

VITAE

Dr. Daniel A. Griffith
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CURRENT BUSINESS ADDRESS

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Academic specialty: spatial statistics; quantitative/urban/economic geography; applied statistics & statistical consulting; research proposal design

EDUCATIONAL BACKGROUND

- Ph. D., geography, University of Toronto, 1978 (supervisor: L. Curry)
- M. S., statistics, The Pennsylvania State University, 1985 (supervisor: J. K. Ord)
- M. A., geography, Indiana University of Pennsylvania, 1972
- B. Sc., mathematics, Indiana University of Pennsylvania, 1970
- American Statistical Assn. Continuing Education (1994: "Spatial statistics for environmental and earth sciences data," "Skills to increase effectiveness in statistical consulting and collaboration"); ASA Syracuse Chapter workshop (1998: An introduction to generalized linear mixed models")
- Certified Geographic Information Systems (GIS) Professional (GISP), 2009, The GIS Certification Institute (GISCI)

EMPLOYMENT HISTORY

- adjunct professor, Department of Resource Economics and Environmental Sociology, U. of Alberta, 2015-
- summer school visiting lecturer (China-wide enrollment), LIESMARS, Wuhan University, 2011-2015
- summer school visiting lecturer, Department of Mathematics and Statistics, University of Jyväskylä, 2006
- University of Texas at Dallas, professor (Ashbel Smith Professor endowed chair), 2005-present
 - successful UTD 2012 (6-year) Periodic Performance Evaluation
 - Geospatial Information Sciences Assistant Unit Head, 2005-present
- University of Miami, professor (and Graduate Faculty member), 2003-2005
- The University of Cambridge, Leverhulme visiting professor, Spring 2004
- Syracuse University, professor, 1988-2003; *Chair*, Department of Geography, 1995-1997
- Syracuse University, Interdisciplinary Program in Statistics faculty, 1991-2003
- SUNY/Environmental Sciences and Forestry, adjunct professor, 1992-2003
- Ministerio de Educación del Perú, consultant, 2000-01 [funded by the British ESRC]
- Syracuse Research Corporation, consultant, 1998-99, 2003
- University of Rome "La Sapienza," 1-month visiting professor, February 1995
- Erasmus University, Rotterdam, visiting professor, Fall 1992
- Syracuse University, *Director*, Interdisciplinary Program in Statistics, 1991-92 & 1993-95
- NY State Program in Geographic Information and Analysis, Deputy Director, 1989-90
- Oregon State University, Department of Statistics, visiting EPA Environmental Monitoring and Assessment Program research affiliate, summers of 1990-93
- State University of New York at Buffalo, assistant professor, 1978-83; associate professor, 1983-1986; professor, 1986-88
- Ryerson Polytechnical University, instructor, 1975-78
- University of Toronto, teaching/research assistant, 1972-75
- Indiana University of Pennsylvania, teaching/research assistant, 1970-72

AWARDS, HONORS, AND PROFESSIONAL RECOGNITIONS

Awards

- 2015 nominated for 2016/17 Vice President, Association of American Geographers
- 2015 elected fellow of the American Statistical Association (ASA):
<http://www.amstat.org/awards/fellowlist.cfm>
- 2014 Fulbright Senior Specialist reappointment (with invitation to the U. of Alberta, CA)
- 2014 EPPS Outstanding Teaching Comet Award
- 2013 selected recipient, AAG Spatial Analysis and Modeling Specialty Group Outstanding Service Award
- 2011 elected fellow of the American Association for the Advancement of Science (AAAS)
- 2011 7th Arthur Getis Lecture in Spatial Analysis, San Diego State University
- 2010 AAG Distinguish Research Honors recipient (noted online by the UTD News Center)
- 2009 elected fellow of the Regional Science Association International (featured in *Richardson Neighbors*, 12/4/2009)
- 2007 elected founding fellow of the Spatial Econometrics Association
- 2006 Doctor of Science, *honoris causa*, from Indiana U. of Pennsylvania
- 2005 Fulbright Senior Specialist (with invitation to the U. of Alberta, CA)
- 2005 visiting researcher, Max Planck Institute for Demographic Research/Rostock (Germany)
- 2005 (1st) Center for Ecosystems Science and Policy (CESP) fellow, U. of Miami
- 2004 Leverhulme Trust (UK) visiting professorship to the U. of Cambridge
- 2001 John Simon Guggenheim Memorial Foundation fellowship (<http://www.gf.org/01fellow.html>)
- 2000 elected fellow of the New York Academy of Sciences
- 1999 distinguished geographer of the year, Pennsylvania Geographical Society
- 1998/9 American Statistical Association/USDA-NASS Research Fellow
- 1997 "Second Prize, Best Software 1996" for USA, from Microcomputer Specialty Group, Association of American Geographers
- 1995 (1st) Department of Geography outstanding alumnus, U. of Toronto
- 1994 "First Prize, Best Software 1993" for EXPLORHO, from Microcomputer Specialty Group, Association of American Geographers
- 1992/93 Fulbright Research Fellow to Canada
- 1982 outstanding alumnus of Indiana U. of Pennsylvania
- 1980 J. Warren Nystrom doctoral dissertation award, Assn. of American Geographers

Honors

- 2014 listed in 32nd edition of Marquis *Who's Who in the World* (also listed in the 19th, 21st, and 26th-31st editions, 2001, 2003, 2008-2013)
- 2014 listed in 69th edition of Marquis *Who's Who in America* (also listed in the 55th-68th editions, 2000-2013)
- 2014 listed in 41st edition of Marquis *Who's Who in the South and Southwest* (also listed in the 36th-40th editions, 2009-2013)
- 2014 selected Steering Committee Chair, International Spatial Accuracy Research Association (ISARA)
- 2013 selected conference co-chair (with D. Dean), Geocomputation 2015
- 2013 conference chair, Spatial Statistics 2013
- 2013 appointed to the NSF "Geography and Spatial Sciences" Advisory Panel
- 2011 appointed to the US EPA Federal Insecticide, Fungicide, and Rodenticide Act Scientific Advisory Panel (FIFRA SAP)
- 2011 appointed to the Steering Committee, International Spatial Accuracy Research Association (ISARA); chair, medal awards panel
- 2009-14 Editor, *Geographical Analysis* (2 terms)
- 2010 listed in 11th edition of Marquis *Who's Who in Science and Engineering* (also listed in 7th edition, 2003).
- 2010 listed in *Who's Who in Social Sciences Education*

- 2009 appointed to the AAG Task Force to update the “Ethics Statement of the AAG”; *Ethics, Place and Environment* (2008) distributed to committee by AAG Executive Director, and was added to the revised bibliography for the “Ethics Statement of the AAG”
- 2009 appointed an Advisory Committee member of the International Collaborative Center for Geo-computation Studies (ICCGS), Wuhan University
- 2008-present appointed to the Steering Committee, Commission on Modeling Geographical Systems, International Geographical Union (IGU)
- 2004 elected a visiting fellow, Fitzwilliam College, U. of Cambridge
- 1993 listed in 6th edition of Marquis *Who's Who in American Education* (also listed in 4th edition, 1993).
- 2002-08 Associate Editor, *Geographical Analysis*
- 2000-02 appointed to the NSF "Methods, Measurement & Statistics" Advisory Panel
- 1996/97 president, North American Regional Science Council
- 1996 inducted into Sigma Xi (Syracuse Chapter)
- 1994 elected to the New York Academy of Sciences
- 1994 listed in 4th edition of *American Men and Women of Science*
- 1993/94 listed an "International Man of the Year" in the International Biographical Centre's 16th edition of *Men of Achievement*
- 1993,98 listed in 23rd & 27th *Dictionary of International Biography*
- 1992 listed in 24th edition of Marquis *Who's Who in the East*.
- 1991 special guest of the Institute of British Geographers, by request of the Quantitative Methods Study Group, for the annual meeting.
- 1972-76 U. of Toronto Open Fellowship
- 1972 inducted into Kappa Delta Pi Honor Society in Education.
- 1971/smr Foreign Area Research Grant through Indiana U. of Pennsylvania
- 1969/70 elected to *Who's Who Among Students in American Universities and Colleges*.
- 1969 inducted into Gamma Theta Upsilon International Honorary Geography Society
- 1967-70 PHEAA Scholarship
- 1966-70 Hempfield Council PTA Scholarship

Professional Recognitions

- 2014 invited Program Committee member of Spatial Statistics 2015
- 2014 invited Program Committee member of GIScience 2014
- 2014 invited nominator for the Vautrin Lud Prize
- 2014 invited nominator for the Kyoto Prize
- 2014 invited lecturer, 27th ERSAs Summer School, July 2-9, Adam Mickiewicz University, Poznan, Poland
- 2013 invited session co-organizer, American Association for the Advancement of Science annual meeting, Boston, MA
- 2013 invited session co-organizer, Joint Statistical Meetings, American Statistical Association annual meeting, Montreal, CA
- 2013 appointed to the *Annals* AAG editorial board (2014-17)
- 2013 appointed to the Scientific Committee, Joint International Conference on Geospatial Theory, Processing, Modeling and Applications (ISPRS-IGU)
- 2012 *Environmental Geochemistry and Health*, 30: 495-509 garnered the #1 spot on the BioMed-Lib ranking in my domain (4/12/12)
- 2012-present appointed reviewer panel member, *Mathematical Reviews*, American Mathematical Society
- 2011-present editorial board, *Geo-spatial Information Science (GSIS)*
- 2011-present editorial board, *Spatial Demography*
- 2011 Korea Research Institute for Human Settlements (KRIHS) eInterview (library.krihs.re.kr/upload/publication/publication1/0000056284.pdf)
- 2010 invited Program Committee member of the Spatial Econometrics Association 2010 meetings
- 2010 *International Regional Science Review*, 34: 253-280 was in the “Top Ten” on the SSRN’s *Analytical Models, Forecasting & Simulation*, and *Outlooks & Forecasting* downloads

