

SATISH IYENGAR
Department of Statistics
University of Pittsburgh
Pittsburgh, PA 15260
412-624-8341, ssi@pitt.edu

EDUCATION

Ph.D. in Statistics, Stanford University, 1982.

A.B. in Mathematics, Harvard University, 1978.

POSITIONS HELD

University of Pittsburgh, Pittsburgh, PA, USA

Chair, Department of Statistics, 2000 – 2009 and 2010 – 2016.

Professor, Department of Psychiatry, joint appointment, since 2004.

Professor, Department of Statistics, since 1998.

Professor, Clinical and Translational Science Institute, since 2010.

Associate Professor, Department of Mathematics and Statistics, 1990 – 1997.

Assistant Professor, Department of Mathematics and Statistics, 1982 – 1990.

Assistant Professor, Department of Psychiatry, joint appointment, 1985 – 2004.

Stanford University, Stanford, CA, USA

Visiting Scholar, Statistics Department, Summers 1983 – 2013.

Research and Teaching Assistant, Statistics Department, 1978 – 1982.

University of Canterbury, Christchurch, New Zealand

Visiting Professor, Department of Mathematics and Statistics, 2004.

Australian National University, Canberra, Australia

Visiting Professor, School of Mathematics, 1999.

Carnegie Mellon University, Pittsburgh, PA, USA

Visiting Associate Professor, Statistics Department, 1991 – 1992.

Postdoctoral Fellow, Statistics Department, 1985 – 1988.

Harvard University, Cambridge, MA, USA

Undergraduate Instructor, Mathematics Department, 1976 – 1978.

HONORS

Elected member of the International Statistical Institute, 2004.

Keynote speaker, New Zealand Statistical Society Annual Meeting, July 2005.

Statistician of the Year, Pittsburgh Chapter of the ASA, 2010.

PUBLICATIONS

A. Statistics

1. Iyengar S, Solomon H. (1983) Selecting representative points in normal populations. *Recent Advances in Statistics*. H Rizvi, J Rustagi, D Siegmund, editors. Academic Press, 579 – 591.
2. Iyengar S. (1985) Hitting lines with two-dimensional Brownian motion. *SIAM J. Applied Mathematics*, 45, 983 – 989.
3. Iyengar S. (1986) On a lower bound for the multivariate normal Mills' ratio. *Annals of Probability*, 14, 1399 – 1403.
4. Iyengar S, Patwardhan G. (1988) Recent developments in the inverse Gaussian distribution. *Handbook of Statistics 7*. PR Krishnaiah, CR Rao, editors. North-Holland, 479 – 499.
5. Iyengar S, Greenhouse JB. (1988) Discussion of the paper by Begg and Berlin. *J. Royal Statistical Society Series A*, 151, 454.
6. Iyengar S, Greenhouse JB. (1988) Selection models and the file-drawer problem (with discussion). *Statistical Science*, 3, 109 – 135.
7. Iyengar S. (1988) Evaluation of normal probabilities of symmetric regions. *SIAM J. Scientific and Statistical Computing*, 9, 418 – 424.
8. Iyengar S, Tong YL. (1989) Convexity of elliptically contoured distributions with applications. *Sankhya, Series A*, 51, 13 – 29.
9. Greenhouse JB, Fromm D, Iyengar S, Dew MA, Holland A, Kass R. (1990) The making of a meta-analysis: a quantitative review of the aphasia treatment literature. *The Future of Meta-Analysis*. M Straf, K Wachter, editors. Sage Press, 29 – 46.
10. Iyengar S. (1991) Much ado about meta-analysis. *Chance*, 4, 33 – 40.
11. Iyengar S. (1993) Plackett's identity, its generalizations, and their uses. *Multiple Comparisons, Selection, and Applications in Biometry*. FM Hoppe, editor. Marcel-Dekker, 121 – 135.
12. Greenhouse JB, Iyengar, S. (1993) Sensitivity analysis and diagnostics. *Handbook of Research Synthesis*. H Cooper, L Hedges, editors. Sage Publications, 383 – 398.
13. Iyengar S, Zhao PL. (1994) Maximum likelihood estimation for weighted distributions. *Probability and Statistics Letters*, 21, 37 – 47.
14. Mendoza-Blanco J, Tu XM, Iyengar S. (1996) Bayesian inference on prevalence using a missing-data approach with simulation-based techniques: applications to HIV screening. *Statistics in Medicine*, 15, 2161 – 2176.
15. Iyengar S. (1996) Parameter estimation for a diffusion approximation to Stein's model. *Computation in Cellular and Molecular Biological Systems*. R Cuthbertson, M Holcombe, R Paton, editors, 265 – 277.
16. Iyengar S, Liao Q. (1997) Modeling neural activity using the generalized inverse Gaussian distribution. *Biological Cybernetics*, 77, 289 – 295.

