

October 25, 2005

CURRICULUM VITAE

John M. Lachin, III, Sc.D.

The Biostatistics Center, 6110 Executive Boulevard, Rockville, Maryland, 20852.

EDUCATION

Sc.D., Biostatistics, University of Pittsburgh, 9/69-4/72.

B.S., Psychology, Tulane University, 6/65.

EMPLOYMENT

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| Present | Professor of Biostatistics and Epidemiology, and of Statistics
Department of Epidemiology and Biostatistics, The School of Public Health
and Health Services.
Department of Statistics, Columbian School of Arts and Sciences.
Former (now Co)-Director, The Biostatistics Center
The George Washington University |
| 1973- | Professor of Biostatistics and Epidemiology, and of Statistics, with tenure (2002),
Professor of Statistics (1984, tenure 1987), Research Professor (1982), Associate
Research Professor (1977), Assistant Research Professor (1973).

Co-Director of the Biostatistics Center (2001), Director (1988), Co-Director (1985),
Assistant Director (1980). |
| 1972-1973 | Mental Hygiene Epidemiologist and Director, Division of Program Information and
Evaluation, Virginia State Department of Mental Health and Mental Retardation,
Richmond; and Adjunct Assistant Professor, Department of Biometry, Medical
College of Virginia, Health Sciences Division, Virginia Commonwealth University. |
| 1969-1972 | Statistician and Systems Analyst for the Research Center in Child Psychiatry,
University of Pittsburgh School of Medicine, Pittsburgh Child Guidance Center. |
| 1967-1969 | Acting Chief, Statistics and Research Section, Division of Administrative Services,
Louisiana State Department of Hospitals, Baton Rouge. |

CURRENT RESPONSIBILITIES

Professor of Biostatistics and Epidemiology, and of Statistics. Each semester teaches one of the following courses in the Department of Epidemiology and Biostatistics, or the Department of Statistics: Courses taught include Introduction to Biostatistics (Statistics 127); Data Analysis (Statistics 210); Design of Medical Studies (Statistics 224); Biostatistical Methods (formerly Statistics 225, now PH 266); Advanced Biostatistical Methods (Statistics 226); or Survival Analysis (Statistics 227).

Former, now Co-, Director of the Biostatistics Center, a research facility of the Department of Statistics of the George Washington University with 100 employees and total funding of \$25 million annually.

Principal Investigator and Director of the Coordinating Center for the Type 1 Diabetes TrialNet, a clinical research consortium to conduct multiple studies into the epidemiology, genetics, autoimmunity, prevention and treatment of type 1 diabetes mellitus, funded by the National Institute of Diabetes, Digestive and Kidney Diseases.

Principal Investigator and Director of the Coordinating Center for the study of the Epidemiology of Diabetes Intervention and Complications (EDIC), a long-term epidemiologic study of subjects with Type 1 diabetes funded by the National Institute of Diabetes, Digestive and Kidney Diseases.

Co-Principal Investigator of the Coordinating Center for the Diabetes Prevention Program Outcome Study (DPPOS), a long-term multi-center observational follow-up of subjects with impaired glucose tolerance and newly diagnosed Type 2 diabetes trial funded by the National Institute of Diabetes, Digestive and Kidney Diseases.

FORMER SIGNIFICANT RESPONSIBILITIES

Director, The Biostatistics Center, 1988-2000.

Program Director for Biostatistics and Chair of the Executive Committee for the graduate degree program in Biostatistics and Epidemiology, jointly by the Department of Epidemiology and Biostatistics and the Department of Statistics, 1995 - 2004.

Principal Investigator and Director of the Coordinating Center for large scale medical studies funded by the National Institutes of Health and industry, and PI for methodological research funded by the NIH. For complete list, see "Sponsored Research" below.

DOCTORAL STUDENTS

Milton Fan, Ph.D. Statistics, 1986, *Estimation of Parameters for the Logistic Regression Model with Partial Incomplete Observations*. (Currently with The Food and Drug Administration).

Yuko Palesch, Ph.D. Statistics, 1990, *R-Sample($R > 2$) Multivariate Rank Tests and Related Estimators of Population Differences*. (Currently with the Department of Biostatistics and Epidemiology, Medical University of South Carolina).

Naji Younes, Ph.D. Statistics, 1994, *A Family of Event-Time Models with Smooth Baseline Hazards*. (Currently with The Biostatistics Center, The George Washington University).

Oliver Bautista, Ph.D. Statistics, 1996, (Co-Advisor with K.K. Gordon Lan), *Analysis of Overdispersed Poisson Count Data*. (Currently with The Biostatistics Center, The George Washington University).

Mingxiu Hu, Ph.D. Statistics, 1997, *Robust Estimating Functions with Nuisance Parameters*. (Currently with Pfizer Corporation).

Theodore Diaz, Ph.D. Statistics, 1999, (Co-Advisor; Advisor: Robert Smythe). *Simultaneous Testing and Estimation of Trend in Proportion Using Historical Controls*.

Yvonne Sparling, Biostatistics, 2002, *Parametric Survival Models for Interval-Censored Data with Time-Dependent Covariates*.

Pablo Bonangelino, Biostatistics, 2003, (Co-Advisor with Thomas Louis). *Maximum Efficiency Robust Tests for the Focused Clustering of Disease*.

SPONSORED RESEARCH (Present and Past, as Principal Investigator (P.I. or Co-P.I.)

Type 1 Diabetes TrialNet: 09/29/2001 - 08/31/2008, Coordinating Center, P.I., NIDDK Cooperative Agreement 1 U01 DK61055-01.

Statistical Methods for Cancer Clinical Trials: 9/97-8/2000, P.I., NCI Grant 2R01-CA-55098-04A2.

Epidemiology of Diabetes Intervention and Complications: 3/96 - 2/2006, P.I., Coordinating Center, NIDDK Contract N01-DK-6-2204, \$22,238,005.

Diabetes Prevention Program - 7/94-6/2001, Co- P.I. (Dr. Raymond Bain, P.I.), Coordinating Center, NIDDK Cooperative Agreement No. 5-U01-DK48489.

Diabetes Control and Complications Trial: 2/82-2/98, P.I., Coordinating Center, NIDDK Contract N01-AM-2-2206B.

Statistical Methods for Chronic Disease Clinical Trials: 7/88-6/91, P.I., NIDDK Grant R01-DK35952.

Study of Angiotensin Converting Enzyme Inhibition in Diabetic Nephropathy: 12/86 - 9/92, (P.I. 1986-10/88; Co-P.I. 10/88 - 9/92) Biostatistical Coordinating Center, co-funded by Grant from E.R. Squibb and Sons, and NIDDK Grant R01-DK-39826.

Collaborative Study of the Treatment of Lactic Acidosis with Dichloroacetate: 4/86-3/92, Co-P.I. (Dr. Elizabeth Wright, P.I.), Data Coordinating Center, subcontract to NIDDK Grant R01-DK-35448 (Dr. Peter Stacpoole, P.I., University of Florida).

Lupus Nephritis Collaborative Study: 4/81-6/88, P.I., Biostatistical Coordinating Center, NIDDK Grant R01-AM27769-02.

Bile Acid Metabolism and Liver Injury In Gallstone Patients: 4/83-9/85, P.I., Biostatistical Support Unit, Consortium Agreement under NIADDK Grant R01-AM31461 (Dr. Alan F. Hofmann, University of California at San Diego, Principal Investigator).

New Drug Application for Ursodeoxycholic Acid: 2/84-2/86, P.I., Biostatistical Unit, contract from Interstate Drug Exchange in collaboration with Garvey Associates, Inc.

National Cooperative Gallstone Study: 9/73-1/84, (P.I. effective 9/80) Biostatistical Support Unit, subcontract to NIADDK Contract N01-AM-0-2205. (Dr. Leslie J. Schoenfield, P.I., Cedars Sinai Medical Center).

Others: Principal Investigator, contracts from other pharmaceutical companies for analyses of phase II and phase III clinical trials. Co-investigator for other NIH grants and contracts.

MEMBERSHIPS

American Statistical Association
 Biometric Society
 Institute of Mathematical Statistics
 Royal Statistical Society
 International Statistical Institute
 International Chinese Statistical Association
 Society for Clinical Trials
 Society for Epidemiologic Research
 International Society for Clinical Biostatistics
 American Diabetes Association
 Professional Section
 Council on Epidemiology and Statistics
 European Association for the Study of Diabetes
 International Diabetes Epidemiology Group
 Drug Information Association

HONORS

American Association of Publishers award for “The Outstanding Professional And Scholarly Title Of 2002 In Mathematics And Statistics” for the book co-authored with W. Rosenberger entitled *Randomization in Clinical Trials: Theory and Practice*, John Wiley and Sons, 2002.
 President, Society for Clinical Trials, 2002-3
 Joseph Ciminera Lecture, Merck and Company, 2002
 John C. Forbes Graduate Student Honors Colloquium. Medical College of Virginia, 1995
 Co-recipient, the Charles H. Best Medal for Distinguished Service in the Cause of Diabetes. Awarded to the Diabetes Control and Complications Trial Study Group (J. Lachin, Director, Coordinating Center). American Diabetes Association, 1994.
 Elected Member, International Statistical Institute, 1993
 Distinguished Graduate Award, Graduate School of Public Health, University of Pittsburgh, 1992
 Delta Omega National Honor Society, 1991
 Elected Fellow, Royal Statistical Society, 1991
 Elected Fellow, American Statistical Association, 1989

ADVISORY COMMITTEES

Data and Safety Monitoring Board (member). Apnea Positive Pressure Long-term Efficacy Study (APPLES). National Heart, Lung and Blood Institute, 2003 - .

Data and Safety Monitoring Board (Vice-chair). Look AHEAD: Action for Health in Diabetes. National Institute of Diabetes, Digestive and Kidney Diseases, 2001 - .

Steering Committee (member). A Diabetes Outcomes Progression Trial (ADOPT), Glaxo SmithKline, 2000 - .

Data and Safety Monitoring Committee (member). Aspirin and Folate Prevention of Large Bowel Polyps. National Cancer Institute, 1997 - 2004.

Data Safety and Quality Monitoring Group (member). Diabetes Prevention Trial - Type I. National Institute of Diabetes, Digestive and Kidney Diseases, 1994 - 2001.

Data and Safety Monitoring Committee (member), Studies of Vesnarinone in Congestive Heart Failure. Otsuka Pharmaceuticals Co., 1987 - 1994.

Treatment Effects Monitoring Advisory Committee (chairman), Glaucoma Laser Trial, National Eye Institute, Coordinating Center - Johns Hopkins University, 1983 - 1995.

Policy-Advisory Board (member), Hypertension Prevention Trial, National Heart, Lung and Blood Institute, Coordinating Center - Johns Hopkins University, 1982-1986.

Operations Committee (member), Veterans Administration Cooperative Study Protocol No. 213, "Treatment of Mild Hypertension in the Aged. Anti-Hypertensive Effectiveness and Patients' Toleration of Different Regimens," 1981-1986.