- 2010 AAG Nominations Committee nominee for AAG National Councilor
- 2009 Certified Geographic Information Systems (GIS) Professional (GISP)
- 2008-2013 annual SAMSG plenary session co-organizer, Assoc. of American Geographers annual meetings (Boston; Las Vegas; Washington, DC; Seattle; New York City; Los Angeles; Tampa)
- 2008 invited Scientific Committee member of the StatGIS'09 Conference
- 2008 RSAI Panel session to commemorate the 20th anniversary of the publication of my landmark book *Advanced Spatial Statistics*
- 2008 invited Program Committee member of the 3rd ICA Workshop on Geospatial Analysis and Modeling
- 2008 *J. of Regional Science*, 48: 969-989 garnered the #1 spot on the SSRN's *Analytical Models*, and in the "Top Ten" on the SSRN's *Cross-Sectional Models, Spatial Models, Treatment Effects Models* downloads
- 2007-11 editorial board, *J. of Stochastic Environmental Research & Risk Assessment*
- 2007-10 editorial board (Associate Editor), *Letters in Spatial and Resource Sciences*
- 2004-present editorial board, *Journal of Geographical Systems*
- 2000-present Article Review Board member, *URISA J.*
- 2007 invited participant, "Science without boundaries," Institute Para Limes, The Netherlands
- 2006 invited panelist, Association of American Geographers special session entitled "Status and trends in spatial statistics in geography," in honor of Honorary Geographer J. Keith Ord
- 2006 review panelist, Small Business Innovation Research, National Science Foundation
- 2005 (with M. Fischer) Regional Science Association dissertation competition judging
- 2005 review panelist, special joint Divisions of Mathematical and Behavioral & Cognitive Sciences competition, National Science Foundation
- 2001-03 AAG Article Award Committee member
- 2001 invited workshop evaluator, ESRI's "geostatistical analyst"
- 2001 invited nominator, John D. & Catherine T. MacArthur Foundation Fellows Program
- 2000-02 Scientific Advisory Board member, 5th International Symposium on Spatial Accuracy Assessment in a Natural Resources and Environmental Sciences
- 2000 review panelist, "NSF/EPA Environmental Statistics," National Science Foundation
- 2000 prolific regional science literature author [*International Regional Science Review*, 23: pp. 323-344].
- 1998 review panelist, GEOID Networks of Centers of Excellence proposal, NSERC (Canada)
- 1998 invited workshop participant, "Status and trends in spatial analysis (the Varenus project)" of the National Science Foundation National Center for Geographic Information and Analysis, Santa Barbara, California.
- 1997 invited lecturer, "Spatial Genomics Workshop" convened by the NSF National Center for Geographic Information and Analysis, Castine, Maine.
- 1996-97 Scientific Advisory Board member, 3rd International Symposium on Spatial Accuracy Assessment in Natural Resources and Environmental Sciences
- 1991 human geography citation centurion [*Transactions*, Institute of British Geographers, 1116: 26-27]
- 1991 review panelist, "Geosciences, Geography and Mathematical Sciences," National Science Foundation, May.
- 1991 invited lecturer, "Initiative #7 experts meeting" of the National Science Foundation National Center for Geographic Information and Analysis, Castine, Maine.
- July 1989 National Science Foundation project selected for inclusion in an NSF funded 2-weeks National Center for Supercomputing Applications Education Workshop, U. of Illinois/Champaign-Urbana.
- 1988 invited lecturer, "Initiative #1 experts meeting" of the National Science Foundation National Center for Geographic Information and Analysis, UCSB.
- 1985,87 recipient, Experienced Faculty Travel Award, New York State/UUP
- 1985-87 editorial board member, *Annals*, Association of American Geographers.
- 1982-90 editorial board member, *Geographical Analysis* (3 terms).
- 1983-86 member, NATO Scientific Affairs Division Advisory Board.

Societal Research Recognitions

- Flight #93 memorial design assessment quoted in *The Tribune-Review*, Thursday, July 20, 2006; Flight 93 memorial design critique for the National Parks Service, 2007 (with citations in the *Pittsburgh Post-Gazette*, and *Johnstown Tribune-Democrat*)
- Syracuse pediatric lead poisoning project featured in *The Post-Standard*, Monday, December 2, 2002, front page & p. 4.
- quoted in *The Post Standard* about counting crowds (Friday, November 23, 2001, pp. C1, C3)
- Syracuse pediatric lead poisoning project included in Congressional briefing on GIS, January, 1997
- Syracuse pediatric lead poisoning project maps included in the *1997-1998 Consolidated Plan* for the City of Syracuse submitted to HUD, June
- Syracuse pediatric lead poisoning project poster invited for displayed during the "Reuniting the Family Conference," Nottingham High School, November
- Syracuse, NY, pediatric blood lead study featured in the *Syracuse Record*, the *SU Alumni News*, and the *Syracuse Herald-J.* (August 30, 1996), *Syracuse University Magazine* (Vol. 13, #1, Fall 1996, pp. 38-39)

COURSES TAUGHT AND OTHER TEACHING ACTIVITIES

Courses taught at U. of Texas @ Dallas

GISC 7387 Research Design in GIS
GISC 7361/ECON 7311 Spatial Statistics/Spatial Econometrics
GEOG 4380/GISC 6380 Spatial Organization and Concepts
ECON 6311/GISC 6311 Statistics for Economists/Mathematical Statistics for Geospatial Science
GISC 6389 Geographic Information Sciences Master Project
ECON 4396/GISC 6379 Urban Economics

Courses taught at U. of Miami

Problems in Geography, Advanced Research Design in Geography, Advanced Spatial Statistics, Master's Thesis

Courses taught at Syracuse U.

Economic Geography of North America, Introduction to Quantitative Methods in Geography, Senior Seminar in Geography (required of all majors), (with F. Csillag) Errors in spatial databases (at request of Cornell U. graduate students), (with R. Francis) Industrial Restructuring in North America, Industrial Location Theory, Multivariate Techniques in Geography, Readings in Multivariate Statistical Applications in Geography, Environmental Monitoring, Research Design in Geography, Spatial Statistics, Independent Study and Reading courses

Freshman Forum (CAS), Quantitative Methods for the Social Sciences (MAX)

Introduction to Statistics, Computing with SAS, Statistical Consulting, Independent Study (STT)

ARC/INFO Independent Study students' Departmental colloquium entitled "A GIS and spatial analysis of blood lead levels in Syracuse" (outcome of GEO 490 Independent Study); map display from study hangs in the SU College of Arts & Sciences Visitors Center

mentored (in conjunction with the SU Future Professoriate Program) Feng (Spring 95) in GEO 383, Anderson (Fall 95) in GEO 311, Layne (Spring 96, 97) in GEO 383

Courses taught at SUNY/Buffalo

Introduction to Human Geography, Introductory Quantitative Methods, Multivariate Analysis for Geographers, Urban Geography, Industrial Geography

Graduate Student Supervision

1. M. A./Ph. D. Committee member:

Barry Glick (Ph. D.)

Peter Rogerson (Ph. D.)

Gustav Lundberg (Ph. D.)

Chi Sham (Ph. D.)

Carl Amrhein (Ph. D.)

Jose Armando Guevara (Ph. D.)

Michael O'Neill (Ph. D.)
David Wong (Ph. D.)
Nestor Vega (M. A.)
Robine Lewis (Ph. D.)
Irena Vasiliev (Ph. D.)
Karen Dhanda (Ph. D.)
Rick Annenberg (M. A.)
Michael Schramm (M. A.)
Elvin Delgado (Ph. D.)
Monique Hernandez (Ph. D.)
Ted Beckstead (Ph.D.)
Ulemu Luhanga (Ph.D.)
Chien-Chou Chen (Ph.D.)

Robert Andrlle (Ph. D.)
Susanna McKnight (Ph. D.)
Chi-Jien Lin (Ph. D.)
Bin Li (Ph. D.)
Unryu Suganamu (Ph. D.)
Alberto Giordano (Ph. D.)
Thomas Whitfield (M. A.)
Brenden McNeil (Ph. D.)
Benjamin Jacob, Ph.D., Epidemiology and Public Health
Adriana Troyo, Ph.D., Epidemiology and Public Health
Melissa Rura (Ph.D.)
Shaofei Chen (Ph. D.)

2. M.A./M.S./Ph. D. supervised:

Joseph Schirippa (M. A.)
Peter Fellows (M. A.)
Claire Saint-Rossy (M. A.)
Matthew Vincent (M. A.)
Michelle Markham (Ph.D.)
Parmanand Sinha (Ph.D.)
Amy Speer (Ph.D.)
Timothy Brown (M. S.)
Shidi Wang (Ph.D. /Economics, co with Kurt Beron)

Richard Nicholson (M. A.)
Jonathan Hancock (M. A.)
Marco Millones (M. A.)
Cheryl Bradley (M. S.)
Eric Morris (Ph.D.)
Monghyeon Lee (Ph.D., co with Yongwan Chun)
Qing Luo (Ph.D., co with Huayi Wu; Wuhan U. MOU)

1994 Ph.D.: Akio Sone, Institute of Socio-Economic Planning, U. of Tsukuba (Japan)
1995 Ph.D.: M. Feng, Director (Oil and Gas Card Modeling), The Associates, Irving, TX
1998 Ph.D.: Zhiqiang Zhang, Arabesque Communications, Redwood Shores, CA 94065
2009 Ph.D.: Janis Schubert, postdoctoral appointment, Sandia Laboratories, Albuquerque, NM
2015 Ph.D.: Parmanand Sinha, postdoctoral appointment, U. of Tennessee
2015 Ph.D.: E Scott Morris, ***

3. M.S. in Applied Statistics

Jonathan Hancock

Zhiqiang Zhang

4. Ph. D. outsider reader/external examiner for:

Mark Renee (School of Management, SUNY/Buffalo)
Raymond Florax (U. of Twente, Enschede, The Netherlands)
Sophonie Nshinyabakobeje (Forest Resources Management, SUNY/CES&F)
Mariano Duran (Forest Resources Management, SUNY/CES&F)
Harold D. Reynolds (Department of Geography, U. of Toronto)
Chijien Lin (Faculty of Social Sciences, U. of Joensuu, Finland)
Minfeng Deng (Dept. of Econometrics and Business Statistics, Monash U., Australia)
Roberto Patuelli (Dept. of Spatial Economics, Free University, Amsterdam, The Netherlands)
Monique Hernandez (Interdisciplinary Studies, U. of Miami)
Marco Millones (School of Geography, Clark U.)