17. Iyengar S, Mazumdar M. (1998) A saddle point approximation for certain multivariate tail probabilities. *SIAM J Scientific Computing*, 19, 1234 – 1244.
18. Iyengar S, Kvam P, Singh H. (1999) Fisher information in weighted distributions. *Canadian J Statistics*, 27, 833 – 841.
19. Iyengar S. (2000) Diffusion models for neural activity. *Statistics for the 21st Century*. CR Rao, G Szekely, editors. Marcel-Dekker, 233 – 250.
20. Chen T, Hoppe F, Iyengar S, Brent D. (2003) A hybrid logistic model for case-control studies. *Methodology and Computing in Applied Probability*, 5, 419 – 426.
21. Czanner G, Grün S, Iyengar S. (2005) Theory of the Snowflake Plot and its Relations to Higher-Order Analysis Methods. *Neural Computation*, 17, 1456 – 1479.
22. Iyengar S. (2007) Invited comment on paper by Ramsay, et al. *J Royal Statistical Society, B*, 69, 785.
23. Mulleney P, Iyengar S. (2008) Parameter Estimation for a Leaky Integrate-and-Fire Neuronal Model from ISI Data. *J Computational Neuroscience*, 24, 179 – 194.
24. Chen JT, Iyengar S, Brent D. (2007) Constraint estimation for the population attributable risk. *J Applied Probability and Statistics*, 2, 251 – 265.
25. Paninski L, Brown EN, Iyengar S, Kass RE. (2009) Statistical models of spike trains. In *Stochastic Methods in Neuroscience*, C Laing and G Lord, editors. Oxford, 272 – 298.
26. Zhao M, Iyengar S. (2009) Nonconvergence in Logistic and Poisson Models for Neural Spiking. *Neural Computation*, 22, 1231 – 1244.
27. Driscoll J, Shih A, Iyengar S, Field J, White G, Squier JA, Cauwenberghs G, Kleinfeld D. (2011) Photon counting, censor corrections, and lifetime imaging for improved detection in two-photon microscopy. *J Neurophysiology*, 105, 3106 – 3113.
28. Frepoli C, Iyengar S. (2011) A Comparison of Non-Parametric Tolerance Limits with Linear Combinations of Order Statistics in Safety Analysis. *Proceedings of ICAPP 2011*, 1392 – 1401.
29. Zhao M, Batista AB, Cunningham JP, Chestek C, Alvidrez ZR, Kalmar R, Ryu S, Shenoy K, Iyengar S. (2012) An L_1 -regularized logistic model for detecting short-term neuronal interactions. *J Computational Neuroscience*, 32, 479 – 497.
30. Tsui LK, Iyengar S, Saunders D. (2013) Tail Dependence of Diffusion Processes with Default Boundaries. In preparation.
31. Ha W, Mulleney P, Iyengar S. (2013) Maximum Likelihood Estimation for Ornstein-Uhlenbeck Models for Neural Activity. In preparation.
32. Iyengar S, Kleinfeld D, Simsek B. (2013) On distributions arising from photon counting statistics. In preparation.

