdam Medical Center, Amsterdam, Netherlands.
- 2003 Oct "Hierarchical Models in Health Services and Outcomes Research", 3rd International Conference in Health Care Policy Research, Chicago Ill.
- 2004 March "Meta-analysis of diagnostic test evaluations", US Cochrane Center Meeting, Brown University
- 2007, 2008 "Clinical trials of imaging", ACRIN Annual Meeting, Arlington Va.
- 2009 Feb-Aug "Clinical trials of diagnostic imaging" Bayer Research Workshops, Seoul, Korea; Shanghai China; Bangkok, Thailand; Taipei, Taiwan.
- 2010 May "Comparative Effectiveness Research: An introduction to statisticians", Spring Meetings of the Biometric Society (ENAR)
- 2010 Sept "Comparative Effectiveness Research: A methodologic introduction", University of Pittsburgh.
- 2010 Oct "Clinical Studies of Diagnostic Tests", European Society for Clinical Investigation. Athens, Greece
- 2012 June "Comparative Effectiveness Research: Introduction for Statisticians ", International Chinese Statistical Association, Boston
- 2013 Oct "Comparative Effectiveness Research", International Conference on Health Policy Statistics, Chicago.

University teaching:

1979, Summer	Introduction to Probability and Statistics, Cornell University
1980, 1981	Statistics for Behavioral Science, Rutgers University
1980, 1981	Real Analysis and Measure Theory, Rutgers University
1981, Fall	Statistics for Business and Economics, Rutgers University
1981, 1982	Mathematical Statistics, Rutgers University
1982, Summer	Experimental Design, Rutgers University
1982, Summer	Applied Statistics for Experimenters, Rutgers University
1982, Fall	Statistics for Education, Rutgers University
1982, 1983	Advanced Theoretical Statistics, Rutgers University
1983, Spring	Bayesian Inference, Rutgers University
1983, Fall	Statistics for Business and Economics, University of Massachusetts/Amherst
1983, 1984	Mathematical Statistics, University of Massachusetts/Amherst
1984, Spring	Probability and Math Statistics, Univ. of Massachusetts/Amherst
1984, Fall	Regression Analysis, University of Massachusetts/Amherst
1985, Spring	Probability and Math Statistics, Univ. of Massachusetts/Amherst
1985, Spring	Advanced Multivariate Analysis, Univ. of Massachusetts/Amherst
1987, Spring	Time Series Analysis, Carnegie-Mellon University
1987, 1988	Advanced Theoretical Statistics, Carnegie-Mellon University
1989, Fall	Applied Bayesian Analysis, Harvard School of Public Health
1990, Fall	Advanced Theoretical Statistics, Harvard School of Public Health
1993, Spring	Statistical methods for Health Policy and Management, Harvard School of Public Health
1994, Fall	Bayesian Methodology in Biostatistics, Harvard School of Public Health
1995-1999	Applied Regression Analysis, Brown University
1995, 1996	Introduction to Biostatistics, Brown University
1997, 1999	Advanced Statistical Inference, Brown University
1998, Fall	Clinical Trials Methodology, Brown University
1999, 2000	Bayesian Methods in Biostatistics, University of Athens, Greece
2000, Fall	Bayesian Statistical Methodology, Brown University
2001, Fall	Discrete Data Analysis, Brown University
2002, Fall	Bayesian Statistical Methodology, Brown University
2004, 2005 Spring	Statistical methods for Bioinformatics: I, Brown University
2006, 2007 Spring	Applied Regression Analysis, Brown University
2007, 2008 Spring	Biostatistics, 1 st year medical students.
2007, Fall	Clinical Trial Methodology, Brown University
2009, 2010 Spring	Advanced Multivariate Methods, Brown University
2011, 2013-2017 Spring	Statistical Inference II, Brown University
2014 - 2016 Fall	First Year Seminar, Brown University