Patient Safety Monitoring Committee (member), National Cooperative Dialysis Study, National Institute of Arthritis, Diabetes, Digestive and Kidney Diseases, Coordinating Center - Harvard University School of Public Health, 1979-1981.

Gastrointestinal Drugs Advisory Committee (member), Food and Drug Administration, 1978-1982; consultant, 1983 - 1984.

Services Research and Epidemiologic Studies Review Committee (member), National Institute of Mental Health, 1977-1980.

Consultant to various review committees of the NIH and the FDA.

OTHER PROFESSIONAL ACTIVITIES (partial list, see "Presentations" below)

Perspectives on the Biostatistical Sciences: A Symposium in Memory of Samuel W. Greenhouse.
June 11, 2001, National Institutes of Health.
Chair, Organizing Committee; member, Program Committee

International Biometric Society (Eastern North American Region)

Liaison Officer to the American Statistical Association, 1989-91.

Society for Clinical Trials

President (2002-3)
Board of Directors, member, 1982 - 1986.
Finance Committee, chairman, 1981 - 1984.
Program Committee, member, 1978, 79, 80, 95.
Workshop Sessions, chairman, 1979, 80.

Organizer and lecturer, Pre-Conference Short Course, "Some Considerations in Clinical Trial Design and Analysis", 1987.

Organizer and speaker, Workshop on "The Role of Randomization in Clinical Trials", 1986.

Meeting host and chairman of session on "Organization and Management of Coordinating Centers," 1978.

Controlled Clinical Trials. Editorial Board, 1986-1989.

Symposia and Conferences (Partial List)

Metabolic Imprinting and the Long-term Complications of Diabetes Mellitus: Bench to Bedside and Back. April 10-11, 2004. National Institutes of Health.

Perspectives on the Biostatistical Sciences: A Symposium in Memory of Samuel W. Greenhouse. June 11, 2001, National Institutes of Health.

American Diabetes Association Consensus Development Conference: C-Peptide as an Endpoint in Type 1 Diabetes Intervention Trials. Chicago, October 21-2, 2001.

Workshop on Future Directions in Prevention of Type 1 Diabetes, Miami, January 9-10, 2000. Invited Speaker.

American Diabetes Association Workgroup: Implications of the United Kingdom Prospective Diabetes Study, 1998.

NIH Workshop: Research Needs for the Design and Analysis of Surrogate Endpoints in Clinical Trials, Potomac, MD, 1998. Invited speaker.

American Diabetes Association Research Symposium on Prevention of Type I Diabetes in the General Population. Estes Park, Colorado, September 27-29, 1996. Invited speaker.

Harvard University Schering-Plough Workshop on Flexible Strategies for Clinical Trials. Boston, May 30-31, 1996. Invited speaker.

John C. Forbes Graduate Student Honors Colloquium. Medical College of Virginia, Virginia Commonwealth University, April 19-20, 1995. Distinguished guest lecturer.

International Clinical Epidemiology Networks (INCLEN) Ninth Annual Meeting, Rockefeller Foundation, Mombassa, Kenya, January 21-25, 1991. Invited speaker.

American Diabetes Association Conference on Peripheral Neuropathy in Diabetes. San Antonio, February 8-9, 1988. Invited speaker.

NIH Consensus Conference: Diet and Exercise in Noninsulin Dependent Diabetes Mellitus. December 8-10, 1986. Member, Consensus Panel.

NIH Centennial Initiative: Kidney Disease of Diabetes Mellitus. November 3-4, 1986. Member, Committee on Clinical Research.

Fifth Advanced Course in Gastroenterology, the Italian Society for Gastroenterology: Cirrhosis of the Liver, Methods and Fields of Research. San Miniato, Italy, October 28 - November 2, 1985. Invited speaker (see publication #40).

Biostatistics Symposium. Diabetes Research Center, University of Washington, Seattle, September 12, 1985. Invited speaker.

Symposium: Update on Treatment of Gallstones: Role of Ursodeoxycholic Acid. Scottsdale, Arizona, Nov. 29 - Dec. 2, 1984. Invited speaker.

Eighth International Bile Acids Meeting: Recent Advances in Bile Acids Research. Cortina D'Ampezzo, Italy, March 22-24, 1984.

Conference on Insulin Pump Therapy in Diabetes: Multi-Center Study of Effect on Microvascular Disease. The Kroc Foundation, Santa Ynez Valley, California, March 21-25, 1983. Invited speaker.

Conference on Changing Concepts in Bioavailability and Clinical Trials. University of Maryland School of Pharmacy, Baltimore, October 1982. Moderator, Session on Quality Assurance: Concepts and Procedures for Clinical Trials.

International Conference on Hepatotoxicity Due to Drugs and Chemicals. John E. Fogarty International Center for Advanced Study in the Health Sciences, NIH, Bethesda, Maryland, November 14-16, 1977. (See Publication #16.)

First Advanced Course in Gastroenterology, The Italian Society for Gastroenterology: The randomized Controlled Trial. Villa Monastero, Varenna, Italy, September 28 - October 2, 1975. (See book below.)

BOOKS

Rosenberger, W. and Lachin J.M. Randomization in Clinical Trials: Theory and Practice. John Wiley and Sons, 2002. (ISBN: 0-471-23626-8, 259 pages)

Lachin, J.M. Biostatistical Methods: The Assessment of Relative Risks. John Wiley and Sons, 2000. (ISBN: 0-471-36996-9; 541 pages)

Tygstrup N, Lachin JM, Juhl E. (editors). The Randomized Clinical Trial and Therapeutic Decisions. Marcel-Dekker, 1982. (ISBN: 0-8247-1856-9; 296 pages)

Lectures from the First Advanced Course in Gastroenterology. Dr. Lachin's chapters are entitled:

Statistical elements of the randomized clinical trial; pp. 77-102.

Statistical inference in clinical trials; pp 117-143.

Statistical analysis of the clinical trial; pp 155-194.

The execution of a protocol; pp. 219-234.

NAMED AUTHOR PUBLICATIONS (refereed designated by *)

- *94. Lachin JM, Cleary PA, Crofford C, Genuth S, Nathan D, Clark C, Ferris F, Siebert C for the DCCT Research Group. Early termination of the Diabetes Control and Complications Trial. In Data Monitoring in Clinical Trials: A Case Studies Approach, DL DeMets, CD Furberg, LM Friedman (Eds). Springer, New York, New York..
- *93. Lachin JM. Maximum Information Designs. Clinical Trials, 2, 453-464, 2005.
- *92. Lachin JM. A review of methods for futility stopping based on conditional power. Statistics in Medicine, 24, 2747-2764, 2005.
- 91. Greenhouse JB and Lachin JM. Greenhouse, Samuel W. In Encyclopedia of Biostatistics, Second Edition. P. Armitage and T. Colton (Eds.), 2251-3. John Wiley & Sons, Ltd. Chichester, 2005
- *90. Lachin JM. The role of measurement reliability in clinical trials. Clinical Trials, 1, 553 – 566, 2004.
- *89. Dickersin K, Davis BR, Dixon DO, George SL, Hawkins BS, Lachin JM, Peduzzi P, Pocock S. The Society for Clinical Trials supports United States legislation mandating trials registration. Clinical Trials, 1, 417-420, 2004.
- *88. Lachin JM. Conflicts of interest in data monitoring of industry versus publicly financed clinical trials. Statistics in Medicine, 23, 1519-1521, 2004.
- *87. Palmer JP, Fleming GA, Greenbaum CJ, Herold KC, Jansa LD, Kolb H, Lachin JM, Polonsky KS, Pozzilli P, Skyler JS, Steffes MW. C-peptide is the appropriate outcome measure for type 1 diabetes clinical trials to preserve beta-cell function: report of an ADA workshop, 21-22 October 2001. Diabetes, 53, 250-64, 2004. Erratum: Diabetes, 53, 1934, 2004.
- * 86. Lachin JM, Greenhouse SW, Bautista OM. Group sequential large sample T^2 -like χ^2 tests for multivariate observations. Statistics in Medicine, 22, 3357-3368, 2003.
- * 85. Lan KKG, Lachin JM, and Bautista OM. Over-ruling a group sequential boundary - a stopping rule versus a guideline. Statistics in Medicine, 22, 3347-3355, 2003.
- * 84. Lachin, JM. A tribute to Samuel W. Greenhouse. Statistics in Medicine, 22, 3267-3276, 2003.
- * 83. Hu MX and Lachin, JM. Corrections for Bias in Maximum Likelihood Parameter Estimates Due to Nuisance Parameters. Communications in Statistics, 32, 619-639, 2003.
- * 82. Viberti G, Kahn SE, Greene DA, Herman WH, Zinman B, Holman RR, Haffner SM, Levy D, Lachin JM, Berry RA, Heise MA, Jones NP, Freed MI. A diabetes outcome progression trial (ADOPT): an international multicenter study of the comparative efficacy of rosiglitazone, glyburide, and metformin in recently diagnosed type 2 diabetes. Diabetes Care, 25, 1737-43, 2002.

- * 81. Hu M and Lachin JM. Application of robust estimating equations to the analysis of quantitative longitudinal data, Statistics in Medicine, 20, 3411-3428, 2001.
- 80. Lachin JM and Greenhouse, J. Sam Greenhouse: 1918-2000. AmStat News, September, 4-5, 2001.
- * 79. Bautista OM, Bain RP and Lachin JM. A flexible stochastic curtailing procedure for the log-rank test. Controlled Clinical Trials, 21, 428-439, 2000.
- * 78. Lachin JM. Statistical Considerations in the Intent-to-treat Principle. Controlled Clinical Trials, 21, 167-189, 2000.
- 77. Hu, MX and Lachin, JM. Likelihood-based Approaches for Handling Nuisance Parameters. ASA Proceedings of the Section on Bayesian Statistical Science, 1999, 108-113.
- * 76. Lachin JM. Worst-rank score analysis with informatively missing observations in clinical trials. Controlled Clinical Trials, 20, 408-422, 1999.
- * 75. Monnier VM, Bautista O, Kenny D, Sell DR, Fogarty J, Dahms W, Cleary P, Lachin J, Genuth S and the DCCT Skin Collagen Ancillary Study Group. Skin collagen glycation, glycoxidation, and crosslinking are lower in subjects with long-term intensive versus conventional therapy of type I diabetes. Diabetes, 48, 870-880, 1999.
- 74. Lachin JM. Sample size determination. In Encyclopedia of Biostatistics, P. Armitage and T. Colton (Eds.), Wiley, New York, 3892-3903, 1998.
- * 73. Younes N and Lachin JM. Link-based models for survival data with interval and continuous time censoring. Biometrics, 53, 1199-1211, 1997.
- * 72. Lachin JM. Group sequential monitoring of distribution-free analyses of repeated measures. Statistics in Medicine, 16, 653-668, 1997.
- * 71. Lachin JM. Distribution-Free marginal analysis of repeated measures. Drug Information Journal, 30, 1017-1028, 1996.
- * 70. Nicolucci A, Carinci JG, Graepel TC, Hohman TC, Ferris F, and Lachin JM. The efficacy of Tolrestat in the treatment of diabetic peripheral neuropathy: a meta-analysis of individual patient data. Diabetes Care, 19, 1091-1096, 1996.
- * 69. Lan KKG and Lachin JM. Martingales without tears. Lifetime Data Analysis, 1, 361-375, 1995.
- * 68. Rosenberger WF, Lachin JM, and Bain RP. Nonparametric test of stochastic ordering for multiple longitudinal measures. Journal of Biopharmaceutical Statistics, 5, 235-243, 1995.
- * 67. Lan KKG, Rosenberger WF and Lachin JM. Sequential monitoring of survival data with the Wilcoxon statistic. Biometrics, 51, 1175-1183, 1995.