B. Collaborative

1. Ryan ND, Puig-Antich J, Ambrosini P, Rabinovich H, Nelson B, Iyengar S, Twomey J. (1987) The clinical picture of major depression in children and adolescents. *Archives of General Psychiatry*, 44, 854 – 861.
2. Puig-Antich J, Goetz D, Davies M, Kaplan T, Davies S, Ostrow L, Asnis L, Twomey J, Iyengar S, Ryan ND. (1989) A controlled family history study of pre-pubertal major depressive disorder. *Archives of General Psychiatry*, 46, 406 – 418.
3. Antoinette T, Iyengar S, Puig-Antich J. (1990) Is locked seclusion necessary for children under the age of 14 ? *American J Psychiatry*, 147, 1283 – 1289.
4. Kovacs M, Iyengar S, Goldston D, Obrosky MS, Stewart J, Marsh J. (1990) Psychological functioning among mothers of children with insulin-dependent diabetes mellitus: a longitudinal study. *J Consulting and Clinical Psychology*, 58, 189 – 195.
5. Kovacs, M, Iyengar, S, Goldston, D, Obrosky, MS, Stewart, J, Marsh, J (1990) Psychological functioning of children with insulin-dependent diabetes mellitus. *J Pediatric Psychology*, 15, 619 – 632.
6. Ryan ND, Williamson D, Iyengar S, Orvashel H, Reich T, Dahl RE, Puig-Antich, J. (1992) A secular increase in child and adolescent onset affective disorder. *J American Academy of Child and Adolescent Psychiatry*, 31, 600 – 605.
7. Ryan ND, Birmaher B, Perel J, Dahl R, Meyer V, Al-Shabbout M, Iyengar S, Puig-Antich J. (1992) Neuroendocrine response to L-5 hydroxytryptophan challenge in prepubertal major depression. *Archives of General Psychiatry*, 49, 843 – 851.
8. Kovacs M, Goldston D, Obrosky DS, Iyengar S. (1992) Prevalence and predictors of pervasive noncompliance with medical treatment among youths with insulin-dependent diabetes mellitus. *J American Academy of Child and Adolescent Psychiatry*, 31, 1112 – 1119.
9. Kovacs M, Goldston D, Obrosky MS, Iyengar S. (1992) Intellectual development and academic performance of children with insulin-dependent diabetes mellitus: a longitudinal study. *Developmental Psychology*, 28, 676 – 684.
10. Ryan ND, Dahl RE, Birmaher B, Williamson D, Iyengar S, Nelson B, Puig-Antich J, Perel J. (1995) Stimulatory tests of growth hormone secretion in prepubertal major depression: depressed versus normal children. *J American Academy of Child and Adolescent Psychiatry*, 33, 824 – 833.
11. Kovacs M, Drash A, Mukerji P, Iyengar S. (1995) Biomedical and psychiatric risk factors for retinopathy among children with IDDM. *Diabetes Care*, 18, 1592 – 1599.
12. Goldston D, Kovacs M, Obrosky MS, Iyengar S. (1995) A longitudinal study of life events and metabolic control among youths with insulin-dependent diabetes mellitus. *Health Psychology*, 14, 409 – 414.
13. Kovacs M, Iyengar S, Mukerji P, Drash A. (1996) Psychiatric disorder and metabolic control among youths with IDDM. *Diabetes Care*, 19, 318 – 323.

14. Brent D, Holder D, Kolko D, Birmaher B, Baugher, M, Roth C, Iyengar S, Johnson B. (1997) A clinical psychotherapy trial for adolescent depression comparing cognitive, family, and supportive therapy. *Archives of General Psychiatry*, 54, 877 – 885.
15. Birmaher B, Brent DA, Kolko D, Baugher M, Bridge J, Holder D, Iyengar S, Ulloa RE. (2000) Clinical Outcome After Short-term Psychotherapy for Adolescents With Major Depressive Disorder. *Archives of General Psychiatry*, 57, 29 – 36.
16. DeBellis MD, Keshavan MS, Frustaci K, Shifflett H, Iyengar S, Beers SR, Hall J. (2002) Superior temporal gyrus volumes in maltreated children and adolescents with PTSD. *Biological Psychiatry*, 51, 544 – 552.
17. DeBellis MD, Keshavan MS, Dahl RE, Birmaher B, Hall J, Frustaci K, Boring AM, Shifflett H, Iyengar S, Ryan N. (2002) Superior temporal gyrus volumes in Pediatric Generalized Anxiety Disorder. *Biological Psychiatry*, 51, 553 – 562.
18. DeBellis MD, Keshavan MS, Shifflett H, Iyengar S, Beers SR, Hall JD, Moritz, G. (2002) Brain structures in pediatric maltreatment-related posttraumatic stress disorder: a sociodemographically matched study. *Biological Psychiatry*, 52, 1066 – 1078.
19. Campo J, Bridge J, Ehmann M, Altman S, Lucas A, Birmaher B, DiLorenzo C, Iyengar S, Brent D. (2004) Recurrent abdominal pain, anxiety, and depression in primary care. *Pediatrics*, 113, 817 – 824.
20. Krimer L, Zaitsev A, Czanner G, Kroner S, Gonzalez-Burgos G, Povysheva N, Iyengar S, Barrioneuvo G, Lewis D. (2005) Cluster analysis-based physiological classification and morphological properties of inhibitory neurons in layers 2-3 of monkey dorsolateral prefrontal cortex. *J Neurophysiology*, 94, 3009 – 3022.
21. Birmaher B, Axelson D, Strober M, Gill MK, Valeri S, Chiappetta L, Ryan ND, Leonard H, Hunt J, Iyengar S, Keller M. (2006) Clinical Course of Children and Adolescents With Bipolar Spectrum Disorders. *Archives of General Psychiatry*, 63, 175 – 183.
22. Strober M, Birmaher B, Ryan ND, Axelson D, Valeri S, Leonard H, Iyengar S, Gill MK, Hunt J, Keller M. (2006) Pediatric bipolar disease: current and future perspectives for study of its long-term course and treatment. *Bipolar Disorders*, 8, 311 – 321.
23. Axelson D, Strober M, Gill MK, Valeri S, Chiappetta L, Ryan ND, Leonard H, Hunt J, Iyengar S, Bridge J, Keller M. (2006) Phenomenology of Children and Adolescents with Bipolar Spectrum Disorders. *Archives of General Psychiatry*, 63, 1139 – 1148.
24. Weersing VR, Iyengar S, Kolko DJ, Birmaher B, Brent DA. (2006) Effectiveness of cognitive-behavioral therapy for adolescent depression: a benchmarking investigation. *Behavioral Therapy*, 37, 36 – 48.
25. Rende R, Birmaher B, Axelson D, Strober M, Gill MK, Valeri S, Chiappetta L, Ryan ND, Leonard H, Hunt J, Iyengar S, Keller M. (2006) Psychotic symptoms in pediatric bipolar disorder and family history of psychiatric illness. *J Affective Disorders*, 96, 127 – 131.