Student Supervisee Recognitions

- P. Doyle received a 1996 SU Chancellor's Award for Public Service for his work on our Syracuse, NY, pediatric blood lead study; he also received an NSF-REU supplement in support of this research
- P. Fellows received an SU Outstanding TA Award, an AAG (MM&QMSG) student paper award, and a 1999 Syracuse Chapter of Sigma Xi award for graduate student research excellence and achievement

RESEARCH GRANT ACTIVITIES

Principal Research Grant Support (\$7.1M +)

- 2014/17 (with Y. Chun; in collaboration with George Mason U.) "Uncertainty in spatial data: identification, visualization, and utilization," National Institutes of Health [1R01HD076020-01A1; \$863,383]
- 2013/15 "Determining qualitative geographic sample size in the presence of spatial autocorrelation." National Science Foundation [BCS-1262717; \$145,000]
- 2012/15 (co-PI with Y. Chun) "Advancing eigenvector spatial filter methodology: solving the eigenvector selection and other related problems," National Science Foundation [BCS-1229223; \$114,997]
- 2008/12 (co-PI with J. Murdoch, C. Eckel, and M. Caughy) "AOC: publicly driven investment, neighborhood change and household behavior," National Science Foundation (Human and Social Dynamics competition) [SES-0827350; \$1,000,178]
- 2007/08 (co-PI with M. Tiefelsdorf) "Training workshop in spatial filter modeling for environmental, health and social scientists and applied statisticians," National Science Foundation [SES 0724964; \$66,794]
- 2006/09 (investigator; with I. Vojnovic /Michigan State U., PI) "Exploring the social dynamics of accessibility, travel behavior, and physical activity by income/race, age, and gender: An inner-city/suburb comparison in the Detroit region," National Science Foundation (Human and Social Dynamics competition) [SES 0624263; \$643,964].
- 2004/08 (investigator; with Dr. John C. Beier/U. of Miami, PI) "Vector-borne disease control in urban environments," Interdisciplinary Exploratory Centers, National Institutes of Health [NIH 1 P20 RR20770-3; \$1,668,869]; see <http://www.intervector.org/>
- 2004/08 (with M. Tiefelsdorf) "Collaborative proposal: approximating eigensystems of matrices used in spatial analysis," Division of Mathematical Sciences and Methodology, Measurement & Statistics Programs, National Science Foundation [DMS-0611883; \$139,351+20,427 = \$159,778]
- 2004 (with R. Haining) Leverhulme Trust [\$40,100]
- 2002/08 "Geography-Based Exposure Assessment for Urban Metals," Geography & Regional Science/Methodology, Measurement & Statistics Programs, National Science Foundation [BCS-0221949/0400559/0552588; \$420,000 + \$7,500 SU/UM/UTD grant + \$11,725 NSF-REU].
- 2001/02 "Scientific visualization of spatial autocorrelation," John Simon Guggenheim Memorial Foundation [\$35,000]
- 2000/01 "Model-based small geographic area estimation: a comparison of two methodologies," USDA-NASS Research Division [\$69,290]
- 1999/03 "An ordinary least squares (OLS) solution to handling spatial autocorrelation latent in georeferenced data," Geography & Regional Science/Measurement, Methods & Statistics Programs, National Science Foundation [BCS-9905213; \$203,876 + \$10,000 SU grant]
- 1999/00 (with G. Jacquez) supplement to "Biostatistical methods in environmental Epidemiology," the National Cancer Institute [\$49,790]
- 1999 ASA/USDA-NASS Research Fellowship [\$69,290]
- 1996/7 (GIS consultant for W. Coplin and A. Merget) "Community Benchmarks: a program to develop indicators of community conditions," Alfred P. Sloan Foundation [grant of \$579,000].
- 1995/97 "Uncovering relationships between geo-statistical and spatial autoregressive modelling," Geography & Regional Science/Methodology, Measurement & Statistics Programs, National Science Foundation [SBR-9507855; \$133,847 + \$5000 REU supplement].
- 1995 (GIS consultant for D. Armstrong and L. Wurst) "A unified site file and GIS data base for NYSDOT Region 3," New York State ISTE Transportation Enhancement Program [\$200,000].
- 1993 U.S./Canada Fulbright fellowship [\$25,000]
- 1992/94 Collaborative project between SU and IBM [\$39,443 in equipment]
- 1992/94 Cornell Theory Center [advanced computing resources]
- 1992/93 National Science Foundation (Geography & Regional Science and Statistics & Probability

- Programs) [\$71,951 + \$10,000 SU match]
- 1991/93, 94/96 NATO Scientific Affairs Collaborative Research Grant Program (with R. Haining, U. of Sheffield, and G. Arbia, U. of Rome); Phases I and II [\$14,300]
- 1989/91 NYS Science & Technology Foundation (consortium comprised of Syracuse U., SUNY College of Environmental Science & Forestry, and Cornell U.) [\$200,000]; follow up (with M. Monmonier, A. Can, F. Csillag, and J. Mercer) [\$30,000]
- 1989/90 National Center for Supercomputing Applications (U. of Illinois) [advanced computing resources]
- 1988/90 National Science Foundation (Geography & Regional Science) [\$40,000]
- 1987 Canadian Studies Program, Canadian Embassy (Academic Relations Office) [\$4,300]
- 1985 National Science Foundation (Geography & Regional Science) [\$10,000]
- 1985 Director, NATO Advanced Studies Institute (grant with R. Haining, U. of Sheffield) [\$35,000]
- 1981/2, 83/4, 85/7 NATO Research Grant for International Collaboration in Science (with R. Bennett, Cambridge U., and R. Haining, U. of Sheffield): Phases I, II and III [\$15,000]
- 1983/84 National Science Foundation (Geography & Regional Science) [\$34,700]
- 1979/80, 81/82 Director, NATO Advanced Studies Institutes (grant with, respectively, R. MacKinnon and A. Lea) [\$35,000; \$35,000]
- Summer, 1979 Association of American Geographers Research Grant [\$400]

Minor Research Grant Support (\$21K +)

1998 & 2000, SU Geography Department/Maxwell Dean's Office [\$2500; \$2000]; 1994, SU/Center for Instructional Development [\$3000]; 1987, SUNY/Buffalo Office of Teaching Effectiveness [\$1000]; 1985 & 1987, Tenured Faculty Mini-grant (NY State/United University Professions) [\$750; \$1000]; 1985, VP-Research, SUNY/Buffalo [\$600]; 1982, Social Science Research Development Funds Grant, SUNY/Buffalo [\$1063]; 1982, Baldy Center for Law and Social Policy Faculty Fellowship, SUNY/Buffalo [\$2500]; 1981, SUNY Research Foundation Grant [\$3450]; 1981, National Science Foundation travel grant for ISOLDE 81 (Skodsborg, Denmark) [\$894 + room and board]; 1980, Baldy Center for Law and Social Policy Grant, SUNY/Buffalo [\$95]; 1978, OUPID Instructional Development Grant (with H. Jacobs) [\$600]; 1976, U. of Toronto/York U. Joint Program in Transportation Grant [\$2000]

PUBLICATIONS, PRESENTATIONS, AND INVITED LECTURES

[2015: Web of Science H-index = 22; Scopus H-index = 20; Google Scholar H-index = 41 (29 since 2010)]

Books (9)

- 2013 (with Y. Chun; 2nd) *Spatial Statistics & Geostatistics*. Thousand Oaks, CA: SAGE.
- 2011 (with J. Paelinck; 1st) *Non-standard Spatial Statistics and Spatial Econometrics*, Berlin: Springer-Verlag "Advances in GIScience Series."
- 2003 *Spatial Autocorrelation and Spatial Filtering: Gaining Understanding through Theory and Scientific Visualization*, Berlin: Springer-Verlag.
- 1999 (with L. Layne; 1st) *A Casebook for Spatial Statistical Data Analysis: A Compilation of Analyses of Different Thematic Datasets*, NY: Oxford University Press.
- 1997 (with C. Amrhein; 1st) *Multivariate Statistical Analysis for Geographers*, Englewood Cliffs, NJ: Prentice Hall.
- 1993 *Spatial Regression Analysis on the PC: Spatial Statistics Using SAS*, Washington, DC: Association of American Geographers "Resource Publications in Geography Series."
- 1991 (with C. Amrhein; 1st) *Statistical Analysis for Geographers*, Englewood Cliffs, NJ: Prentice Hall.
- 1988 *Advanced Spatial Statistics*, Dordrecht: Martinus Nijhoff.
- 1987 *Spatial Autocorrelation: A Primer*, Washington, D. C.: Assn. of American Geographers" Resource Publications in Geography Series" [source for a GRASS-GIS program to calculate autocorrelation statistics].

Edited Books (6)

- 1998 (with C. Amrhein and J.-M. Hurriot) *Advances in Spatial Modelling and Methodology: Essays in Honor of Jean Paelinck*, Dordrecht: Kluwer
- 1995 (with S. Arlinghaus) *Practical Handbook of Spatial Statistics*, Boca Raton, FL: CRC Press.
- 1990 *Spatial Statistics: Past, Present, and Future*, Ann Arbor, MI: Institute of Mathematical Geography.

- 1986 (with R. Haining) *Transformations Through Space and Time*, The Hague: Martinus-Nijhoff.
 1983 (with A. Lea) *Evolving Geographical Structures*, The Hague: Martinus Nijhoff.
 1981 (with R. MacKinnon) *Dynamic Spatial Models*, Alphen aan den Rijn: Sijthoff and Noordhoff.