66. Lachin JM and Bautista OM. Stratified-adjusted versus unstratified assessment of sample size and power for analyses of proportions. Recent Advances in Clinical Trial Design and Analysis, P.F. Thall (Ed.), Kluwer, Boston, 203-223,1995.
65. Lachin JM. Discussion: Adaptive designs in clinical trials: the Lilly experience. Biopharmaceutical Report, 3: 6,1995.
- * 64. Stacpoole PW, Wright EC, Baumgartner TG, Bersin RM, Buchalter S, Curry SH, Duncan C, Harman EM, Henderson GN, Jenkinson S, Lachin JM, Lorenz A, Schneider SH, Siegel JH, Summer WR, Thompson D, Wolfe CL, Zorovich B, and the DCA Lactic Acidosis Study Group. Natural history and course of acquired lactic acidosis in adults. The American Journal of Medicine, 97:47-54,1994.
- * 63. Rosenberger WF and Lachin JM. The use of response-adaptive designs in clinical trials. Controlled Clinical Trials, 14, 471-484, 1993.
- * 62. Lan KKG, Rosenberger WF, Lachin JM. Use of spending functions for occasional or continuous monitoring of data in clinical trials. Statistics in Medicine, 12, 2219-2231, 1993.
- * 61. Palesch YY and Lachin JM. Asymptotically distribution-free multivariate rank tests for multiple samples with partially incomplete observations. Statistica Sinica, 4, 373-387, 1994.
- * 60. Stacpoole, PW, Wright EC, Baumgartner TG, Bersin RM, Buchalter S, Curry SH, Duncan, CA, Harman EM, Henderson GN, Jenkinson S, Lachin JM, Lorenz A, Schneider SH, Siegel JH, Summer WR, Thompson D, Wolfe CL, Zorovich B, and the Dichloroacetate-Lactic Acidosis Study Group. A controlled clinical trial of dichloroacetate for treatment of lactic acidosis in adults. The New England Journal of Medicine, 327, 1564-1569, 1992.
- * 59. Su JQ and Lachin JM. Group sequential distribution-free methods for the analysis of multivariate observations. Biometrics, 48, 1033-1042, 1992.
- * 58. Lachin JM. Power and sample size evaluation for the McNemar test with application to matched case-control studies. Statistics in Medicine, 11, 1239-1251, 1992.
- * 57. Lachin JM. Some large sample distribution-free estimators and tests for multivariate partially incomplete data from two populations. Statistics in Medicine, 11, 1151-1170, 1992.
- * 56. Lewis EJ, Hunsicker LG, Lan S, Rohde RD, Lachin JM and the Lupus Nephritis Collaborative Study Group. A controlled trial of plasmapheresis therapy in severe lupus nephritis. The New England Journal of Medicine, 326, 1373-1379, 1992.
- * 55. Lachin JM and Lan SL. Statistical considerations in the termination of a clinical trial with no treatment group difference: The Lupus Nephritis Collaborative Study. Controlled Clinical Trials, 13, 62-79, 1992.
- * 54. Levey AS, Lan SP, Corwin HL, Kasinath BS, Lachin JM, Neilson EG, Hunsicker LG, Lewis EJ and the Lupus Nephritis Collaborative Study Group. Progression and remission

- of renal disease in the Lupus Nephritis Collaborative Study. Results of treatment with prednisone and short-term oral cyclophosphamide. *Annals of Internal Medicine*, 1992, 116, 114-123.
- * 53. Lan KKG and Lachin JM. Group sequential logrank tests in a maximum duration trial. *Biometrics*, 1990, 46, 759-770.
 - * 52. Wei LJ, Su JQ and Lachin JM. Interim analyses with repeated measurements in a sequential clinical trial. *Biometrika*, 1990, 77, 359-64.
 - 51. Clough JD, Lewis EJ, Lachin JM and the Lupus Nephritis Collaborative Study Group (LNCSSG) (1990). Treatment protocols of the Lupus Nephritis Collaborative Study of plasmapheresis in severe nephritis. In: *Apheresis*, Ed. Alan R. Liss, Inc., New York, pp. 301-307.
 - *50. Lachin JM, Matts JP and Wei LJ. Response to Letter to the Editor. Permutation tests following restricted randomization procedures. *Controlled Clinical Trials*, 1990, 11, 150-152.
 - * 49. Lachin JM. Properties of randomization in clinical trials: Foreword. *Controlled Clinical Trials*, 1988, 9, 287-288.
 - * 48. Lachin JM. Statistical properties of randomization in clinical trials. *Controlled Clinical Trials*, 1988, 9, 289-311.
 - * 47. Lachin JM. Properties of simple randomization in clinical trials. *Controlled Clinical Trials*, 1988, 9, 312-326.
 - * 46. Matts JP and Lachin JM. Properties of permuted-block randomization in clinical trials. *Controlled Clinical Trials*, 1988, 9, 327-344.
 - * 45. Wei LJ and Lachin JM. Properties of the Urn randomization in clinical trials. *Controlled Clinical Trials*, 1988, 9, 345-364.
 - * 44. Lachin JM, Matts JP and Wei LJ. Randomization in clinical trials: Conclusions and recommendations. *Controlled Clinical Trials*, 1988, 9, 365-374.
 - * 43. Lachin JM and Wei LJ. Estimators and tests in the analysis of nonindependent 2 x 2 tables with partially missing observations. *Biometrics*, 1988, 44, 513-528.
 - * 42. Thall PF and Lachin JM. Analysis of recurrent events: Nonparametric methods for random interval count data. *Journal of the American Statistical Association*, 1988, 83, 339-347.
 - * 41. Canner PL, Gatewood LC, White C, Lachin JM and Schoenfeld LJ. External monitoring of a data coordinating center: Experience of the National Cooperative Gallstone Study. *Controlled Clinical Trials*, 1987, 8, 1-11.
 - * 40. Halperin M, Gilbert PR and Lachin JM. Distribution-free confidence intervals for $\Pr(X_1 < X_2)$. *Biometrics*, 1987, 43, 71-80.

39. Lachin JM and Wright EC. Statistical considerations in the design and analysis of clinical trials of causal therapy in cirrhosis of the liver. In Tygstrup N and Orlandi F. (eds.), Cirrhosis of the Liver: Methods and Fields of Research, Elsevier, Amsterdam, 1987, 461-482.
- * 38. Lachin JM and Foulkes MA. Evaluation of sample size and power for analyses of survival with allowance for non-uniform patient entry, losses to follow-up, non-compliance and stratification. Biometrics, 1986, 42, 507-519.
- * 37. Thall PF and Lachin JM. Assessment of stratum-covariate interactions in Cox's proportional hazards regression model. Statistics in Medicine, 1986, 5, 73-83.
- * 36. Stellard F, Klein PD, Hofmann A and Lachin JM. Mass spectrometry identification of biliary bile acids in bile from gallstone patients before and during treatment with chenodeoxycholic acid. Journal of Laboratory and Clinical Medicine, 1985, 105, 504-513.
- * 35. Thistle JL, Cleary PA, Lachin JM, Tyor MP, Hersch T, and the NCGS Group. The natural history of untreated cholelithiasis during the National Cooperative Gallstone Study (NCGS). Annals of Internal Medicine, 1984, 100, 171-175.
- * 34. Wei LJ and Lachin JM. Two-sample asymptotically distribution-free tests for incomplete multivariate observations. Journal of the American Statistical Association, 1984, 79, 653-661.
- * 33. Marks J, Croke G, Gochman N, Hofmann AF, Lachin JM, Schoenfield LJ and Tyor MP, and the NCGS Group. Major issues in the organization and implementation of the National Cooperative Gallstone Study (NCGS). Controlled Clinical Trials, 1984, 5, 1-12.
- * 32. Grundy SM, Lan S, Lachin JM, the Steering Committee and the NCGS Group. The effects of chenodiol on biliary lipids and their association with gallstone dissolution in the National Cooperative Gallstone Study (NCGS). Journal of Clinical Investigation, 1984, 73, 1156-1166.
- * 31. Hofmann AF and Lachin JM. Biliary bile acid composition and cholesterol saturation. Gastroenterology, 1983, 84, 1075-1077.
- * 30. Schoenfield LJ, Grundy SM, Hofmann AF, Lachin JM, Thistle JL and Tyor MP, for the NCGS. The National Cooperative Gallstone Study viewed by its investigators. Gastroenterology, 1983, 84, 644-648.
- * 29. Habig RL, Thomas P, Lippel K, Anderson D and Lachin JM. Central laboratory quality control in the National Cooperative Gallstone Study. Controlled Clinical Trials, 1983, 4, 101-123.
- * 28. Lachin JM, Schoenfield LJ, the Steering Committee and the NCGS Group. Effects of dose relative to body weight in the National Cooperative Gallstone Study, a fixed-dose clinical trial. Controlled Clinical Trials, 1983, 4, 125-131.
- * 27. Phillips MJ, Fisher RL, Anderson DW, Lan S, Lachin JM, Boyer JL, and the Steering Committee for the NCGS Group. Ultrastructural evidence of intrahepatic cholestasis before