26. Rende R, Birmaher B, Axelson D, Strober M, Gill MK, Valeri S, Chiappetta L, Ryan ND, Leonard H, Hunt J, Iyengar S, Keller M. (2007) Childhood-onset bipolar disorder: Evidence for increased familial loading of psychiatric illness. *J American Academy of Child and Adolescent Psychiatry*, 46, 197 – 204.
27. Rende R, Birmaher B, Axelson D, Strober M, Gill MK, Valeri S, Chiappetta L, Ryan ND, Leonard H, Hunt J, Iyengar S, Keller M. (2007) Childhood-Onset Bipolar Disorder: Evidence for Increased Familial Loading of Psychiatric Illness. *J American Academy of Child and Adolescent Psychiatry*, 46, 197 – 204.
28. Campo JV, Bridge J, Lucas A, Savorelli S, Walker L, Di Lorenzo C, Iyengar S, Brent DA (2007) Physical and Emotional Health of Mothers of Youth With Functional Abdominal Pain. *Archives of Pediatric and Adolescent Medicine*, 161, 131 – 137.
29. Diler RS, Daviss WB, Lopez A, Axelson D, Iyengar S, Birmaher B. (2007) Differentiating major depressive disorder in youths with attention deficit hyperactivity disorder. *J Affective Disorders*, 102, 125 – 130.
30. Bridge J, Iyengar S, Salary C, Barbe R, Birmaher B, Pincus H, Ren L, Brent D. (2007) Clinical response and risk for reported suicidal ideation and suicide attempts in pediatric antidepressant treatment: a meta-analysis of randomized controlled trials. *J American Medical Association*, 297, 1683 – 1696.
31. Walkup JT, Albano AM, Piacentini J, Birmaher B, Compton SN, Sherrill JT, Ginsburg GS, Rynn MA, McCracken J, Waslick B, Iyengar S, March JS, Kendall PC. (2008) Cognitive behavioral therapy, sertraline, or a combination in childhood anxiety. *New England J Medicine*, 359, 2753 – 2766.
32. Garber J, Clarke GN, Weersing VR, Beardslee WR, Brent DA, Gladstone TRG, DeBar LL, Lynch FL, D’Angelo E, Hollon SD, Shamseddeen W, Iyengar S. (2009) Prevention of depression in at-risk adolescents: a randomized controlled trial. *J American Medical Association*, 301, 2215 – 2224.
33. Birmaher B, Axelson D, Monk K, Kalas C, Goldstein B, Hickey MB, Obreja M, Ehmann M, Iyengar S, Shamseddeen W, Kupfer D, Brent D. (2008) Lifetime psychiatric disorders in school-aged offspring of parents with bipolar disorder. *Archives of General Psychiatry*. 66, 287 – 296
34. Birmaher B, Axelson D, Goldstein B, Monk K, Kalas C, Obreja M, Hickey MB, Iyengar S, Brent DA, Shamseddeen W, Diler R, Kupfer D. (2010) Psychiatric Disorders in Preschool Offspring of Parents With Bipolar Disorder: The Pittsburgh Bipolar Offspring Study (BIOS) *American J Psychiatry*, 167, 321 – 330.
35. Kendall PC, Compton SN, Walkup JT, Birmaher B, Albano AM, Sherrill J, Ginsburg G, Rynn M, McCracken J, Gosch E, Keeton C, Bergman L, Sakolsky D, Suveg C, Iyengar S, March J, Piacentini J. (2010) Clinical characteristics of anxiety disordered youth. *J Anxiety*

Disorders, 24, 360 – 365.