Monographs (2)

- 1994 (with J. Newman) *Eliminating Hunger in Africa: Technical and Human Perspectives on Food Allocation*, Maxwell School of Citizenship and Public Affairs, Syracuse University—reproduction permission given to Copyright Clearing House in 2000.
 1989 *Simulating $K=3$ Christaller Central Place Structures: An Algorithm Using a Constant Elasticity of Substitution Consumption Function*, Ann Arbor, MI: Institute of Mathematical Geography.

Journal Guest Editorships (4)

- 2014 (with A. Stein and S. Stehman) *Spatial Statistics*, special issue entitled “Revealing Intricacies in Spatial and Spatio-Temporal Data: Papers from the Spatial Statistics 2013 Conference.”
 2007 (with G. Christakos) *J. of Stochastic Environmental Research & Risk Assessment*; special issue about medical geography as a science of interdisciplinary knowledge synthesis under conditions of uncertainty
 2006 *Geographical Analysis*: special issue about Poisson modeling of georeferenced counts data
 1992 (with C. Weiss and C. Duguay) *The Operational Geographer*, 10 (2): 2-3; special issue about spatial data analysis

Publications in Major Refereed Journals (63 single authored; 76 joint authored; * denotes publication with student)

- 2015 *(with T. Brown, J. Wood; 3rd) Using spatial autocorrelation analysis to guide mixed methods survey sample design decisions, *J. of Mixed Methods Research*, forthcoming
 2015 On the eigenvalue distribution of adjacency matrices for connected planar graphs, *Quaestiones Geographicae*, forthcoming.
 2015 (with D. Murakami; 2nd) Random effects specifications in eigenvector spatial filtering: A simulation study *Journal of Geographical Systems*, forthcoming; <http://link.springer.com/article/10.1007/s10109-015-0213-7>.
 2015 Approximation of Gaussian spatial autoregressive models for massive regular square tessellation data, *International J. of Geographical Information Science*, 29: 2143-2173.
 2015 (with Y. Chun; 1st) Spatial autocorrelation in spatial interactions models: geographic scale and resolution implications for network resilience and vulnerability, *Networks and Spatial Economics*, 15: 337-365.
 2014 (with Y. Chun; 1st) An eigenvector spatial filtering contribution to short range regional population forecasting, *Economics and Business Letters*, 3: 208-217.
 2014 Reflections on the current state of spatial statistics education in the United States: 2014, *Geo-spatial Information Science*, 17: 229-235.
 2014 (with Y. Chun; 2nd) A quality assessment of eigenvector spatial filtering based parameter estimates for the normal probability model, *Spatial Statistics*, 10: 1-11.
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- 1996 (with A. Can) "Spatial statistical/econometric versions of simple urban population density models," in S. Arlinghaus and D. Griffith (eds.), *Practical Handbook of Spatial Statistics*, Boca Raton, FL: CRC Press, pp. 231-249.
- 1995 "The general linear model and spatial autoregressive models," in L. Anselin and R. Florax (eds.), *New Directions in Spatial Econometrics*, Berlin: Springer-Verlag, 1995, pp. 273-295.
- 1993 Which spatial statistics techniques should be converted to GIS functions? in M. Fischer and P. Nijkamp (eds.), *Geographic Information Systems, Spatial Modelling and Policy Evaluation*, Berlin: Springer-Verlag, pp. 103-114.
- 1992 Model identification for estimating missing values in space-time data series: monthly inflation in the U.S. Urban System, 1977-1990, in G. Haag, U. Mueller, and K. Troitzsch (eds.), *Economic Evolution and Demographic Change: Formal Models in Social Sciences*, Berlin: Springer-Verlag, pp. 192-218.
- 1990 A numerical simplification for estimating parameters of spatial autoregressive models, in D. Griffith (ed.), *Spatial Statistics: Past, Present, and Future*, Ann Arbor, MI: Institute of Mathematical Geography, pp. 185-195.
- 1984 Theory of spatial statistics, in C. Willmott and G. Gaile (eds.), *Spatial Statistics and Models*, Dordrecht, The Netherlands: R. Reidel, pp. 3-15.
- 1984 Measuring the arrangement property of a system of areal units generated by partitioning a planar surface, in G. Bahrenberg, M. Fischer and P. Nijkamp (eds.), *Recent Developments in Spatial Analysis: Methodology, Measurement, Models*, Aldershot, UK: Gower, pp. 191-200.
- 1982 Geographic infrastructure and numerical spatial analysis, in *Spatial-Economic Structures of the Far East*, Vladivostok: USSR Academy of Sciences, pp. 93-103.

Conference Proceedings (11 single authored; 14 joint authored)

- 2012 (with Heuvelink; 1st) Chapter 1: Deriving space-time variograms from space-time autoregressive (STAR) model specifications, in A. Yeh, J. Shi, Y. Leung, and C. Zhou (eds.), *Advances in Spatial Data Handling and GIS*, pp. 3-14. Berlin: Springer Verlag.
- 2011 Positive spatial autocorrelation, mixture distributions, and geospatial data histograms, in Y. Leung, B. Lees, C. Chen, C. Zhou, and D. Guo (eds.), *Proceedings of the Spatial Data Mining and Geographical Knowledge Services (ICSDM) 2011 IEEE International Conference*, Fuzhou, China, June 29-July 1. Beijing: IEEE, Inc., pp. 1-6; <http://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=5958522>.
- 2010 (with R. Haining; 1st) Analyzing small geographic area datasets containing values having high levels of uncertainty, in N. Tate and P. Fisher (eds.), *Accuracy 2010*, Proceedings of the 9th International Symposium on Spatial Accuracy Assessment in Natural Resources and Environmental Sciences (University of Leicester, 20-23 July), Leicester, UK: MPG Books Group, pp. 289-292.
- 2008 Spatial autocorrelation and random effects in digitizing error, in J. Zhang and M. Goodchild (eds.), *Spatial Uncertainty*, vol I, Proceedings of the 8th International Symposium on Spatial Accuracy Assessment in Natural Resources and Environmental Sciences, Shanghai, China: World Academic Press, pp. 94-102.
- 2006 Statistical efficiency of model-informed geographic sampling designs, in C. Mário and M. Painho (eds.), *Proceedings of Accuracy 2006*, Proceedings of the 7th International Symposium on Spatial Accuracy Assessment in a Natural Resources and Environmental Sciences, Lisboa, Portugal: Instituto Geográfico Português, pp. 91-98.
- 2002 (with S. McMaster; 1st) Spatial statistical evaluation of a forestry suitability index: assessing uncertainty in spatial decision making, in G. Hunter and K. Lowell (eds.), *Accuracy 2002*, Proceedings of the 5th International Symposium on Spatial Accuracy Assessment in Natural Resources and Environmental Sciences, Melbourne, AU: RMIT U., pp. 522-530.
- 2000 (with G. Arbia and R. Haining) Error propagation effects in aggregated spatial data with location error, in G. Heuvelink and M. Lemmens (eds.), *Accuracy 2000*, Proceedings of the 4th International Symposium on Spatial Accuracy Assessment in Natural Resources and Environmental Sciences, Delft, NL: Delft U. Press, pp. 261-266.
- 2000 Spatial statistical reflections on an area frame sampling design for collecting agricultural statistics in South Africa, *Proceedings of the RSAI/Port Elizabeth Technikon Symposium in South Africa on: Challenges for Integrated Regional Development: International & South African Experiences*, Port Elizabeth, South Africa: <http://www.petech.ac.za/RegDev/html/Paper-Griffith.htm>.
- 1999 (with G. Arbia and R. Haining) Uncertainty and error propagation in map analyses involving arithmetic and