- and after chenodeoxycholic acid (CDCA) therapy in patients with cholelithiasis: The National Cooperative Gallstone Study (NCGS). *Hepatology*, 1983, 3, 209-220.
- * 26. Hofmann AF, Grundy SM, Lachin JM, Lan, SP, et al. Pretreatment biliary lipid composition in white patients with radiolucent gallstones in the National Cooperative Gallstone Study. *Gastroenterology*, 1982, 83, 738-752.
 - * 25. Fisher RL, Anderson DW, Boyer JL, Ishak K, Klatskin G, Lachin JM, and Phillips MJ, and the Steering Committee for the NCGS Group. A prospective morphologic evaluation of hepatic toxicity of chenodeoxycholic acid in patients with cholelithiasis: The National Cooperative Gallstone Study. *Hepatology*, 1982, 2, 187-201.
 - * 24. Albers JJ, Grundy SM, Cleary PA, Small DM, Lachin JM, Schoenfield LJ, for the NCGS Group. National Cooperative Gallstone Study: The effect of chenodeoxycholic acid on lipoproteins and apolipoproteins. *Gastroenterology*, 1982, 82, 638-646.
 - * 23. Schoenfield LJ, Lachin JM, the Steering Committee and the NCGS Group. National Cooperative Gallstone Study: A controlled trial of the efficacy and safety of chenodeoxycholic acid for dissolution of gallstones. *Annals of Internal Medicine*, 1981, 95, 257-282.
 - * 22. Lasser EC, Amberg JR, Baily NA, Varady P, Lachin JM, Okun R, and Schoenfield LJ. Validation of a computer-assisted method for estimating the number and volume of gallstones visualized by cholecystography. *Investigative Radiology*, 1981, 16, 342-347.
 - * 21. Marks JW, Sue SO, Pearlman BJ, Banorris GG, Varady P, Lachin JM and Schoenfield LJ. Sulfation of lithocholate as a possible modifier of chenodeoxycholic acid-induced elevations of serum transaminase in patients with gallstones. *Journal of Clinical Investigation*, 1981, 68, 1190-1196.
 - * 20. Lachin JM, Marks J, and Schoenfield LJ, the Protocol Committee and the NCGS Group. Design and methodological considerations in the National Cooperative Gallstone Study: A multi-center clinical trial. *Controlled Clinical Trials*, 1981, 2, 177-230.
 - * 19. Lachin JM. Sequential clinical trials for normal variates using interval composite hypotheses. *Biometrics*, 1981, 37, 87-101.
 - * 18. Lachin JM. Introduction to sample size determination and power analysis for clinical trials. *Controlled Clinical Trials*, 1981, 2, 93-113.
 - * 17. Lachin JM. Perceptions of the Coordinating Center: Foreword. *Controlled Clinical Trials*, 1980, 1, 125-126.
 - 16. Lachin JM. Sample size considerations for clinical trials of potentially hepatotoxic drugs. In *Guidelines for Detection of Hepatotoxicity Due to Drugs and Chemicals*, CS Davidson, CM Leevy, and EC Chamberlayne, eds., U.S. Department of H.E.W., National Institutes of Health, NIH Publication No. 79-313, 1979, 119-130.

15. Lachin JM. "Prog. Lachin", a computer program for the Lachin (1973) procedure; In Discrete Discriminant Analysis, by M Goldstein and WR Dillon, Wiley, New York, 1978, 153-168.
- * 14. Lachin JM. Informed consent in clinical investigations. Biometrics, 1977, 33, 761-762.
- * 13. Marks JW, Bonorris GG, Chung A, Coyne MJ, Okun R, Lachin JM and Schoenfield LJ. Feasibility of low dose and intermittent chenodeoxycholic acid therapy of gallstones. American Journal of Digestive Diseases, 1977, 22, 856-860.
- * 12. Lachin JM. Sample size determinations for $r \times c$ comparative trials. Biometrics, 1977, 33, 315-324.
- * 11. Schachter J, Lachin JM, and Wimberly F. Newborn heart rate and blood pressure: Relation to race and socioeconomic class. Psychosomatic Medicine, 1976, 38, 390-398.
- * 10. Schachter J, Lachin JM, Kerr J, Wimberly F, and Patey J. Heart rate and blood pressure in black newborns and in white newborns. Pediatrics, 1976, 58, 283-286.
- * 9. Schachter J, Lachin JM, Kerr J, and Wimberly F. Measurement of electroencephalic evoked response: Comparison of univariate and multivariate. Psychophysiology, 1976, 13, 261-268.
- * 8. Schachter J, Kerr J, Lachin JM, and Faer M. Newborn offspring of schizophrenic parent: Cardiac reactivity to auditory stimuli. Psychophysiology, 1975, 12, 483-492.
- * 7. Schachter J, Kerr J, Wimberly F, and Lachin J. Phasic heart rate responses: Different patterns in black and in white newborns. Psychosomatic Medicine, 1975, 37, 326-332.
- * 6. Schachter J, Kerr J, Wimberly F, and Lachin J. Heart rate levels of black and white newborns. Psychosomatic Medicine, 1974, 36, 513-524.
- * 5. Lachin JM and Schachter J. On stepwise discriminant analyses applied to physiologic data. Psychophysiology, 1974, 11, 703-709.
- * 4. Lachin JM. On a stepwise procedure for two population Bayes decision rules using discrete variables. Biometrics, 1973, 29, 551-564.
3. Kerr J, Tobin M, Milkman N, Kjoletto B, Khachaturian Z, Williams T, Schachter J, and Lachin J. A PDP-12 System for on-line acquisition of heart rate data. PDP-12 Biomedical User Application Report, Digital Equipment Corporation, Maynard, Mass., 1971.
- * 2. Bell AH, Weingold HP, and Lachin J. Measuring adjustment in patients disabled with alcoholism. Quarterly Journal of Studies on Alcohol, 1969, 30, 634-639.
- * 1. Weingold HP, Lachin JM, Bell AH, and Cox RC. Depression as a symptom of alcoholism: Search for a phenomenon. Journal of Abnormal Psychology, 1968, 73, 195-197.

GROUP AUTHORED PUBLICATIONS:**The Diabetes Control and Complications Trial (DCCT) and Epidemiology of Diabetes Interventions and Complications (EDIC)****PI, Coordinating Center**

- *66. The DCCT/EDIC Research Group (J. Lachin, Director, Coordinating Center, member, Writing Committee). Sustained effect of intensive treatment of type 1 diabetes mellitus on development and progression of diabetic nephropathy. Journal of the American Medical Association; 2003, 290, 2159-67.
- *65. The DCCT/EDIC Research Group (J. Lachin, Director, Coordinating Center, member, Writing Committee). Intensive diabetes therapy and carotid intima-media thickness in type 1 diabetes mellitus. The New England Journal of Medicine; 2003, 348, 2294-303.
- *64. The DCCT/EDIC Research Group (J. Lachin, Director, Coordinating Center, member, Writing Committee). The effect of intensive therapy on the microvascular complications of type 1 diabetes mellitus. Journal of the American Medical Association, 2002, 287, 2563-2569.
- *63. The DCCT/EDIC Research Group (J. Lachin, Director, Coordinating Center). The beneficial effects of intensive therapy of diabetes during adolescence: Outcomes after the conclusion of the Diabetes Control and Complications Trial (DCCT). The Journal of Pediatrics, 2001, 139, 804-812.
- *62. The Diabetes Control and Complications Trial Research Group (J. Lachin, Director, Coordinating Center). Influence of Intensive Diabetes Treatment on Body Weight and Composition of Adults with Type 1 Diabetes in the Diabetes Control and Complications Trial. Diabetes Care, 2001, 24, 1711-1721
- *61. The DCCT Research Group (J. Lachin, Director, Coordinating Center; member, Writing Committee). The effect of pregnancy on microvascular complications in the Diabetes Control and Complications Trial (DCCT). Diabetes Care, 2000, 23, 1084-1091.
- *60. The DCCT/EDIC Research Group (J. Lachin, Director, Coordinating Center; Chair, Writing Committee). Retinopathy and nephropathy in patients with type 1 diabetes four years after a trial of intensive therapy. The New England Journal of Medicine, 2000, 342, 381-9.
- *59. The EDIC Research Group (J. Lachin, Director, Coordinating Center;). The effect of intensive diabetes treatment on carotid artery wall thickness in the Epidemiology of Diabetes Interventions and Complications (EDIC). Diabetes, 1999, 48, 383-90.
- *58. The EDIC Research Group (J. Lachin, Director, Coordinating Center). Epidemiology of Diabetes Interventions and Complications (EDIC): design, implementation, and preliminary results of a long-term follow-up of the Diabetes Control and Complications Trial cohort. Diabetes Care, 1999, 117, 99-111.
- *57. Monnier VM, Bautista O, Kenny D, Sell DR, Fogarty J, Dahms W, Cleary P, Lachin J, Genuth S and the DCCT Collagen Ancillary Study Group. Skin collagen glycation, glycoxidation, and crosslinking are lower in subjects with long-term intensive versus

- conventional therapy of type I diabetes: Relevance of glycated collagen products versus HbA1c as markers of diabetic complications. *Diabetes*, 1999, 48, 870-880
- *56. The DCCT Research Group (J. Lachin, Director, Coordinating Center; member, Writing Committee). Early worsening of diabetic retinopathy in the Diabetes Control and Complications Trial. *Archives of Ophthalmology*, 1998, 116, 874-86.
 - *55. The DCCT Research Group (J. Lachin, Director, Coordinating Center; member, Editorial Board). Effect of intensive diabetes therapy on measures of autonomic nervous system function in the Diabetes Control and Complications Trial. *Diabetologia*, 1998, 41, 416-23.
 - *54. The DCCT Research Group (J. Lachin, Director, Coordinating Center; member, Editorial Board). Effect of intensive therapy on residual β -cell function in patients with Type I diabetes in the Diabetes Control and Complications Trial. *Annals of Internal Medicine*, 1998, 128, 517-523.
 - *53. The DCCT Research Group (J. Lachin, Director, Coordinating Center; member, Editorial Board). Effect of intensive diabetes therapy on measures of autonomic nervous system function in the Diabetes Control and Complications Trial. *Diabetologia*, 1998, 41, 416-23.
 - *52. The DCCT Research Group (J. Lachin, Director, Coordinating Center; member, Writing Committee). Clustering of long-term complications in families with diabetes in the Diabetes Control and Complications Trial. *Diabetes*, 1997, 46, 1829-1839.
 - *51. The Diabetes Control and Complications Trial Research Group (J. Lachin, Director, Coordinating Center; Chairman, Writing Committee). Hypoglycemia in the Diabetes Control and Complications Trial. *Diabetes*, 1997, 46, 271-286
 - *50. The DCCT Research Group (J. Lachin, Director, Coordinating Center; member, Editorial Board). Lifetime benefits and costs of intensive therapy as practiced in the Diabetes Control and Complications Trial. *Journal of the American Medical Association*, 1996, 276, 1409-1415.
 - *49. The DCCT Research Group (J. Lachin, Director, Coordinating Center; Chairman, Writing Committee). The absence of a glycemic threshold for the development of long-term complications: the perspective of the Diabetes Control and Complications Trial. *Diabetes*, 1996, 45, 1289-1298.
 - *48. The DCCT Research Group (J. Lachin, Director, Coordinating Center; member, Writing Committee). Effects of intensive diabetes therapy on neuropsychological function in adults in the Diabetes Control and Complications Trial. *Annals of Internal Medicine*, 1996, 124, 379-388.
 - *47. The DCCT Research Group (J. Lachin, Director, Coordinating Center; member, Writing Committee). Influence of intensive diabetes treatment on quality-of-life outcomes in the Diabetes Control and Complications Trial. *Diabetes Care*, 1996, 19, 195-203.
 - *46. The Diabetes Control and Complications Trial Research Group. Pregnancy outcomes in the Diabetes Control and Complications Trial. *American Journal of Obstetrics and Gynecology*, 1996, 174, 1343-1353