36. Compton SN, Walkup JT, Albano AM, Piacentini JC, Birmaher B, Sherrill JT, Ginsburg GS, Rynn MA, McCracken JT, Waslick BD, Iyengar S, Kendall PC, March JS. (2010) Child/Adolescent Anxiety Multimodal Study (CAMS): rationale, design, and methods. *Child and Adolescent Psychiatry and Mental Health*, 4, 1 – 15.
37. Grote NK, Bridge JA, Gavin A, Melville JL, Iyengar S, Katon WJ. (2010) A Meta-analysis of Depression during Pregnancy and the Risk of Preterm Birth, Low Birth Weight, and Intrauterine Growth Restriction. *Archives of General Psychiatry*, 67, 1012 – 1024.
38. Sala R, Axelson DA, Castro-Fornieles J, Goldstein T, Ha W, Liao F, Gill MK, Iyengar S, Strober MA, Goldstein BI, Yen S, Hower H, Hunt J, Ryan ND, Dickstein D, Keller MB, Birmaher B. (2010) Comorbid anxiety in children and adolescents with bipolar spectrum disorders: prevalence and clinical correlates. *J Clinical Psychiatry*, 1344 – 1350.
39. Cohen J, Mannarino A, Iyengar S. (2011) Community Treatment of PTSD for Children Exposed to Intimate Partner Violence: A Randomized Controlled Trial. *Archives of Pediatrics and Adolescent Medicine*, 165, 16 – 21.
40. Vitiello B, Emslie G, Clarke G, Wagner KD, Asarnow JR, Keller M, Birmaher B, Ryan N, Kennard B, Mayes T, DeBar L, Lynch F, Dickerson J, Strober M, Suddath R, McCracken JT, Spirito A, Onorato M, Zelazny J, Porta G, Iyengar S, Brent D. (2011) Long-term outcome of adolescent depression initially resistant to SSRI treatment. *J Clinical Psychiatry*, 72, 388–396.
41. Perez-Rosello T, Baker JL, Ferrante M, Iyengar S, Ascoli GA, Barrionuevo G. (2011) Passive and Active Shaping of Unitary Responses from Associational/Commissural and Perforant Path Synapses in Hippocampal CA3 Pyramidal Cells. *J Computational Neuroscience*, 31, 159 – 182.
42. Goldstein TR, Obreja M, Shamseddeen W, Iyengar S, Axelson DA, Goldstein BI, Monk K, Hickey MB, Sakolsky D, Kupfer DJ, Brent DA, Birmaher B. (2011) Risk for Suicidal Ideation Among the Offspring of Bipolar Parents: Results from the Bipolar Offspring Study (BIOS). *Archives of Suicide Research*, 15, 207 – 222.
43. Schlund MW, Cataldo MF, Siegle GJ, Ladouceur CD, Silk JS, Forbes EF, McFarland A, Iyengar S, Dahl RE, Ryan ND. (2011) Pediatric functional magnetic resonance neuroimaging: A conceptual framework and tactics for encouraging task compliance. *Behavioral and Brain Functions*, 7, 1 – 10.
44. Axelson DA, Birmaher B, Strober MA, Goldstein BI, Ha W, Gill MK, Goldstein TR, Yen S, Hower H, Hunt JI, Liao F, Iyengar S, Dickstein D, Kim E, Ryan ND, Frankel E, Keller MB. (2011) Course of Subthreshold Bipolar Disorder in Youth: Diagnostic Progression From Bipolar Disorder Not Otherwise Specified. *J American Academy of Child and Adolescent*

Psychiatry, 50, 1001 – 1016.

45. Sakolsky DJ, Perel JM, Emslie GJ, Clarke GN, Wagner KD, Vitiello B, Keller MB, Birmaher B, Ryan ND, McCracken JT, Strober MJ, Iyengar S, Porta G, Brent DA. (2011) Antidepressant Exposure as a Predictor of Clinical Outcomes in the Treatment of Resistant Depression in Adolescents (TORDIA) Study. *J Clinical Psychopharmacology*, 32, 92 – 97.
46. Ginsburg GS, Kendall PC, Sakolsky D, Compton SN, Piacentini J, Albano AM, Walkup JT, Sherrill J, Coffey KA, Rynn MA, Keeton CP, McCracken JT, Bergman L, Iyengar S, Birmaher B, March J. (2011) Remission after acute treatment in children and adolescents with anxiety disorders: findings from the CAMS. *J Consulting and Clinical Psychology*, 79, 806 – 813.
47. Maalouf FT, Porta G, Vitiello B, Emslie G, Mayes T, Clarke G, Wagner KD, Asarnow JR, Spirito A, Keller M, Birmaher B, Ryan ND, Shamseddeen W, Iyengar S, Brent DA. (2012) Do sub-syndromal manic symptoms influence outcome in treatment resistant depression in adolescents? A latent class analysis from the TORDIA study. *J Affective Disorders*, 138, 86 – 95.
48. Ballester J, Goldstein T, Goldstein B, Obreja E, Axelson D, Monk K, Hickey MB, Iyengar S, Farchione T, Kupfer DJ, Brent D, Birmaher B. (2012) Is bipolar disorder specifically associated with aggression? *Bipolar Disorders*, 14, 283 – 290.
49. Sala R, Axelson D, Castro-Fornieles J, Goldstein T, Goldstein B, Ha W, Liao F, Gill MK, Iyengar S, Strober M, Yen S, Hower H, Hunt J, Dickstein D, Ryan N, Keller MB, Birmaher B. (2012) Factors Associated with the Persistence and Onset of New Anxiety Disorders in Youth with Bipolar Spectrum Disorder. *J Clinical Psychiatry*, 73: 87 – 94, 2012.
50. Beardslee WR, Brent DB, Weersing VR, Clarke GN, Porta G, Hollon SD, Gladstone TRG, Gallop R, Lynch FL, Iyengar S, DeBar L, Garber J. (2013) Prevention of depression in at-risk adolescents: longer-term effects. *JAMA Psychiatry*. In press.
51. Ginsburg GS, Becker EM, Keeton CP, Sakolsky D, Piacentini J, Albano A, Compton SN, Iyengar S, Sullivan K, Caporino N, Peris T, Birmaher B, Rynn M, March J, Kendall PC. (2013). Naturalistic follow-up of youth treated for pediatric anxiety disorders. *JAMA Psychiatry*, in press.