- overlay operations: inventory and prospects, in K. Lowell and A. Jaton (eds.), *Spatial Accuracy Assessment: Land Information Uncertainty in Natural Resources*, Ann Arbor Press pp. 11-25
- 1999 *(with P. Fellows) Pixels and eigenvectors: classification of LANDSAT TM imagery using spectral and locational information, in K. Lowell and A. Jaton (eds.), *Spatial Accuracy Assessment: Land Information Uncertainty in Natural Resources*, Ann Arbor Press, pp. 309-317.
- 1997 *(with L. Layne) Uncovering relationships between geo-statistical and spatial autoregressive models, in the 1996 *Proceedings on the Section on Statistics and the Environment*, American Statistical Association, pp. 91-96.
- 1996 *(with L. Layne and P. Doyle) Further explorations of relationships between semi-variogram and spatial autoregressive models, in H. Mowrer, R. Czaplewski and R. Hamre (eds.), *Spatial Accuracy in Natural Resource and Environmental Sciences: Second International Symposium*. Ft. Collins CO: Rocky Mountain Forest and Range Experiment Station, General Technical Report RM-GTR-277, pp. 147-154.
- 1994 (with C. Amrhein) Errors in spatial data bases: a summary of results from several research projects, in R. Congalton (ed.), *International Symposium on the Spatial Accuracy of Natural Resource Data Bases*. Bethesda, MD: American Society for Photogrammetry & Remote Sensing, pp. 214-226.
- 1993 *(with D. Long, S. DeGloria, G. Carlson, and G. Nielsen) Spatial regression analysis of crop and soil variability within an experimental research field, in P. Robert et al (eds.), *Proceedings of the First Workshop on Soil Specific Crop Management*, Minneapolis, MN, April 14-16, 1992. Madison, WI: ASA-CSSA-SSSA, pp. 365-366.
- 1992 Statistical analysis of spatial urban census data in the presence of missing values, *Proceedings, Statistics Canada Symposium 91: Spatial Issues in Statistics* (held November 12-14), Ottawa: Statistics Canada, pp. 251-268.
- 1991 (with C. Amrhein) A simple model for statistical quality control of geographical data in an information system, *Proceedings, The Canadian Conference on GIS* (held March 18-22), Ottawa: CISM, pp. 94-103.
- 1991 Data quality and visualization: a position paper, in M. Beard, B. Buttenfield, and S. Clapham (eds.), *NCGIA Research Initiative 7: Visualization of Spatial Data Quality*, Technical Paper No. 91-26, NCGIA, C77-C85.
- 1989 Distance calculations and errors in geographic data bases, in M. Goodchild and S. Gopal (eds.), *Accuracy of Spatial Databases*, New York: Taylor & Francis, pp. 81-90; **translated and reprinted in abridged form** in *Nederlands Geodetisch Tijdschrift Geodesia*, 92-1 (1992), 4-8; specially acknowledged by the French National Geographic Institute, 1997.
- 1986 Model identification for estimating missing values in space-time data series: monthly inflation in the U.S. urban system, 1977-1985, in D. Griffith and R. Haining (eds.), *Transformations Through Space and Time*. The Hague: Martinus Nijhoff, pp. 309-319.
- 1986 *(with J. Huff, M. Sonis, L. Leifer and D. Straussfogel) Dynamic central place theory: an appraisal and future prospects, in D. Griffith and R. Haining (eds.), *Transformations Through Space and Time*. The Hague: Martinus Nijhoff, pp. 121-151.
- 1985 (with R. Haining and R. Bennett) Estimating missing values in space-time data series, in J. Ord and O. Anderson (eds.), *Time Series Analysis: Theory and Practice 6*. Amsterdam: North-Holland, pp. 273-282.
- 1983 Contraction dynamics of the Puerto Rican sugar industry: a preliminary analysis, in B. Lentnek (ed.), *Contemporary Issues in Latin American Geography*, Proceedings of CLAG #9, pp. 142-143.
- 1983 *(with C. Amrhein and J. Guevara) The effect of random Thiessen structure and random processes on the measurement of spatial autocorrelation, *Proceedings, 14th annual Pittsburgh Modelling and Simulation Conference*, pp. 585-589.
- 1983 Phasing-out of the Puerto Rican sugar industry, in D. Griffith and A. Lea (eds.), *Evolving Geographical Structures*. The Hague: Martinus Nijhoff, pp. 196-228.
- 1981 Interdependence in space and time: numerical and interpretative considerations, in D. Griffith and R. MacKinnon (eds.), *Dynamic Spatial Models*. Alphen aan den Rijn: Sijthoff and Noordhoff, pp. 258-287.

Secondary and Non-refereed Publications (39 single authored; 18 joint authored)

- 2015 MR3314161, *Mathematical Reviews*: Maridewicz, A., and S. Puntanen, All about the \perp with its applications in the linear statistical models, *Open Mathematics* 13 (2015), 33-50; forthcoming.

- 2015 MR3241636, *Mathematical Reviews*: Gruber, M. *Matrix Algebra for Linear Models*, Wiley, 2014; <http://www.ams.org/mathscinet/pdf/3241636.pdf?pg1=RVR1&pg3=authreviews&s1=76920&vfref=html&r=1>
- 2014 MR3247003, *Mathematical Reviews*: Jiang, B., S. He, Z. Li, and S. Zhang. Moments tensors, Hilbert's identity, and k-wise uncorrelated random variables. *Mathematical Operations Research* 39 (2014), no. 3, 775-788; <http://www.ams.org/mathscinet-getitem?mr=3247003>
- 2014 MR3216647, *Mathematical Reviews*: Protasov, V.; and D. Logofet. Rank-one corrections of nonnegative matrices, with an application to matrix population models. *SIAM J. Matrix Anal. Appl.* 35 (2014), no. 2, 749-764; <http://www.ams.org/mathscinet-getitem?mr=3216647>
- 2014 MR3204324, *Mathematical Reviews*: Merikoski, Jorma K.; Kovačec, Alexander An upper bound for the largest eigenvalue of a nonnegative symmetric matrix with zero diagonal. *The Natália Bebiano anniversary volume*, 121--129, Textos Mat. Sér. B, 44, Univ. Coimbra, Coimbra, 2013; <http://www.ams.org/mathscinet-getitem?mr=3204324>
- 2014 MR3137632, *Mathematical Reviews*: Carlson, G. The shape of data, *Foundations of Computational Mathematics, Budapest 2011*, 16–44, Cambridge Univ. Press, Cambridge, London Math. Soc. Lecture Note Ser., 403, 2013; <http://www.ams.org/mathscinet-getitem?mr=3137632>
- 2014 MR3102908, *Mathematical Reviews*: Jordan, M. On statistics, computation and scalability, *Bernoulli* 19 (2013), no. 4, 1378-1390; <http://www.ams.org/mathscinet-getitem?mr=3102908>
- 2014 MR3097174, *Mathematical Reviews*: Bruno, F., D. Cocchi, and A. Vaghegini. Finite population properties of individual predictors based on spatial patterns, *Environ. Ecol. Stat.* 20 (2013), no. 3, 467-494; <http://www.ams.org/mathscinet-getitem?mr=3097174>
- 2014 MR3090433, *Mathematical Reviews*: Hürlimann, W. Generalized Helmert-Ledermann orthogonal matrices and rom simulation, *Linear Algebra Appl.* 439 (2013), no. 7, 1716-1729; <http://www.ams.org/mathscinet-getitem?mr=3090433>
- 2014 Editorial: Editor's Comments, *Geographical Analysis*, 46: 337-339.
- 2014 (with S. Stehman and A. Stein; 1st) Editorial for the special issue entitled "Revealing Intricacies in Spatial and Spatio-Temporal Data: Papers from the Spatial Statistics 2013 Conference," *Spatial Statistics*, 9: 1-3.
- 2014 (with S. Arlinghaus; 2nd) Eigenvalue fractal geometry: an alternative approach to fractal generation, *Solstice*, XXV (1), <http://www.mylovedone.com/image/solstice/sum14/>
- 2013 MR2993871, *Mathematical Reviews*: Caro-Lopera, F.; González-Farías, G.; Balakrishnan, N. Determinants, permanents and some applications to statistical shape theory, *J. Multivariate Anal.* 114 (2013), 29–39; <http://www.ams.org/mathscinet-getitem?mr=2993871>
- 2012 MR2921728, *Mathematical Reviews*: Klein, A.; and Spreij, P. Transformed statistical distance measures and the Fisher information matrix, *Linear Algebra Appl.* 437 (2012), no. 2, 692-712; <http://www.ams.org/mathscinet-getitem?mr=2921728>
- 2012 MR2869495, *Mathematical Reviews*: Bocci, C.; Carlini, E.; and Rapallo, F. Perturbation of matrices and nonnegative rank with a view toward statistical models, *SIAM J. Matrix Anal. Appl.* 32 (2011), no. 4, 1500-1512; <http://www.ams.org/mathscinet-getitem?mr=2869495>
- 2011 Editorial: Geography, graph theory, and the new network science, *Geographical Analysis*, 43: 345-346.
- 2010 (with S. Arlinghaus; 2nd) Mapping it out! A contemporary view of Burgess's concentric ring model of urban growth, *Solstice*, XXI (2), www.mylovedone.com/image/solstice/win10/ArlinghausandGriffith.html
- 2010 Editorial: Celebrating 40 years of scientific impacts by Alan Wilson, *Geographical Analysis*, 42: 361-363.
- 2010 (with R. Patuelli, N. Schanne, and P. Nijkamp; 3rd) "Persistent disparities in regional unemployment: application of a spatial filtering approach to local labour markets in Germany," also *Research Memorandum 2010-1* (also *Quaderni DSE Working Paper* No. 743, Università de Bologna). Amsterdam: Faculty of Economics and Business Administration, Vrije Universiteit.
- 2009 Editorial: Celebrating 40 years of scientific impacts by Cliff and Ord, *Geographical Analysis*, 41: 343-345.
- 2009 Introduction, *Geographical Analysis*, 41: 1-2.
- 2007 (with G. Christakos) Medical geography as a science of interdisciplinary knowledge synthesis under conditions of uncertainty, *Stochastic Environmental Research & Risk Assessment*, 21: 459-460.
- 2007 An assessment of Mr. Alec Rawls's "Islamic and jihadist design features of the Crescent/Bowl of Embrace," report submitted to the National Park Service, U.S. Department of the Interior.
- 2006 Beyond the bell-shaped curve: Poisson models in spatial data analysis, *Geographical Analysis*, 38: iii-iv.
- 2006 *(with R. Patuelli, M. Tiefelsdorf and P. Nijkamp) The use of spatial filtering techniques: the spatial and