- *45. Leiter LA, and the Diabetes Control and Complications Trial Research Group. Use of Bioelectrical Impedance Analysis Measurements in Patients with Diabetes. American Journal of Clinical Nutrition, 1996, 64 supplement 515S-518S
- *44. The DCCT Research Group (J. Lachin, Director, Coordinating Center; member, Writing Committee). Effect of intensive diabetes treatment on nerve conduction in the Diabetes Control and Complications Trial. Annals of Neurology, 1995, 38, 869-880.
- *43. The DCCT Research Group (J. Lachin, Director, Coordinating Center; member, Writing Committee). Adverse events and their association with treatment regimens in the Diabetes Control and Complications Trial. Diabetes Care, 1995, 18, 1415-1427.
- *42. The DCCT Research Group (J. Lachin, Director, Coordinating Center; member, Editorial Board). Resource utilization and costs of care in the Diabetes Control and Complications Trial. Diabetes Care, 1995, 18, 1468-1478.
- *41. The DCCT Research Group (J. Lachin, Director, Coordinating Center; Chairman, Writing Committee). The relationship of glycemic exposure (HbA1c) to the risk of development and progression of retinopathy in the Diabetes Control and Complications Trial. Diabetes, 1995, 44, 968-983.
- *40. The DCCT Research Group (J. Lachin, Director, Coordinating Center; member, Editorial Board). The effect of intensive diabetes therapy on macrovascular disease and its risk factors in the Diabetes Control and Complications Trial. American Journal of Cardiology, 1995, 75, 894-903.
- *39. The DCCT Research Group (J. Lachin, Director, Coordinating Center; member, Writing Committee). The effect of intensive therapy on the development and progression of diabetic nephropathy in the Diabetes Control and Complications Trial. Kidney International, 1995, 47, 1703-1720.
- *38. The DCCT Research Group and Klein R. (J. Lachin, Director, Coordinating Center; member, Editorial Board). Comparison of study populations in the Diabetes Control and Complications Trial and the Wisconsin Epidemiologic Study of Diabetic Retinopathy. Archives of Internal Medicine, 1995, 155, 745-754.
- *37. The DCCT Research Group (J. Lachin, Director, Coordinating Center; member, Writing Committee). The effect of intensive diabetes therapy on the development and progression of neuropathy in the Diabetes Control and Complications Trial. Annals of Internal Medicine, 1995, 122, 561-68.
- *36. The DCCT Research Group (J. Lachin, Director, Coordinating Center; member, Writing Committee). Progression of retinopathy with intensive versus conventional treatment in the Diabetes Control and Complication Trial. Ophthalmology, 1995, 102, 647-661.
- *35. The DCCT Research Group (J. Lachin, Director, Coordinating Center; member, Writing Committee). Implementation of treatment protocols in the Diabetes Control and Complications Trial. Diabetes Care, 1995, 18, 361-76.

- *34. The DCCT Research Group (J. Lachin, Director, Coordinating Center; member, Writing Committee). The effect of intensive diabetes treatment on the development and progression of diabetic retinopathy in insulin-dependent diabetes mellitus: the Diabetes Control and Complications Trial. Archives of Ophthalmology, 1995, 113, 36-51.
- 33. The Diabetes Control and Complications Trial Research Group. Psychological aspects of the DCCT. The Technology of Diabetes Care, Converging Medical and Psychosocial Perspectives, 1994, 122-139
- *32. Leiter LA, Lukaski HC, Kenny DJ, Barnie A, Camelon K, Ferguson RS, MacLean S, Simkins S, Zinman B and Cleary PA for the DCCT Research Group. The use of Bioelectrical Impedance Analysis (BIA) to estimate body composition in the Diabetes Control and Complications Trial (DCCT). International Journal of Obesity, 1994, 18, 829-835
- *31. Schmidt LE, Cox MS, Buzzard IM, and Cleary PA, for the DCCT Research Group. Reproducibility of a comprehensive diet history in the Diabetes Control and Complications Trial. Journal of the American Dietetic Association, 1994, 94, 1392-1397
- *30. The DCCT Research Group (J. Lachin, Director, Coordinating Center; member, Editorial Board). A screening algorithm to identify clinically significant changes in neuropsychological function in the Diabetes Control and Complications Trial. Journal of Clinical and Experimental Neuropsychology, 1994, 16, 303-316.
- *29. The DCCT Research Group (J. Lachin, Director, Coordinating Center; member, Writing Committee). The effect of intensive diabetes treatment on the development and progression of long-term complications in adolescents with IDDM: the DCCT. Journal of Pediatrics, 1994, 125, 177-88.
- *28. The DCCT Research Group. The impact of the trial coordinator in the Diabetes Control and Complications Trial. Diabetes Educator, 1993, 19, 509-512
- *27. Levey AS, Greene T, Schluchter MD, Cleary PA, Teschan PE, Lorenz RA, Molitch ME, Mitch WE, Siebert C, Hall PM, and Steffes MW, for the Modification of Diet in Renal Disease Study Group and the Diabetes Control and Complications Trial Research Group. Glomerular filtration rate measurements in clinical trials. Journal of the American Society of Nephrology, 1993, 4, 1159-1171
- *26. The DCCT Research Group. "Nutrition Interventions for Intensive Therapy in the Diabetes Control and Complications Trial." The Journal of the American Dietetic Association, 1993, 93, 768-772
- *25. The DCCT Research Group. Expanded role of the dietitian in the Diabetes Control and Complications Trial: Implications for clinical practice. The Journal of the American Dietetic Association, 1993, 93, 758-767
- *24. The DCCT Research Group (J. Lachin, Director, Coordinating Center; member, Writing Committee). The effect of intensive treatment of diabetes on the development and progression of long-term complications in insulin-dependent diabetes mellitus. The New England Journal of Medicine, 1993, 329, 977-986.

- *22. The DCCT Research Group (J. Lachin, Director, Coordinating Center; member, Editorial Board). Baseline analysis of renal function in the Diabetes Control and Complications Trial. *Kidney International*, 1993, 43, 668-674.
- *21. The DCCT Research Group (J. Lachin, Director, Coordinating Center; member, Editorial Board). Lipid and lipoprotein levels in patients with IDDM. The Diabetes Control and Complications Trial Experience. *Diabetes Care*, 1992, 15, 886-894.
- 20. Ryan CM, Adams KA, Heaton RK, Grant I, Jacobson AM and the DCCT Research Group. Neurobehavioral assessment of medical patients in clinical trials: The DCCT Experience. In Mohr E and Brouwers P, editors, *Handbook of Clinical Trials*; The Neurobehavioral Approach. Amsterdam/Lisse: Swets and Zeitlinger, 1991, 215-240
- *19. The DCCT Research Group, (J. Lachin, Director, Coordinating Center; member, Writing Committee). Epidemiology of severe hypoglycemia in the Diabetes Control and Complications Trial. *The American Journal of Medicine*, 1991, 90, 450-459.
- *18. The DCCT Research Group (J. Lachin, Director, Coordinating Center; member, Editorial Board). The Diabetes Control and Complications Trial (DCCT): Update. *Diabetes Care*, 1990, 13, 427-433.
- *17. The DCCT Research Group. The DCCT: Will it answer the questions? In Larkin R, Zimmer P, Chisolm D, editors, *Diabetes* 1988. Amsterdam: Elsevier: 1989, 847-855
- *16. The DCCT Research Group, (J. Lachin, Director, Coordinating Center; member, Editorial Board). The Diabetes Control and Complications Trial: The trial coordinator perspective. *Diabetes Educator*, 1989, 15, 236-241.
- 15. Siebert C for The DCCT Research Group. The Diabetes Control and Complications Trial (DCCT): Results of the feasibility study and design of the full-scale clinical trial. In Laron Z, Kamp M, editors, *Pediatric and Adolescent Endocrinology*. Tel Aviv, Basel, Karger, 1989, 18, 15-21
- *14. The DCCT Research Group, (J. Lachin, Director, Coordinating Center; member, Editorial Board). Implementation of a multi-component process to obtain informed consent in the Diabetes Control and Complications Trial. *Controlled Clinical Trials*, 1989, 10, 83-96.
- *13. The DCCT Research Group, (J. Lachin, Director, Coordinating Center; member, Editorial Board). The Diabetes Control and Complications Trial: Update. *Diabetes Spectrum*, 1988, 1, 187-190.
- *12. The DCCT Research Group, (J. Lachin, Director, Coordinating Center; member, Editorial Board). Weight gain associated with intensive therapy in the Diabetes Control and Complications Trial (DCCT). *Diabetes Care*, 1988, 11, 567-573.
- *11. Schumer M, Burton G, Burton C, Crum D, Pfeifer MA, and The DCCT Study Group. Diabetic autonomic neuropathy-Part I. Autonomic nervous system data analysis by a computerized central unit in a multicenter trial. *The American Journal of Medicine*, 1988, 85, Supplement 5A, 137-143

- *10. The DCCT Research Group, (J. Lachin, Director, Coordinating Center; member, Editorial Board). Is there a need for a continuation of the DCCT in 1988? *Diabetes Nutrition and Metabolism*, 1988, 1, 151-159.
- *9. The DCCT Research Group, (J. Lachin, Director, Coordinating Center; member, Editorial Board). Reliability and validity of a diabetes quality-of-life measure for the Diabetes Control and Complications Trial (DCCT). *Diabetes Care*, 1988, 11, 725-732.
- *8. The DCCT Research Group, (J. Lachin, Director, Coordinating Center; member, Editorial Board). Factors in the development of diabetic neuropathy: Baseline analysis in the feasibility phase of the Diabetes Control and Complications Trial (DCCT). *Diabetes*, 1988, 37, 476-481.
- *7. The DCCT Research Group, (J. Lachin, Director, Coordinating Center; member, Editorial Board). Are continuing studies of metabolic control and microvascular complications in IDDM justified?: The Diabetes Control and Complications Trial (DCCT). *The New England Journal of Medicine*, 1988, 318, 246-250.
- *6. The DCCT Research Group, (J. Lachin, Director, Coordinating Center; member, Editorial Board). Color photography vs. fluorescein angiography in the detection of diabetic retinopathy in the Diabetes Control and Complications Trial. *Archives of Ophthalmology*, 1987, 105, 1344-1351.
- *5. The DCCT Research Group, (J. Lachin, Director, Coordinating Center; member, Editorial Board). Feasibility of centralized measurements of glycated hemoglobin in the Diabetes Control and Complications Trial: A multicenter study. *Clinical Chemistry*, 1987, 33, 2267-71.
- * 4. The DCCT Research Group, (J. Lachin, Director, Coordinating Center; member, Editorial Board). Effects of age, duration and treatment of insulin-dependent diabetes mellitus on residual Beta-cell function: Observations during eligibility testing for the Diabetes Control and Complications Trial (DCCT). *Journal of Clinical Endocrinology and Metabolism*, 1987, 65, 30-36.
- * 3. The DCCT Research Group, (J. Lachin, Director, Coordinating Center; member, Editorial Board). The Diabetes Control and Complications Trial (DCCT): Results of the feasibility study(Phase II). *Diabetes Care*, 1987, 10, 1-19.
- 2. The DCCT Research Group, (J. Lachin, Director, Coordinating Center; member, Editorial Board). Treatment regimen design in the Diabetes Control and Complications Trial (DCCT). *Transplantation Proceedings*, 1986, 28, 1678-80.
- *1. The DCCT Research Group, (J. Lachin, Director, Coordinating Center; chairman, writing team; member, Editorial Board). The Diabetes Control and Complications Trial (DCCT): Design and methodological considerations for the feasibility phase. *Diabetes*, 1986, 35, 530-545.