C. Book Reviews

1. Iyengar S. (1997) *Statistical Inference - Based on the Likelihood* by A Azzalini. *J American Statistical Association*. 92, 1220–1221.
2. Iyengar S. (1997) *A Course in Stochastic Processes* by D Bosq and HT Nguyen. *J American Statistical Association*. 92, 1651.
3. Iyengar S. (1998) *Multivariate Models and Dependence Concepts* by H Joe. *Technomet-*

rics. 40, 348-9.

4. Iyengar S. (2013) *Understanding the New Statistics: Effect Sizes, Confidence Intervals, and Meta-Analysis* by G Cumming. To appear in *J American Statistical Association*.

D. Mathematical Reviews

To date, reviewed 42 papers:

MR1125747, MR1165229, MR1165927, MR1199789, MR1243519, MR1275050, MR1326530, MR1343009, MR1371964, MR1391171, MR1408130, MR1414141, MR1436648, MR1659047, MR1448309, MR1659219, MR1710638, MR1775066, MR1820144, MR1869859, MR1891744, MR1917421, MR1917800, MR1938944, MR1968953, MR1987321, MR2001302, MR1957198, MR2019130, MR2045318, MR2054802, MR2151558, MR2225067, MR2275420, MR2397501, MR2414357, MR2444331, MR2481572, MR2525259, MR2665482, MR2773782, MR2855519, MR3041264.

ADVISING AND TEACHING

A. Post-doctoral Fellows (years, present position)

Tuhao Chen (1998 – 2000, Professor, Mathematics and Statistics, Bowling Green State U.)

Jungeun Heo (2000 – 2002, Staff researcher, KISTI, South Korea)

Paul Mallowney (2005 – 2006, Staff researcher, Tech-X Corporation, Boulder, CO)

Reuben Muchemedzi (2006 – 2007, deceased)

Ed Bein (2007 – 2009, Adjunct Lecturer, Harvard Graduate School of Education)

Meredith Wallace (2010 – 2013) Assistant Professor, U. of Pittsburgh Medical School.

B. PhD Students

Primary adviser for the following students (year of graduation, current position):

1. Qiming Liao (1995, Senior Statistician, Glaxo-Wellcome)
2. Sa Shen (1997, Assistant Professor, Psychiatry, Columbia U.)
3. Silviu Bacanu (1998, Assistant Professor, Psychiatry, Virginia Commonwealth U.)
4. Aurele Hounbedji (2000, Financial Officer, World Bank)
5. Oded Meyer (2000, Associate Professor, Statistics, Carnegie Mellon U.)
6. Youngju Lee (2001, Proprietor, Quantavium Hedge Fund)
7. Gabriela Czanner (2004, Lecturer, U. of Liverpool)
8. Melissa Ziegler (2006, Consulting biostatistician, Dupont)
9. Lulu Ren (2006, Statistician, Amgen)
10. Adriana Lopez (2008, Lecturer, Carnegie Mellon U. Qatar campus)
11. Wonho Ha (2009, Statistician, Proctor and Gamble)
12. Kaleab Abebe (2009, Assistant Professor, UPMC)
13. Yao Zhang (2010, Statistician, Immunetrics)
14. Mengyuan Zhao (2010, Senior Risk Modeler, JP Morgan Chase)

15. Mihaela Obreja (2010, Statistician, Onyx Pharmaceuticals)
16. Nan Zhou (2011, Quantitative Research Analyst at Quest Partners)
17. Hao Wang (2011, Senior Statistician, Amgen)

Currently advising four PhD Statistics students.