- space-time structure of German unemployment data, *Discussion Paper # 06-049/3*, Tinbergen Institute, Amsterdam, The Netherlands.
- 2001 (with A. Lea) "Opposites don't attract in spatial autocorrelation," *GEOWorld*, 14, #11 (November), 42-44 (www.geoplance.com/gw/).
- 2000 *(with P. Fellows and F. Lagona), "Promoting statistical literacy: a conceptual approach to teaching first-year students," in *1999 Sigma Xi Forum Proceedings*, p. 173.
- 2000 "Small geographic area estimation contributions to federal agricultural data: a Pennsylvania case study," *The Pennsylvania Geographer*, 38 (#1): 3-29.
- 2000 "President's Column," *Sigma Xi News*, 9 (#3), March, pp. 1, 5.
- 1999 "A methodology for small area estimation with special reference to a one-number agricultural census and confidentiality: results for selected major crops and states," *RD Research Report*, Number RD-99-04, National Agricultural Statistics Service, U.S. Department of Agriculture.
- 1999 "President's Column," *Sigma Xi News*, 9 (#2), October, pp. 1, 4.
- 1997 (with F. Lagona) "Specification errors in spatial models: impacts on modeling and estimation," *Discussion Paper* No. 108, Department of Geography, Syracuse University.
- 1997 "Final Report: Spatial Sampling for the 'Community Benchmark Project'" for project funded by the Alfred P. Sloan Foundation, W. Coplin and A. Merget PIs, Public Administration.
- 1995 (with S. Borcker, S. Stehman, and S. Halperin) "STT 101: Introduction to Statistics, a final report on development of the course," *Final Report* submitted to the Dean of Arts & Sciences; *Final Report* on "Design of a numerically based introduction to statistics (STT 101)," Syracuse University Faculty Instructional Grants Program, to Center for Instructional Development.
- 1995 (with R. Martin) "Some results on graph spectra, with applications to geographic spatial modelling," *Research Report* No. 461/95, Department of Probability and Statistics, U. of Sheffield.
- 1993 *(with A. Sone) "Some trade-offs associated with computational simplifications for estimating spatial statistical/econometric models: preliminary results," *Discussion Paper* No. 103, Department of Geography, Syracuse University.
- 1993 A course in spatial statistics, *Technical Report* #153, Department of Statistics, Oregon State University.
- 1992 (with J. Mercer, F. Csillag, M. Monmonier, and A. Can) "The Utility of GIS for State Housing Agency Databases: New York State's SHARS," *Final Report* submitted to the NYS Science and Technology Foundation.
- 1992 "Estimating missing values in spatial urban census data," *The Operational Geographer*, 10 (2): 23-26 [also translated into French].
- 1992 *(with A. Sone) "Trade-offs associated with computational simplifications for estimating spatial statistical models," *Working Paper*, l'Institut de Mathematiques Economiques, Universite de Bourgogne, Dijon, France (with French "Resumé").
- 1991 "Error assessment, locational errors, and attribute errors," in GIS and spatial data analysis: report on the Sheffield workshop, *Regional Research Laboratory Initiative Discussion Paper* #11, R. Haining and S. Wise (eds.), University of Sheffield, November pp. 14-15.
- 1991 "Univariate and multivariate modelling of areal data, in GIS and spatial data analysis: report on the Sheffield workshop," in R. Haining and S. Wise (eds.), *Regional Research Laboratory Initiative Discussion Paper* #11, University of Sheffield, pp. 22-25.
- 1991 (with C. Amrhein) "A statistical model for analyzing error in geographic data in an information system," *Discussion Paper* No. 38, Department of Geography, University of Toronto.
- 1991 *(with A. Sone) "An evaluation study of a location-allocation modeling software package for the PC," *Discussion Paper* No. 101, Department of Geography, Syracuse University.
- 1990 *(with R. Lewis, B. Li, I. Vasiliev, S. McKnight, X. Yang) "Developing MINITAB software for spatial statistical analysis: a tool for education and research," *The Operational Geographer*, 8 (3): 28-33.
- 1990 (with R. Jensen, M. Monmonier, S. DeGloria, L. Herrington) *Final Report*, New York State Program in Geographic Information and Analysis Planning Grant, Syracuse University, 191 pp.
- 1990 "A New York State Program in Geographic Information and Analysis: report on the planning grant," *URISA NYS Chapter Newsletter*, Vol. 1, #2 (Winter).
- 1988 "A Reply to R. Martin, Some comments on correction techniques for boundary effects and missing value techniques," *Geographical Analysis*, 20: 70-75.
- 1986 "An overview of the spatial statistics literature," *Discussion Paper* No. 1986/6, Foundations of Empirical

Economics Research Series, Netherlands Economic Institute.

- 1981 "Towards a theory of spatial statistics: a rejoinder," *Geographical Analysis*, 13: 91-93.
- 1978 The impact of configuration and spatial autocorrelation on the investigation and interpretation of geographical models, unpublished doctoral dissertation, Department of Geography, University of Toronto.
- 1977 "Spatial economic dynamics and the Canadian grain handling system: some preliminary findings," Working Paper No. 5, U. of Toronto/York U. Joint Program in Transportation, U. of Toronto.
- 1976 "Spatial autocorrelation problems: some preliminary sketches of a structural taxonomy," *The East Lakes Geographer*, 11: 59-68.
- 1975 "The search for spatial theories: on the role of conceptual and computational models in geographic research," *The Geographical Bulletin*, 9: 7-13.
- 1975 (with L. Bourne) "The spatial organization of urban land use: a statistical evaluation of a classification," Research Paper No. 69, Centre for Urban and Community Studies, University of Toronto.
- 1974 "A maximum likelihood technique for estimating the parameters of a spatial probability function," Discussion Paper No. 16, Department of Geography, University of Toronto.
- 1972 "The use of regression models in geographic research: a classroom methodology," *The Pennsylvania Geographer*, 10: 7-14.

Computer Software Design (5)

- Spatial autocorrelation simulation game; review in *The Professional Geographer*, 39 (1987), 234-235; described in the AAG Microcomputer Specialty Group newsletter, February, 1989.
- Simulating central place structures; review in *The Professional Geographer*, 42 (1990), 246-247 & *Mathematical Review*; described in the AAG Microcomputer Specialty Group newsletter, October, 1990.
- "Spatial regression analysis on the PC: spatial statistics using MINITAB," Discussion Paper #1, Institute of Mathematical Geography, 1989; review in *The Professional Geographer*, 42 (1990), 499-500; described in the AAG Microcomputer Specialty Group newsletter, February, 1991.
- Spatial regression analysis on the PC: spatial statistics using SAS, described in the AAG Microcomputer Specialty Group newsletter, February, 1992.
- EXPLORHO, Version 2.0.

Book and Computer Software Reviews (28)

- *Technometrics*
 - 1988 *Statistical Techniques in Geographical Analysis*, 30: 348-349.
- *Geographical Analysis*
 - 2013 *An Introduction to Scientific Research Methods in Geography and Environmental Studies* (2nd ed.), 45: 442-444.
 - 1993 *Statistics for Spatial Data*, 25: 271-275.
 - 1986 *Spatial Data Analysis by Example*, 18: 372-373.
- *Annals*, Association of American Geographers
 - 1979 *Specification and Estimation Problems in Models of Spatial Dependence*, 69: 497-498.
 - 2004 *The Geographical Dimensions of Terrorism*, 94: 998-1001.
 - 2010 *Seven Rules for Social Research*, 100: 1214-1216.
 - 2014 *Spatial Mathematics: Theory and Practice through Mapping*, *The AAG Review of Books*, 2(2): 65-67.
- *J. of Regional Science*
 - 1993 *Spatial Tessellations*, 33: 564-567.
- *Environment and Planning*
 - 1997 *Interactive Spatial Data Analysis*, 29A: 747-752 (review essay)
 - 1993 *Applications of the Expansion Method*, 20B: 370-371.
 - 1983 *European Progress in Spatial Analysis*, 15A: 135-136.
- *International J. of Geographical Information Sciences*
 - 2004 *Spatial Statistics Through Applications*, 18: 207-208.
- *Economic Geography*
 - 1989 *Spatial Econometrics*, 65: 160-162.

- 1988 *Geographical Systems and Systems of Geography*, 64: 396-400.
- *The Professional Geographer*
 - 1987 *Statistical Methods for Geographers*, 39: 244-245.
 - 1982 *Spatial Statistics*, 34: 231-232.
 - 1980 *Spatial Dynamics and Optimal Space-time Development*, 32: 488-489.
 - 1986 *PC-MATLAB*, 38: 427-428.
- *Geographical Review*
 - 1989 *Metropolis*, 79: 479-481.
- *Progress in Human Geography*
 - 1983 *Spatial Processes*, 7: 149-150.
- *Annals of Regional Science*
 - 1988 *Spatial Cycles*, 22 (#2): 119-120.
 - 1983 *Spatial Diffusion*, 17 (#1): 125-126.
 - 1981 *Spatial Systems*, 15 (#3): 118-119.
 - 1979 *Resources, Tariffs, and Trade: Ontario's State*, 13 (#2): 159-161.
 - 1978 *Quantitative and Analytical Studies in East-West Economic Relations*, 12 (2): 128-130.
- *J. of Geography*
 - 1980 *Statistical Concepts in Geography*, 79: 273.
- *The Operational Geographer*
 - 1993 *RESAMPLE*, 11 (3): 39-40.
- discovered and documented 2 software bugs in initial MINITAB 11.0 release, 1997
- discovered and documented 1 software bug in initial SAS 6.12 release, 1997

Invited Lectures and Presentations

FEATURED/KEYNOTE PRESENTATIONS (46)

- 2014 Spatial autocorrelation in spatial interaction models: geographic scale and resolution implications for journey-to-work flows, network resilience, and vulnerability, 2nd International IAB/RCEA/ZEW Workshop, IAB, Nuremberg, Germany
- 2014 Reflections on the current state of spatial statistics education in the United States: 2014, ISPRS Technical Commission VI Symposium, Wuhan, China
- 2013 Implementing Gaussian spatial autoregressive models for massive georeferenced datasets: some spatial data mining outcomes IEEE SDSTDM-13, Dallas, TX
- 2013 Spatial autocorrelation is everywhere, 18th European Colloquium of Theoretical & Quantitative Geography, Dourdan, France
- 2012 Selected challenges from spatial statistics for spatial econometrics, Spatial Econometrics and Regional Economic Analysis Conference, U. of Lodz, Poland
- 2012 Ten maps that changed the world, Poznań City Hall-Adam Mickiewicz University Lecture Series
- 2011 Qualitative geographic sample size in the presence of spatial autocorrelation, 7th Arthur Getis Spatial Analysis Lecture, San Diego State University
- 2011 (with M. Fischer) Eigenvector spatial filtering: addressing spatial autocorrelation in spatial interaction data, Advances in the statistical modeling of spatial interaction data workshop, U. of Lugano (Swiss NSF funded)
- 2011 Space, time, and space-time eigenvector filter specifications that account for autocorrelation, Symposium on Geo-computation and Analysis, LIESMARS, Wuhan University; International Autumn School in Spatial Econometrics, University of Castilla-La Mancha at Toledo, Toledo (Spain)
- 2010/11 Positive spatial autocorrelation impacts on attribute variable frequency distributions, 3rd Spatial Statistics and Image Modeling Symposium, Foz de Iguaçu, Brazil (2010); Korean Society for Geospatial Information System, Busan, Korea (2011); Korean Cartographic Association, Seoul, Korea (2011)
- 2010 (with S. Arlinghaus) Urban compression patterns: fractals and non-Euclidean geometries —inventory and prospect, 1st International Conference on Cities and Their Growth: Sustainability and Fractality, Adam Mickiewicz U., Poznań, Poland
- 2010 (with G. Heuvelink) Deriving space-time variograms from space-time autoregressive (STAR) model specifications, IGU, Hong Kong