The Diabetes Prevention Program (DPP), Co-PI Coordinating Center

- *20. The DPP Research Group. (J. Lachin, Co-Director, Coordinating Center, member, Writing Committee). Lipid, lipoproteins, C-reactive protein, and hemostatic factors at baseline in the diabetes prevention program. *Diabetes Care*. 2005, 28(10): 2472-9.
- *19. The DPP Research Group. (J. Lachin, Co-Director, Coordinating Center). Role of insulin secretion and sensitivity in the evolution of type 2 diabetes in the diabetes prevention program: effects of lifestyle intervention and metformin. *Diabetes*. 2005, 54(8): 2404-14
- *18. The DPP Research Group. (J. Lachin, Co-Director, Coordinating Center). Intensive lifestyle and metformin on inflammation and coagulation in participants with impaired glucose tolerance. *Diabetes* 2005, 54(5):1566-1572.
- *17. The DPP Research Group (J. Lachin, Co-Director, Coordinating Center). Effect of metformin and lifestyle intervention on the metabolic syndrome: The Diabetes Prevention Program Randomized Trial. *Ann Int Med* 2005; 142: 611-19.
- *16. The DPP Research Group (J. Lachin, Co-Director, Coordinating Center). Depression symptoms and antidepressant medicine use in in Diabetes Prevention Program (DPP) participants. *Diabetes Care* 2005, 28: 830-37.
- *15. The DPP Research Group (J. Lachin, Co-Director, Coordinating Center). Impact of intensive lifestyle and metformin therapy on cardiovascular (CVD) risk factors in the Diabetes Prevention Program. *Diabetes Care* 2005, 28: 888-94.
- *14. The DPP Research Group (J. Lachin, Co-Director, Coordinating Center). Prevention of type 2 diabetes with troglitazone in the Diabetes Prevention Program. *Diabetes* 2005, 54: 1150-1156
- *13. The DPP Research Group (J. Lachin, Co-Director, Coordinating Center). The cost-effectiveness of lifestyle modification or metformin in preventing type 2 diabetes in adults with impaired glucose tolerance. *Ann Intern Med*. 2005, 42:323-32
- *12. The DPP Research Group (J. Lachin, Co-Director, Coordinating Center). Strategies to identify adults at high risk for type 2 diabetes. *Diabetes Care* 2005, 28: 138-44.
- *11. The DPP Research Group (J. Lachin, Co-Director, Coordinating Center). Dietary intake in the diabetes prevention program cohort: Baseline and 1-year post-randomization. *Annals of Epidemiology* 2004, 14: 763-72
- *10. The DPP Research Group. (J. Lachin, Co-Director, Coordinating Center, member, Writing Committee). Achieving weight and activity goals among diabetes prevention program lifestyle participants. *Obesity Research* 2004; 12: 1426-34
- *9. The DPP Research Group. (J. Lachin, Co-Director, Coordinating Center, member, Writing Committee). Within trial cost-effectiveness of lifestyle intervention or metformin for the primary prevention of type 2 diabetes. *Diabetes Care* 2003; 26: 2518-23

- *8. The DPP Research Group (J. Lachin, Co-Director, Coordinating Center, member, Writing Committee). Cost associated with the primary prevention of type 2 Diabetes Mellitus in the Diabetes Prevention Program. *Diabetes Care*, 2003, 26, 36-47.
- *7. The DPP Research Group (J. Lachin, Co-Director, Coordinating Center). Effects of withdrawal from metformin on the development of diabetes in the diabetes prevention program. *Diabetes Care*, 2003, 26, 977-80.
- *6. The DPP Research Group (J. Lachin, Co-Director, Coordinating Center). The Diabetes Prevention Program: recruitment methods and results. *Controlled Clinical Trials*, 2002; 23, 157-171.
- *5. The DPP Research Group (J. Lachin, Co-Director, Coordinating Center). The Diabetes Prevention Program (DPP): Description of lifestyle intervention. *Diabetes Care*, 2002, 25, 2165-2171.
- *4. The DPP Research Group (J. Lachin, Co-Director, Coordinating Center, member, Writing Committee). Hypertension, Insulin, Proinsulin in participants with impaired glucose tolerance. *Hypertension*, 2002, 40, 679-686.
- *3. The DPP Research Group (J. Lachin, Co-Director, Coordinating Center; member, Writing Committee). Reduction in the incidence of type 2 diabetes with lifestyle intervention or metformin. *The The New England Journal of Medicine*, 2002; 346, 393-403.
- *2. The DPP Research Group (J. Lachin, Co-Director, Coordinating Center). The Diabetes Prevention Program: baseline characteristics of the randomized cohort. *Diabetes Care*, 2000, 23, 1619-29.
- *1. The DPP Research Group (J. Lachin, Co-Director, Coordinating Center). The Diabetes Prevention Program. Design and methods for a clinical trial in the prevention of type 2 diabetes. *Diabetes Care*, 1999, 22, 623-34.

The Collaborative Study Group, Study of Angiotensin Converting Enzyme Inhibition in Diabetic Nephropathy

PI, Biostatistical Coordinating Center, 1986-88

Co-PI, 1988 - 1992

- *12. Najafi CC, Korbet SM, Lewis EJ, Schwartz MM, Reichlin M and Evans J, for the Collaborative Study Group. Significance of histologic patterns of glomerular injury upon long-term prognosis in severe lupus glomerulonephritis. *Kidney International* 2001, 59, 2156-63
- *11. Korbet SM, Lewis EJ, Schwartz MM, Reichlin M, Evans J, and Rohde RD for the Collaborative Study Group. Factors predictive of outcome in severe lupus nephritis. *American Journal of Kidney Diseases*, 2000, 35, 904-914
- *10. Weiss MF, Rodby RA, Justice AC, Hricik DE and the Collaborative Study Group. Free Pentosidine and neopterin as markers of progression rate in diabetic nephropathy. *Kidney International* 1998, 54, 193-202.

- *9. Breyer JA, Bain RP, Evans JK, Nahman NS, Lewis EJ, Cooper M, McGill J, Berl T and the Collaborative Study Group. Predictors of the progression of renal insufficiency in patients with insulin-dependent diabetes and overt diabetic nephropathy. *Kidney International*. 1996, 50,1651-8
- *8. Rodby RA, Lewis EJ, Firth LM, and the Collaborative Study Group. An Economic analysis of Captopril in the treatment of diabetic nephropathy. *Diabetes Care*, 1996 19, 1051-61
- *7. Sloan RP, Schwartz MM, Korbet SM, Borok RZ and the Lupus Nephritis Collaborative Study Group. Long term outcome in systemic lupus erythematosus membranous glomerulonephritis. *Journal of American Society of Nephrology* 1996, 7, 299-305
- *6. Herbert LA, Dillon JJ, Middelndorf DF, Lewis EJ, Peter JB, and the Lupus Nephritis Collaborative Study Group. Relationship between appearance of urinary red blood cell/white blood cell casts and the onset of renal relapse in systemic lupus erythematosus. *American Journal of Kidney Diseases* 1995, 26, 432-8
- *5. Rodby RA, Rohde RD, Sharon Z, Pohl M, Bain RP and Lewis EJ for the Collaborative Study Group. The urine protein to creatinine ratio as a predictor of 24-hour urine protein excretion in type 1 diabetic patients with nephropathy. *American Journal of Kidney Diseases* 1995, 26, 904-9
- *4. Rodby RA, Rohde R, Evans J, Bain RP, Mulcahy WS, Lewis EJ and the Collaborative Study Group, The study of the effect of intensity of blood pressure management on the progression of type 1 diabetic nephropathy: study design and baseline patient characteristics. *Journal American Society of Nephrology* 1995; 5, 1775-81
- *3. Breyer JA, Hunsicker LG, Bain RP, Lewis EJ, and the Collaborative Study Group (J. Lachin, Co-Principal Investigator, Biostatistical Coordinating Center). Angiotensin converting enzyme inhibition in diabetic nephropathy. *Kidney International*, 1994, 45, S156-60.
- *2. Herbert LA, Verme D, Bain RP, Cattran DC, Whittier FC, Tolchin N, Lewis EJ, Rohde R, and the Collaborative Study Group. Remission of nephrotic range proteinuria in type I diabetes. *Kidney International* 1994 46, 1688-93
- *1. Lewis EJ, Hunsicker LG, Bain RP and Rohde RD (J. Lachin, Co-Principal Investigator, Biostatistical Coordinating Center). The effect of angiotensin-converting-enzyme inhibition in diabetic nephropathy. *The The New England Journal of Medicine*, 1993, 329, 1456-1462.

The Lupus Nephritis Collaborative Study (LNCS)

Principal Investigator, Biostatistical Coordinating Center

- *14. Schwartz MM, Lan SP, Bernstein J, Hill GS, Holley K, Lewis EJ, and the Lupus Nephritis Collaborative Study Group (J. Lachin, Director, Biostatistical Coordinating Center). Irreproducibility of the activity and chronicity indices limits. Their utility in the management of Lupus Nephritis. *American Journal of Kidney Diseases*, 1993, 21, 374-377.