Served on committees in Biomedical Engineering, Computer Science, Economics, Education, Industrial Engineering, Information Science, Mathematics, Philosophy, Carnegie Mellon's Statistics Department, and at U. of Canterbury's Department of Mathematics and Statistics.

C. Others

Primary adviser for Nelly Leon, M.S. (1985).

First experiences in research: Laura Riley (2005), Helena Tzou (2007).

Adviser for several undergraduate Statistics majors.

D. Courses Taught

Undergraduate:

introductory statistics, statistical computing, multivariate analysis,
intermediate probability and statistics, stochastic processes.

Masters

linear models, data mining, meta-analysis, discriminant analysis, consulting.

Doctoral:

probability, statistics, asymptotics, stochastic differential equations, meta-analysis.

GRANTS, FELLOWSHIPS, CONTRACTS

National Institute of Mental Health, 2008–2013. Transdisciplinary Studies of CBT for Anxiety in Youth. (Co-director Research Core. Principal investigator: N. Ryan.)

National Institute of Mental Health, 2002–2007. Neurobehavioral changes in pediatric affective disorders. (Director of Statistics Core. Principal investigator: N. Ryan.)

National Institute of Mental Health, 2002–2007. Advanced center for intervention and services research. (Co-investigator. Principal investigator: D. Brent.)

National Institute of Health, 2002–2006. Modeling the acute inflammatory response. (Co-investigator. Principal investigator: C. Chow.)

National Institute of Health, 2001–2004. The analysis of nonstationary point process data. (Co-investigator. Principal investigator: R. Kass.)

National Institute of Mental Health, 1993–2003. Behavioral neuroscience and schizophrenia. (Co-investigator. Principal investigator: D. Lewis.)

National Institute of Mental Health, 1997–2002. The psychobiology of childhood anxiety and depression. (Director of Data Analytic Core. Principal investigator: N. Ryan.)

National Institute of Mental Health, 1997–2002. CADPRC for early-onset affective and anx-

xiety disorders. (Director of Statistics Core. Principal investigator: D. Brent.)
National Institute of Mental Health, 1997–2000. Familial pathways of early onset suicide attempt. (Co-investigator. Principal investigators: D. Brent, J. Mann.)
National Institute of Mental Health, 1996–1999. Adolescent depression: treatment and outcome. (Co-investigator. Principal investigator: D. Brent.)
Office of Naval Research, 1993–1996. Boundary crossing problems with applications to the neural sciences.
National Science Foundation, SCREMS, 1994–1995. (Co-investigator. Principal investigator: T. Savits.)
Office of Naval Research, 1991–1994. Statistical problems in single neuron activity.
Office of Naval Research, 1989–1991. Statistical methods for the neurosciences.
National Institute of Mental Health, 1991–1996. Psychobiology of depression in children and adolescents. (Director of Data Analytic Core. Principal investigator: N. Ryan.)
Power Systems Research, Inc. Contract, 1989. Development of analytical techniques to assist in evaluation of power system composite reliability indices. (Co-investigator. Principal investigator: M. Mazumdar.)
National Institute of Mental Health, 1986–1990. Psychobiology of depression in children and adolescents. (Director of Data Analytic Core. Principal investigator: J. Puig-Antich.)
University of Pittsburgh, 1983. FAS Type I summer research grant.

INVITED TALKS

A. Meetings

Modeling Neural Activity, Lihue HI, June 2013.
Neuroinformatics. Marine Biological Laboratories, Woods Hole MA, August 2002-2012.
BIOSTEC conference, Vilamoura, Portugal. February, 2012.
Congress on Advances in Nuclear Power Plants, Nice, France, May 2011.
Presentation by C. Frepoli.
Coding International Workshop, Tainan, Taiwan. May, 2009.
Association for Behavioral and Cognitive Therapies, Orlando, FL. November, 2008.
American Physical Association, Denver, CO, March 2007.
IMA workshop on Biology, Dynamics, and Statistics, Minneapolis MN, August 2007.
Point Processes and Applications. BIRS, Banff Canada, June 2003.
New Clinical Drug Evaluation Unit (NCDEU). Boca Raton FL, June 2002.
Interface 2002, Montreal, CA, April, 2002.
Workshop on the Analysis of Neural Data. Woods Hole MA, August 1998-2001.
International Indian Statistical Association Conference. Hamilton ONT, October 1998.
Lukacs Symposium. Bowling Green OH, April 1998.