- 2009 Spatial filtering: past, present, and future, International Symposium on Geo-computation and Analysis (ISGA), LIESMARS, Wuhan University
- 2009 Remarks on observational dependence and the utilization of spatial filters in labour-market research, Labour Market Strategies and Policies in the Age of Globalization, IAB, Nuremberg, Germany
- 2007 A numerical study of planar and near-planar adjacency matrices used in geographical analysis, MAT-TRIAD 2007, Institute of Mathematics of the Polish Academy of Sciences.
- 2007 Spatially structured random effects & Spatial filtering and space-time data, Symposium on Quantitative Ecology, Research Center for Biodiversity of Academia Sinica, Taiwan.
- 2006 Entering an interdisciplinary world, 2006 Commencement Address, Indiana U. of Pennsylvania (reported on in the Sunday, May 14, 2006, *Indiana Gazette*).
- 2006 To IUP and beyond, 2006 Department of Geography & Regional Planning, Indiana U. of Pennsylvania, convocation address.
- 2003 Prioritizing remediation within a hazardous waste site, Students for Spatial Statistics Workshop, GEOIDE/Wilfrid Laurier U.
- 2002 Statistics and the Environment/American Statistical Association, U. of Washington, Seattle
- 2001 Syracuse Chapter of Sigma Xi
- 1999 Pennsylvania Geographical Society, annual meeting, Indiana, PA
- 1998 Third International Symposium on Spatial Accuracy Assessment in Natural Resources and Environmental Sciences, Quebec City, Canada
- 1997 Presidential address, 44th annual North American meetings of the Regional Science Association International, Buffalo, NY
- 1995 Annual Awards Presentation and Graduation Reception for the Department of Geography & Program in Planning, U. of Toronto
- 1995 Tinbergen Institute, Rotterdam, *New Models Explaining the Development of Regions: The Case of Europe*
- 1994 *GIS and Spatial Modelling* workshop and seminar, Department of Geography, U. of Bristol (co-funded by the UK ESRC and the NCGIA)
- 1993 Institut National de la Recherche Scientifique-URBANISATION, *Séminaire-atelier sur les méthodes quantitatives d'analyse spatiale appliquées aux sciences sociales*, , Canada
- 1993 National Center for Geographic Information and Analysis, *Exploratory Spatial Data Analysis* workshop, U. of California/Santa Barbara (U.S. NSF funded)
- 1992 Department of Regional Economics, Free U. of Amsterdam, *Exploratory spatial data analysis* (European Urban and Regional Spatial Analysis Network funded workshop)
- 1992 Department of Geography, U. of Sheffield, *Remote sensing and GIS research cluster* (NATO Scientific Affairs funded workshop)
- 1992 Groupe de Contact F.N.R.S. en Géographie Théorique et Quantitative, Université Catholique de Louvain, Louvain-la-Neuve
- 1992 l'Institut de Mathématiques Économiques, 26th Annual Colloquium, Université de Bourgogne, Dijon, France
- 1992 Capital District ArcInfo User's Group, New York State Museum, Albany
- 1991 Max Planck Institute for Solid State Research, Stuttgart, *Interdisciplinary Colloquium on Forecasting for Systems with Chaotic Evolution* (Marshall Fund funded symposium)
- 1991 National Center for Geographic Information and Analysis, U. of Maine (Maine Maritime Academy), Castine (U.S. NSF funded)
- 1991 Ecosystem Research Center, Cornell U., *Advanced methods for mapping and visualizing environmental data* (USEPA funded seminar series)
- 1990 plenary session, 6th Annual NYS GIS Conference, Syracuse
- 1989 National Center for Geographic Information and Analysis, U. of California/Santa Barbara (U.S. NSF funded)
- 1985 NATO Advanced Studies Institute, Hanstholm, Denmark
- 1982 NATO Advanced Studies Institute, <i Cappuccini>, Italy (2)
- 1980 NATO Advanced Studies Institute, Chateau de Bonas, France

INVITED ACADEMIC LECTURES: GEOGRAPHY DEPARTMENTS (92)

Boston U., 1977

U. of Minnesota, 1977, 1994 (2)

U. of Bristol: 2004
 UC/Santa Barbara 1983, 1993 (2); & NCGIA,
 1988, 1989, 1993, 1998 (position paper)
 U. of Cambridge, 1982, 2004
 Catholic U. of Louvain-la-Neuve, Belgium,
 1986
 Central Michigan U., 2012
 Chinese Academy of Sciences/Beijing, 2013
 (20th Sijan Forum Lecture)
 Chinese U. of Hong Kong (ISEIS), 2010
 U. of Connecticut, 1986
 U. of Florida, 1983
 U. of Geneva, 1992
 U. of Hawaii, 1990 (2), 2013
 Hong Kong Polytechnical U. (ARCSI), 2010
 Indiana U., 1992
 Indiana U. of Pennsylvania, 1985, 2005 (3)
 International Institute for Aerospace Survey &
 Earth Sciences (Cartography), Enschede,
 The Netherlands, 1992
 Kent State U., 1977
 U. of Kentucky, 1986
 U. of Lancaster (& Mathematics Dept.
 & Regional Research Lab.), 1991
 Louis Pasteur U. (Strasbourg, FR), 1992 (2)
 McMaster U., 1980, 1993
 U. of Maryland, 1999 (2)
 Memorial U. of Newfoundland, 1976
 U. of Miami, 2003 (2), 2005, 2011
 Michigan State U., 1999, 2008, 2009 (2)
 U. of Montreal, 1987
 Nanjing Normal University, 2008, 2014
 U. of New Mexico, 2005
 The U. of North Carolina, 2001
 The Ohio State U., 2001
 U. of Paris I, France, 1986
 Pennsylvania State U., 1985
 U. of Pittsburgh, 1980
 Pontificia Universidad Catolica del Peru, 2001
 Queen's U. (Canada), 1993
 Ryerson Polytechnical U., 1993 (3)
 San Diego State U., 1999 (2)
 U. of Sheffield, 1982
 St. Andrews U., 2004
 SUC/Geneseo, 1996
 SUNY/Albany, 1986
 SUNY/Buffalo, 1978, 1994
 Syracuse U., 1979, 1987
 Texas A&M U., 2000 (3)
 U. of Toronto, 1978, 1993, 2009
 U. of Utrecht (Physical Geography),
 The Netherlands, 1992
 Economic U. of Vienna, 1991, 2005, 2008, 2009,
 2010
 Virginia Polytechnical Institute & State U.,
 1976, 1977
 Wilfred Laurier U., 1982 (2), 1993
 U. of Washington, 2002
 U. of Windsor, 1976

INVITED ACADEMIC LECTURES: OTHER ORGANIZATIONS (97)

- School of Remote Sensing Information Engineering, Wuhan University, 2009, 2010, 2011
- Dept. of Mathematics, U. of New Mexico, 2005
- Dept. of Mathematics, Indiana U. of Pennsylvania, 2005
- Dept. of Mathematics, U. of Alberta, 2005
- Dept. of Mathematics, U. of Miami, 2004
- Dept. of Mathematical Sciences. UTD, 2014
- Dept. of Mathematical Sciences. U. of Delaware, 2014
- Center for Geospatial Analysis, College of William and Mary, 2014
- (with J. Hancock) SUNY/CES&F, "Children's Environmental Health Issues" workshop, 1998
- China Data Center & School of Natural Resources, U. of Michigan, 1999
- Office of Research, UTD, 2014
- School of Natural Resources, U. of Michigan, 2000
- Institute for Social Research, U. of Michigan, 2000
- Institute Para Limes (The Netherlands), 2008
- Dept. of Epidemiology, School of Public Health, U. of Michigan, 2000 (2)—National Cancer Institute funded
- Dept. of Statistics, The Pennsylvania State U., 1984
- Dept. of Theoretical Spatial Economics, Erasmus U., Netherlands, 1986 (3), 1992 (3)
- Department of Earth and Atmospheric Sciences, U. of Alberta, 2000 (2), 2005, 2006
- Dept. of Statistics, SUNY/Buffalo, 1986
- Dept. of Statistics, U. of Paris V, 1986 (2)
- Dept. of Surveying and Geo-informatics, Tongji U., 2011, 2012
- Institute of Public Policy, George Mason U., 1999