- *13. Lewis EJ, Hunsicker LG, Lan SP, Rohde RD, and Lachin JM for the Lupus Nephritis Collaborative Study Group. A controlled trial of plasmapheresis therapy in severe lupus nephritis. The New England Journal of Medicine, 1992, 326, 1373-1379
- *12. Lachin JM, Lan SP and the Lupus Nephritis Collaborative Study Group. Termination of a clinical trial with no treatment group difference: The Lupus Nephritis Collaborative Study. Controlled Clinical Trials, 1992, 13, 62-79
- *11. Levey AS, Lan SP, Corwin HL, Kasinath BS, Lachin J, Neilson EG, Hunsicker LG, Lewis EJ and The Lupus Nephritis Collaborative Study Group. Progression and emission of renal disease in the Lupus Nephritis Collaborative Study: Results of treatment with prednisone and short-term oral cyclophosphamide. Annals of Internal Medicine, 1992, 116, 114-123
- *10. Bain R, Rohde R, Hunsicker LG, McGill J, Kobrin S, Lewis EJ, and the Collaborative Study Group (J. Lachin, Co-Principal Investigator, Biostatistical Coordinating Center). A controlled clinical trial of angiotensin-converting enzyme inhibition in Type I diabetic nephropathy: Study design and patient characteristics. Journal of the American Society of Nephrology, 1992, 3, 97-103.
- *9. Rodby R, Ali J, Rohde RD, Lewis EJ, and the Collaborative Study Group for the study of angiotensin converting enzyme inhibition in diabetic nephropathy. Renal scanning Tc-DTPA GFR determination compared to iothalamate clearance GFR in diabetics. American Journal of Kidney Diseases, 1992, XX,: 569-573
- *8. Schwartz MM, Lan SP, Bernstein J, Hill GS, Holley K, Lewis EJ, and the Lupus Nephritis Collaborative Study Group (J. Lachin, Director, Biostatistical Coordinating Center). Role of pathology indices in the management of severe lupus glomerulonephritis. Kidney International, 1992, 42, 743-748.
- *7. Ricker DM, Hebert LA, Rohde R, Sedmak D, Lewis EJ, Clough JD and the Lupus Nephritis Collaborative Study Group, Serum C3 Levels are diagnostically more sensitive and specific for SLE activity than are serum C4 levels. American Journal of Kidney Diseases, 1991, XVIII, 678-685
- *6. Pohl MA, Lan SL, Berl T, and the Lupus Nephritis Collaborative Study Group (J. Lachin, Director, Biostatistical Coordinating Center). Plasmapheresis does not increase the risk for infection in immunosuppressed patients with severe lupus nephritis. Annals of Internal Medicine, 1991, 114, 924-929.
- *5. Lemann J, Jr., Bidani AK, Bain RP, Lewis EJ, Rohde RD, and the Collaborative Study Group of Angiotensin Converting Enzyme Inhibition in Diabetic Nephropathy (J. Lachin, Co-Principal Investigator, Biostatistical Coordinating Center). Use of the serum creatinine to estimate glomerular filtration rate in health and early diabetic nephropathy. American Journal of Kidney Diseases, 1990, 16, 236-243.
- *4. Clough J. Proceedings of the Second International Congress of the World Apheresis Association 1988, Treatment protocols of the lupus nephritis collaborative study of plasmapheresis in severe lupus nephritis. Progress in Clinical and Biological Research, 1990, 337, 301-307

- *3. Schwartz MM, Lan SP, Bonsib SM, Gephardt GN, Sharma HM, and the Lupus Nephritis Collaborative Study Group. Clinical outcome of three discrete histologic patterns of injury in severe lupus glomerulonephritis. American Journal of Kidney Diseases, 1989, XIII, 273-283.
- *2. Sasse EA, Dumas BT, Lemann J, Jr. and the Collaborative Study Group. Urinary albumin in relation to urinary total protein in patients with established diabetic nephrology. Annals of Internal Medicine, 1989, III, 343-4.
- *1. Schwartz ML, Bernstein J, Hill GS, Holley K, Phillips EA, and the Lupus Nephritis Collaborative Study Group (J. Lachin, Director, Biostatistical Coordinating Center). Predictive value of renal pathology in diffuse proliferative lupus glomerulonephritis. Kidney International, 1989, 36, 891-896.

Other

- *4. American Diabetes Association (Work Group: Genuth S, Eastman R, Kahn R, Klein R, Lachin J, Liebovitz H, Nathan D, Vinicor F). Implications of the United Kingdom Prospective Diabetes Study, Diabetes Care, 1998, 21, 2180-84.
- 3. American Diabetes Association and American Academy of Neurology, (J. Lachin, participant). Consensus statement: Report and recommendations of the San Antonio conference on diabetic neuropathy. Diabetes Care, 1988, 11, 592-597.
- 2. The NIH. (J. Lachin, member, Consensus Panel). Consensus development conference on diet and exercise in non-insulin dependent diabetes mellitus. Diabetes Care, 1987, 10, 639-644.
- *1. Marks JW, Lan SP, the Steering Committee (Lachin JM, et al.) and the NCGS Group. (J. Lachin, Director, Biostatistical Support Unit). Low-dose Chenodiol to prevent gallstone recurrence after dissolution therapy. Annals of Internal Medicine, 1984, 100, 376-381.

PRESENTATIONS (at scientific meetings, invited designated by *)

- *88. Lachin JM. Sample Size Considerations In Trialnet: POPPII-1 And Other Studies. National Institutes of Health Symposium on *Biostatistical Issues and the Design of Type 1 Diabetes TrialNet Protocols*, 2004.
- *87. Lachin JM. The Intent-To-Treat Design And The Intent-To-Treat Analysis. *Drug Information Association*, 2004.
- *86. Lachin JM. Futility Monitoring Based on Conditional Power. *Society for Clinical Trials*, 2004.
- *85. Lachin JM. Differences in HbA1c Levels During DCCT Explain Persistent Effects of DCCT Intensive Therapy on Vascular Complications During Subsequent 8 years of Follow-up in EDIC. *International Diabetes Epidemiology Group*, 2003.

- *84. Lachin JM. Long Lasting Effects of DCCT Intensive Therapy on Microvascular Complications and Early Atherosclerosis During EDIC. *American Diabetes Association*, 2003.
- *83. Lachin JM. The Effect of Glycemic Exposure on Microvascular Complications During the DCCT and its Persistent Long-Term Effects in EDIC. Metabolic Imprinting and the Long-term Complications of Diabetes Mellitus: *Bench to Bedside and Back*. April 10-11, 2003. National Institutes of Health.
- *82. Lachin JM. Biostatistical Methods: The Assessment of Relative Risks. *The Fifty-Eighth Annual Deming Conference on Applied Statistics*, 2002.
- *81. Lachin JM. Potential for Selection Bias in Randomized Clinical Trials. *American Statistical Association*, 2001.
- *80. Lachin JM. Highlights of the Career of Sam Greenhouse. Perspectives on the Biostatistical Sciences: *A Symposium in Memory of Samuel W. Greenhouse*. June 11, 2001, National Institutes of Health.
- *79. Lachin, JM. Biostatistical Methods: The Assessment of Relative Risks. *Annual Deming Conference on Applied Statistics and Management*, 2001.
- *78. Lachin JM. Sam Greenhouse, the GWU years. *International Biometric Society, Eastern North American Region*, 2001.
- 77. Bautista OM and Lachin JM. Preserving alpha and power when over-ruling a group sequential boundary. *Society for Clinical Trials*, Toronto, 2000.
- *76. Lachin JM. Design of Studies to Evaluate Preservation of C-Peptide Function Based on the DCCT Results. *Workshop on Future Directions in Prevention of Type 1 Diabetes*, Miami, 2000.
- *75. Lachin JM. Interim analysis and Data-safety Monitoring Boards. *FDA/Industry statistical Workshop: Statistical Issues for the New Millennium*, Crystal City, Virginia, 1999.
- *74. Lachin JM. Evaluation of the association of blood glucose levels with the risk of diabetes complications and hypoglycemia in the Diabetes Control and Complications Trial. *Joint Statistical Meetings, the American Statistical Association*, Baltimore, 1999.
- 73. Lachin JM, Genuth S, Nathan DM, Davis MD, Cleary P and The EDIC Research Group. Prolonged Effects of DCCT Intensive Therapy on Complications After Four Years Of EDIC Follow-up. *American Diabetes Association*, San Diego, 1999.
- *72. Lachin JM. Ruminations on being an academic biostatistician. *Biostatistics in the Future*. Department of Biostatistics, University of Pittsburgh, 1999.
- *71. Lachin JM. Risk of microvascular complications of type 1 diabetes mellitus as a function of glycemic exposure (hba1c) in the diabetes control and complications trial. National Institutes of Health Workshop: *Research Needs for the Design and Analysis of Surrogate Endpoints in Clinical Trials*, Potomac, MD, 1998.

- 70 Lachin JM, Cleary P, Davis MD, Molitch M, Nathan DM and The EDIC Research Group. Progression of retinopathy in the DCCT cohort after 4 years of follow-up in the Epidemiology of Diabetes Interventions And Complications (EDIC) study. *European Association for the Study of Diabetes*. Barcelona, 1998.
- 69 Lachin JM, Cleary P, Molitch M, Nathan DM and the DCCT Research Group. Pregnancy increases the risk of complications in the DCCT. *American Diabetes Association*, Chicago, 1998.
- *68. Lachin JM. Design and interim monitoring of clinical trials. *Drug Information Association: Models for Launching and Coordinating Multi-Center Trials*. New Orleans, 1988.
- *67. Lachin JM. Discussion to "The Role of DSMBs and the Accumulating Evidence in the Conduct of Clinical Trials". *International Biometric Society, Eastern North American Region*, 1998.
- *66. Lachin JM. Role of data and safety monitoring boards in phase 3 clinical trials. *Drug Information Association: Clinical Trials and Drug Development in Biotechnology*, Dana Point, CA, 1998.
- *65. Lachin JM. Statistical considerations in the intention-to-treat principle. *Biopharmaceutical Applied Statistics Symposium*. Hilton Head, South Carolina, 1997.
64. Lachin JM, Genuth S, Cleary P, Spielman R and the Diabetes Control and Complications Trial (DCCT) Research Group. Familial clustering of insulin dependent diabetes mellitus (IDDM) complications in the Diabetes Control and Complications Trial (DCCT). *Sixteenth International Diabetes Federation Congress*, Helsinki, 1997.
63. Lachin JM, Lorenz R, Cleary P, Nathan D and the DCCT Research Group. Risk factors for hypoglycemia in the Diabetes Control and Complications Trial (DCCT). *International Diabetes Epidemiology Group*, satellite meeting to the Sixteenth International Diabetes Federation Congress, Savonlinna, Finland, 1997.
62. Lachin JM. Poisson regression direct adjustment comparison of lifetables. Joint meeting of the *Society for Clinical Trials and International Society for Clinical Biostatistics*, Boston, 1997.
- *61. Lachin JM. Is there a glycemic threshold in type 1 diabetes mellitus for development of microvascular complications: the Diabetes Control and Complications Trial (DCCT) perspective. *American Diabetes Association*, 1997.
- *60. Lachin JM. Trial design and other considerations. *American Diabetes Association Research Symposium on Prevention of Type I Diabetes in the General Population*. Estes Park, Colorado, 1996.
- *59. Lachin JM. Selection, definition, and measurement of outcomes. *American Diabetes Association Satellite Symposium on "Clinical Trials: Understanding Design, Management and Analysis - A Workshop for Researchers in Diabetes"*. San Francisco, 1996.