IMS-ENAR Spring Meeting. Pittsburgh PA, March 1998.
Joint Statistical Meetings (Special Contributed Session). Chicago IL, August 1996.
Conference on Information Processing in Cells and Tissues. Liverpool UK, September 1995.
ONR Conference on Single Neuron Computation. Arlington VA, July 1993.
Joint Statistical Meetings. Boston MA, August 1992.
ONR Conference on Moments and Signal Processing. Monterey CA, April 1992.
AMS-IMS-SIAM Summer Research Conference. Seattle WA, June 1991.
Symposium on Biostatistics and Statistics. Hamilton ONT, May 1991.
EPA Conference on Statistics. Richmond VA, March 1991.
ONR Conference on New Directions in Statistics. Arlington VA, November 1990.
ONR Conference on Single Neuron Computation. Woods Hole MA, September 1990.
AMS-IMS-SIAM Summer Research Conference. Arcata CA, June 1989.
ASA Regional Meeting. Lexington KY, April 1989.
ASA Regional Meeting. Boston MA, April 1988.
NRC Workshop on the Future of Meta-Analysis. Hedgesville WV, October 1986.

B. Departmental Seminars

IIT Ropar, Humanities and Social Sciences, May 2013.
Indian Institute of Science, Center for Neuroscience, May 2013.
Howard Hughes Medical Institute (HHMI) at Janelia Farm, January, 2011.
Columbia University, Statistics Department, October 2007.
Bowling Green State University, Statistics Department, April 2005.
Massey University, Statistics Department, May 2004.
Victoria University, Statistics Department, July 2004.
Massey University at Albany, Statistics Department, June 2004.
University of Western Ontario, Statistics Department, October 2003.
University of Pennsylvania, Statistics Department, October 2003.
Case-Western Reserve University, Statistics Department, February 2003.
University of Canterbury, Department of Mathematics and Statistics, February 2003.
West Virginia University, Statistics Department, October 2001.
Carnegie Mellon University and University of Pittsburgh, CNBC, February 2001.
McGill University, Department of Mathematics and Statistics, September 2000.
Michigan State University, Statistics Department, November 1999.
Latrobe University, Statistics Department, March 1999.
University of Sydney, Statistics Department, March 1999.
Australian National University, Statistics Department, March 1999.
Ohio State University, Statistics Department, February 1996.

Purdue University, Statistics Department, October 1995.
Pennsylvania State University, Statistics Department, April 1994.
Florida State University, Statistics Department, April 1992.
North Carolina State University, Statistics Department, March 1991.
University of Pittsburgh, Biostatistics Department, October, 1988.
University of Maryland, Baltimore Co., Statistics Department, October 1987.
Stanford University, Departments of Statistics and Psychology, July 1986.
Carnegie Mellon University, Statistics Department, October 1985.
Carnegie Mellon University, Statistics Department, April 1984.
University of Pittsburgh, Department of Mathematics and Statistics, March 1982.

PROFESSIONAL ACTIVITY

NSA Statistical Advisory Group, Stanford University, 1980 – 2013.
Served on review panels for the National Institute of Health since 2000.
Served as external reviewer for fourteen promotion and tenure cases at other universities.
Served as outside member on a committee to investigate possible research misconduct at another university.
NZIMA Program on Hidden Markov Models steering committee, 2004 – 2005.
Refereed one report of the National Academy of Sciences. Refereed proposals to National Science Foundation, National Institutes of Health, Air Force Office of Scientific Research and MITACS (Canada), Marsden Grant (New Zealand).
Refereed articles for *Annals of Statistics*, *J American Statistical Association*, *Statistical Science*, *SIAM J. Scientific Computing*, *Technometrics*, *Biometrics*, *J Multivariate Analysis*, *American J Psychiatry*, *Archives of General Psychiatry*, *Neural Computation*, *J Computational Neuroscience*.
Taught short courses on meta-analysis with I. Olkin and T. Chalmers at the University of Pittsburgh, May 1991, and at the Upjohn Corporation, Kalamazoo MI, October 1991.
Treasurer, Pittsburgh Chapter of the American Statistical Association, 1984 – 1988.

CONSULTING EXPERIENCE

Allegheny General Hospital, Department of Psychiatry, Pittsburgh, PA, 2001 – 2008.
Westinghouse LOCA Integrated Services, Cranberry, PA, 2007 – 2012.
NIOSH, Morgantown, WV. 2002 – 2005.
Carnegie Mellon University, Microwave Processing Center, Pittsburgh, PA. 2002.
Westinghouse Government Services, Electro Mechanical Division, Cheswick, PA, 2001.

UNIVERSITY SERVICE

Several promotion and tenure committees; tenure selection committee, 2011 – 2013.

FAS Summer Grants Committee, 1993 – 1996; chair 1995 – 1996.

Ad hoc Planning and Budgeting System Review Committee, 1995 – 1996.

Statistics Department liaison to College in High School Program, 1995 – 2001.

Applied Statistics Education Committee, since 1994.

WPIC Research Committee, since 1990.