- *58. Lachin JM. Analysis strategies and issues. *American Diabetes Association Satellite Symposium on "Clinical Trials: Understanding Design, Management, and Analysis - A Workshop for Researchers in Diabetes"*. San Francisco, 1996.
- *57. Lachin JM. Experience and perspectives of the monitoring committee in NIH and industry sponsored trials. *Harvard University Shering-Plough workshop on "Flexible Strategies for Clinical Trials"*. Boston, 1996.
- *56. Lachin JM. The role of a central statistical center in multi-center collaborative studies: the role of the George Washington University Biostatistics Center in the Diabetes Control and Complications Trial (DCCT). *Department of Epidemiology and Biostatistics of the School of Health Sciences and Nursing of the University of Tokyo, Japan*, 1995.
- *55. Lachin JM. The effects of intensive vs. conventional treatment and exposure to hyperglycemic (HbA1c) on the risk of retinopathy progression in the Diabetes Control and Complications Trial (DCCT). *The Tokyo Society of Medical Sciences and the Faculty of Medicine at the University of Tokyo, and the Japanese Diabetes Society*, 1995.
- *54. Lachin JM. Distribution-free marginal analyses of repeated measures. *Drug Information Association's Second Annual Biostatistics Meeting in Tokyo*, 1995.
- *53. Lachin JM. Exposure to hyperglycemia and risk of complications in insulin dependent diabetes mellitus: time-dependent covariate analyses in the DCCT. *John C. Forbes Graduate Student Honors Colloquium*. Medical College of Virginia, 1995.
- *52. Lachin JM. Some considerations in monitoring pharmaceutical trials. *International Biometric Society, Eastern North American Region*, 1995.
- *51. The DCCT Study Group (J. Lachin presenting). Glycemic exposure and the risk of progression of complications in the DCCT. *American Diabetes Association*, 1994.
- 50. Lachin JM. Group sequential monitoring of distribution-free analyses of repeated measures. *International Biometric Conference*, Hamilton, New Zealand, 1992.
- 49. Lachin JM. Some useful distribution-free multivariate estimators and tests for the analysis of repeated measures in a clinical trial. *International Society for Clinical Biostatistics and the Society for Clinical Trials*, Brussels, Belgium, 1991.
- *48. Lachin JM. A review of methods for sample size evaluation based on power and precision. *Symposium on Sample Size Methodology*, Temple University, 1991.
- *47. Lachin JM. A review of some distribution-free methods for analysis of repeated measures from two populations. *Conference on Moving Clinical Trials Into the Twenty-first Century*, the Delaware Chapter of the American Statistical Association, 1991.
- *46. Lachin JM. Sample size Evaluation. Workshop organized for the *International Clinical Epidemiology Network*, Ninth Annual Meeting, Mombassa, Kenya, 1991.
- *45. Lachin JM. Sample size, precision and power. Paper presented to the *International Clinical Epidemiology Network*, Ninth Annual Meeting, Mombassa, Kenya, 1991.

44. Bain RP, Lachin JM, Keen H, Viberti GC. Designing longitudinal studies in progressive renal disease. *Society for Clinical Trials*, 1989.
43. Lachin JM and Wei LJ. Methods for the analysis of multiple nonindependent 2 x 2 tables with partially missing observations. *International Biometric Conference*, 1988.
- *42. Lachin JM. Randomization in clinical trials: Some statistical considerations. *Associates of Clinical Pharmacology*, 1988.
- *41. Lachin JM. The statistical properties of clinical indices for diabetic neuropathy. *American Diabetes Association Conference on Peripheral Neuropathy in Diabetes*, 1988.
- *40. Lachin JM. Study size and trial duration. (Pre-conference course: Some considerations in clinical trial design and analysis.) *Society for Clinical Trials*, 1987.
39. Lachin JM, Lan SP and the Lupus Nephritis Collaborative Study Group. Termination of a clinical trial with no treatment group difference: the Lupus Nephritis Collaborative Study. *Controlled Clinical Trials*, 1987, 8, 280 (abstract). *Society for Clinical Trials*, 1987.
- *38. Lachin JM. Statistical considerations in the design of clinical trials in peripheral neuropathy. *Peripheral Neuropathy Association of America*, 1986.
37. Thall PF and Lachin JM. Analysis of recurrent events based on random interval count data. *Controlled Clinical Trials*, 1986, 7, 237 (abstract). *Society for Clinical Trials*, 1986.
- *36. Lachin JM. Simple randomization in clinical trials. *Society for Clinical Trials*, 1986. (In workshop organized by J. Lachin: The role of randomization in clinical trials).
- *35. Lachin JM. Randomization in clinical trials. *Delaware Chapter of the American Statistical Association*, 1986.
- *34. Lachin JM and Wright EC. Statistical considerations in the design and analysis of clinical trials of causal therapy in cirrhosis of the liver. *Fifth Advanced Course in Gastroenterology*, San Miniato, Italy, 1985.
- *33. Lachin JM. Design and analysis of an intervention trial to assess the effects of control of blood glucose on early vascular complications. *Biostatistics Symposium*, Diabetes Research Center, University of Washington, 1985.
32. Foulkes MA and Lachin JM. Sample size and survival for survival time studies with non-uniform entry, losses to follow-up, non-compliance and stratification. *Controlled Clinical Trials*, 1985, 6, 230 (abstract). *Society for Clinical Trials*, 1985.
- *31. Lachin JM. The design and analysis of clinical trials: Perspectives on recent developments. *Fortieth Annual Conference on Applied Statistics*, 1984.
- *30. Lachin JM. Ursodeoxycholic acid treatment of gallstones--International results. Symposium: *Update on treatment of gallstones: Role of ursodeoxycholic acid*, 1984.

- *29. Lachin JM. Historically and randomized controlled clinical trials in nephritis. *International Congress of Nephrology*, 1984.
- *28. Lachin JM. Design of clinical trials in peripheral neuropathy. *Peripheral Neuropathy Association of America*, 1984.
- *27. Lachin JM. External monitoring of data coordinating center performance: Assessment of the biostatistical monitoring team in the National Cooperative Gallstone Study. *Society for Clinical Trials*, 1984.
- *26. Lachin JM. Design of clinical trials in apheresis. *International Society for Artificial Organs*, 1984.
- 25. Thall PF and Lachin JM. Assessment of stratum-covariate interactions in Cox's proportional hazards regression model. *Society for Clinical Trials*, 1983.
- *24. Lachin JM. Statistical aspects of clinical trials of the effects of insulin pump therapy on microvascular disease. *Kroc Foundation Conference*, 1983.
- 23. Wei LJ and Lachin JM. Two sample distribution-free tests for censored multivariate observations, *Biometrics*, 1983, 39, 813 (abstract). *International Biometric Society (ENAR)*, 1983.
- 22. Schwartz SJ, Lan SP, Soloway RD, and Lachin JM, et al. Predicting dissolution in patients treated with chenodiol. *Gastroenterology*, 1982, 82, 1173 (abstract). *American Gastroenterology Association*, 1982.
- 21. Thistle JL, Cleary PA, Lachin JM, Tyor MP, Hersh T, et al. The natural history of untreated cholelithiasis in the National Cooperative Gallstone Study. *Gastroenterology*, 1982, 82, 197 (abstract). *American Gastroenterology Association*, 1982.
- 20. Grundy SM, Lan SP, Lachin JM, et al. Biliary lipid determinants of gallstone dissolution among patients in the National Cooperative Gallstone Study. *Gastroenterology*, 1982, 82, 1073 (abstract). *American Gastroenterology Association*, 1982.
- 19. Schoenfield LJ, Lachin JM et al. The National Cooperative Gallstone Study: A controlled trial of the efficacy and safety of chenodeoxycholic acid for dissolution of gallstones. *Gastroenterology*, 1981, 80, (abstract). *American Gastroenterology Association*, 1981.
- 18. Fisher RL, Anderson D, Boyer JL, Ishak K, Klatskin G, Lachin JM, Phillips MJ, et al. National Cooperative Gallstone Study: A prospective morphologic evaluation of hepatic toxicity of chenodeoxycholic acid (CDCA) in patients with cholelithiasis. *Gastroenterology*, 1981, 80, 1332 (abstract). *American Gastroenterology Association*, 1981.
- 17. Fisher RL, Anderson D, Boyer JL, Ishak K, Klatskin G, Lachin JM, Phillips MJ, et al. National Cooperative Gallstone Study: Abnormal hepatic morphology in patients with cholelithiasis--light (LM) and electron (EM) microscopic interpretation. *Gastroenterology*, 1981, 80, 1332 (abstract). *American Gastroenterology Association*, 1981.

- *16. Lachin JM. Utilization of results from quality control programs: measurement of gallstone number and volume from cholecystograms. *Society for Clinical Trials*, 1981.
- *15. Lachin JM. Utilization of results from quality control programs: evaluation of morphological changes from liver biopsies. *Society for Clinical Trials*, 1981.
- *14. Anderson D and Lachin JM. Statistical reports in the National Cooperative Gallstone Study. *Sixth Annual Symposium on Coordinating Clinical Trials*, 1979.
- 13. Lachin JM and Rogers JS. Managing laboratory data in multicenter trials. *Fifth Annual Symposium on Coordinating Clinical Trials*, 1978.
- 12. Shaw LW, Ellenberg SS, Lachin JM, and Schlesselman SE. Constraints employed in randomization procedures. *Fifth Annual Symposium on Coordinating Clinical Trials*, 1978.
- 11. Lachin JM and Wong E. Data entry using the Datapoint 1100. *Fifth Annual Symposium on Coordinating Clinical Trials*, 1978.
- 10. Schachter J, Lachin JM and Wimberly FC. Newborn heart rate: relation to race and socioeconomic status. *American Psychosomatic Society*, 1976.
- 9. Lachin JM. Bayes extensions of some F and Chi-square tests, *Biometrics*, 1975, 31, 1005 (abstract). *International Biometric Society (ENAR)*, 1975.
- 8. Schachter J, Patey J, Wimberly F, and Lachin JM. Maternal weight gain and newborn blood pressure level. *Psychophysiology*, 1975, 12, (abstract). *Society for Psychophysiological Research*, 1974.
- *7. Lachin JM. Some criteria for evaluating information systems in mental health. *Southern Regional Conference on Mental Health Statistics*, 1973.
- 6. Schachter J, Kerr J, Wimberly F and Lachin JM. Racial differences in newborn heart rate level. *Psychophysiology*, 1974, 11, (abstract). *Society for Psychophysiological Research*, 1973.
- 5. Lachin JM. Two population discriminant functions under prior logical constraints. *Statistics Section, Virginia Academy of Sciences*, 1973.
- 4. Lachin JM and Schachter J. On the interpretation of stepwise discriminant function analyses applied to evoked physiologic data. *Psychophysiology*, 1973, 10, 199 (abstract). *Society for Psychophysiological Research*, 1972.
- 3. Schachter J, Kerr J, Lachin JM, Khachaturian Z, Williams T, and Faer M. Heart rate reactivity of newborn offspring of schizophrenic parents. *Psychophysiology*, 1972, 9, 273 (abstract). *Society for Psychophysiological Research*, 1971.
- 2. Williams TA, Lachin JM, and Schachter J. The multiphasic heart rate response to auditory clicks in neonates: Sources of variance in response to repetitive stimuli. *Psychophysiology*, 1971, 8, 277 (abstract). *Society for Psychophysiological Research*, 1970.

1. Khachaturian Z, Kruger R, Schachter J, Williams T, and Lachin JM. A comparison of two methods of analyzing cardiac activity; R-R interval vs. heart rate. *Psychophysiology*, 1970, 6, 647-648 (abstract). *Society for Psychophysiological Research*, 1969.