- Colloquium in Earth Systems & GeoInformation Sciences, George Mason U., 2006
- Institute of Theoretical Physics, U. of Stuttgart, Germany, 1986
- Institute of Applied Mathematics, U. of Erlangen-Nuernberg, Germany, 1986
- Institute of Geography, U. of Groningen, Netherlands, 1986
- Dept. of Spatial Economics, Free U., Amsterdam, Netherlands, 1986
- Istituto Ricerche Economico-Sociali del Piemonte, Italy, 1987
- Dept. of Forestry, SUNY/CES&F, 1988
- Syracuse Chapter of the American Statistical Association, Syracuse U., 1989, (& Mathematics Dept.) 1999
- Royal Statistical Society/Highlands Group, St. Andrews U., 2004
- (with C. Amrhein) the Applied Geography Conference, Binghamton, New York, 1989
- U. of Illinois/Chicago (in the "Regional Science Seminar Series"), 1990
- National Center for Supercomputing Applications Users Group, U. of Illinois/Chicago, 1990
- International Geographical Union Commission on Mathematical Models Advanced Workshop on Spatial Modeling, Boston U., 1990.
- Institute of British Geographers, U. of Sheffield, 1991
- British ESRC Workshop on "Spatial Analysis for GIS," U. of Sheffield, 1991 (2)
- National Institute of Environmental Health Sciences Workshop on "Exposure assessment using highspatial resolution, hyperspectral imagery," U. of Michigan, 2000
- (with D. Armstrong) Italian National Research Council Workshop on "Spatial Statistical Methods in Archaeological and Cultural Heritage Safeguard Research," Pescara, Italy, 2000 (2)
- Interdisciplinary Consortium for Statistical Applications, Indiana U., 1992
- Dept. of General Economics, Wageningen Agricultural U., 1992
- Dept. of Economics, Universitat Pompeu Fabra, Barcelona, 1992
- Faculty of Business Economics, Katholieke Universiteit Nijmegen, The Netherlands, 1992
- Urban Planning Group, Technische Universiteit Eindhoven, The Netherlands, 1992
- Dept. of Biology, U. of Montreal, 1993
- Institute for Land Information Management, U. of Toronto, 1993
- Dept. of Biometrics, Cornell U., 1993, 1997
- NCGIA/ESRC funded symposium workshop, Bristol U., 1994
- Dept. of Statistics, Probability, & Statistical Applications, U. of Rome "La Sapienza," 1995, 2000, 2001
- Dept. of Political and Social Science, U. of Rome II, 2001
- School of Social Science, U. of Texas/Dallas, 2001, 2006 (Social Sciences Workshop)
- The Carolina Population Center, U. of North Carolina, 2001
- Dept. of Quantitative Methods and Regional Economics, Universita' Degli Studi G. d'Annunzio, Pescara, Italy, 1995, 2000
- Dept. of Statistics, Universita' Degli Studi G. d'Annunzio, Pescara, Italy, 2004
- Sigma Xi Scientific Research Society, Local Chapter Research Presentation, 1997
- Spatial Accuracy in Natural Resource: (with C. Amrhein) Williamsburg, VA, 1994; (with L. Layne & P. Doyle) Ft. Collins, CO, 1996; (with P. Fellows) Quebec, 1998; (with R. Haining & G. Ariba) Amsterdam, 2000; (with S. McMaster) Melbourne, AU, 2002; (with M. Millones & M. Vincent) Portland, ME, 2004; Lisbon, Portugal, 2006; Shanghai, China, 2008; (with R. Haining) Leicester, UK, 2010; (with Y. Chun) Florianópolis, Brazil, 2012; (with Y. Chun) Michigan State U., USA, 2014
- RSAI/Port Elizabeth Technikon Symposium in South Africa, 2000
- CASA/U. College London, 2004
- Max Planck Institute for Demographic Research/Rostock, Germany, 2004, 2005
- Dept. of Epidemiology and Public Health, U. of Miami, 2003
- Statistics Group, U. of Miami, 2003
- CESP, U. of Miami, 2003
- Geospatial Technologies and Public Health, Texas A&M University, 2007 (2)
- (with Tiefelsdorf and Chun) Department of Civil, Architectural and Environmental Engineering, U. of Texas/Austin, 2008

INVITED NON-ACADEMIC LECTURES (23)

Ministerio de Educación del Perú, 12/10-

Institute of Tropical Forestry (USDA Forest

15/2000, 5/14-18/2001—British ESRC funded
 USEPA Environmental Research Laboratory,
 Corvallis, OR, 1985, 1990
 National Agricultural Statistics Service,
 U.S. Dept. of Agriculture, 1999, 2001
 Rochester Region GIS Special Interest Group,
 Center for Governmental Research Inc., 1990
 1st Syracuse Regional Lead Conference, 1997
 Statistics Canada Methodology Symposium,
 "Issues in spatial statistics," Ottawa, 1991
 Environics Analytics, Toronto, Canada, 2014

Service) and the Center for Energy and Environmental Research, U. of Puerto Rico, Rio Piedras, 1992
 Mathematical Sciences Section, Rijksinstituut voor Volksgezondheid en Milieuhygiene, Bilthoven, The Netherlands, 1992.
 GI Science & Technology Group, Computational Physics & Engineering Division, Oak Ridge National Laboratory, 1998
 Steinbeis Transfer Centre Applied System Analysis/Stuttgart, Germany, 2005

COMPUTER DEMONSTRATIONS AND WORKSHOPS (28)

- 2014 (with Chun) Spatial Accuracy, Michigan State U.; (with Chun) AAG, Tampa; ERSA Summer School, Adam Mickiewicz U., Poland
 2013 (with Chun) Spatial Statistics, Columbus
 2012 & 2013 (with Chun) NA Regional Science annual meeting, Ottawa, CA; Atlanta
 2012 (with Chun) Spatial Accuracy Assessment in Natural Resource and Environmental Sciences
 2011 (with Chun) Seoul National University, Korea; Korean Research Institute for Human Settlements, Seoul
 2008 (with Tiefelsdorf) Spatial Filtering with the Eigenvector Approach, UTD (NSF funded)
 2007 Research Center for Biodiversity of Academia Sinica, Taiwan, Fushan Botanical Garden Research Center
 2005 Max Planck Institute for Demographic Research/Rostock, Germany; U. of Alberta
 1994 Dept. of Geography, SUNY/Buffalo
 1993 Assn. of American Geographers, 89th annual meeting, Atlanta; Dept. of Geography, UC/Santa Barbara
 1992 Dept. of Economics, Universitat Pompeu Fabra, Barcelona, Spain; CNRS Pour l'Avancement des Recherches sur l'Interaction Spatiale, U. of Paris I (Sorbonne); "Exploratory spatial data analysis" workshop, Dept. of Regional Economics, Free U. of Amsterdam [funded by the European Urban and Regional Spatial Analysis Network]; Interdisciplinary Consortium for Statistical Applications & Dept. of Geography, Indiana U.; Association of American Geographers, 88th annual meeting, San Diego
 1991 "Spatial Analysis for GIS," Dept. of Geography, U. of Sheffield [funded by British ESRC]; Dept. of Geography, U. of Ottawa; Cornell Theory Center's National Supercomputer Facility; Statistics Canada (2)
 1989 (with Anselin) Association of American Geographers, 85th annual meeting, Baltimore (2); Sixth European Colloquium on Theoretical and Quantitative Geography, Chantilly, France
 1978 Ontario Division of the Canadian Association of Geographers, Ryerson Polytechnical U.

PRESENTATIONS

- Association of American Geographers annual meeting: Milwaukee (70th), 1974; Salt Lake City (73rd), 1977; New Orleans (74th), 1978; Philadelphia (75th), 1979; Louisville (invited for the Nystrom Competition; 76th), 1980; Los Angeles (77th), 1981; San Antonio (78th), 1982; Denver (79th), 1983; Washington, D. C. (80th), 1984; Minneapolis (82nd), 1986; Phoenix (84th), 1988; San Diego (88th), 1992; San Francisco (90th), 1994 (2); Chicago (91st), 1995; Ft. Worth (93rd), 1997; Boston (94th), 1998; Honolulu (95th), 1999 (2); Pittsburgh (96th), 2000; New York (97th), 2001; Los Angeles (98th), 2002 (2); New Orleans (99th), 2003; Philadelphia (100th), 2004; Denver (101st), 2005; Chicago (102nd), 2006; San Francisco (103rd), 2007 (2); Boston (104th), 2008 (3); Las Vegas (105th), 2009; Washington, DC (106th), 2010 (2); Seattle, WA (107th), 2011; New York City (108th), 2012; Los Angeles (109th), 2013 (2); Tampa (110th), 2014 (4)
- NA Regional Science Association annual meeting: Chicago (25th), 1978; Los Angeles (26th), 1979; Milwaukee (27th), 1980; (with B. Holly) Montreal (28th), 1981; Pittsburgh (29th), 1982; Chicago (30th), 1983; Baltimore (34th), 1987; Toronto (35th), 1988; Santa Barbara (CA; 36th), 1989; Boston (37th), 1990; New Orleans (38th), 1991; (with A. Can) Houston (40th), 1993; Niagara Falls (41st), 1994; (with Can; with Tiefelsdorf) Cincinnati, (42nd), 1995; Washington, DC (43rd), 1996; Buffalo (44th), 1997; Santa Fe (45th), 1998; (with A. Getis; with D. Wong) Montreal (46th), 1999; Chicago (47th), 2000; Charleston (48th), 2001; San Juan, Puerto Rico (49th), 2002 (2); Philadelphia (50th), 2003; Seattle (51st), 2004 (2); Las Vegas (52nd), 2005 (2); Toronto (53rd), 2006 (2); Savannah (54th), 2007; Brooklyn (55th), 2008 (4); San Francisco, (56th) 2009; Denver (57th), 2010; Miami, FL (57th), 2011; Ottawa, CA (58th), 2012; Atlanta, 2013; Bethesda, MD, 2014 (2)

- Geocomputation: Wuhan, 2013 (poster)
- American Association for the Advancement of Science: Boston, 2013
- The Spatial Econometrics Association: Cambridge, 2007; Barcelona, 2009 (2); Washington, DC, 2013
- Spatial Accuracy Assessment in Natural Resource and Environmental Sciences: Williamsburg, VA, 1994; Ft. Collins, CO, 1996; Quebec, 1998; Amsterdam, 2000; Melbourne, Australia, 2002; (& TIES) Portland, ME, 2004; Lisbon, Portugal, 2006; Shanghai, China, 2008; Leicester, 2010; Florianópolis, Brazil, 2012 (2); Michigan State U., 2014
- American Statistical Association annual meeting: Toronto, 1994; Chicago, 1996; (paper presenter & co-exhibitor) Baltimore, 1999; Montreal, 2013
- ERSA Summer School: Poznan, 2014
- ISPRS-IGU International Conference: Toronto, 2014 (2)
- NECTAR: Azores, 2013
- Spatial Statistics: Enschede (The Netherlands), 2011
- LINSTAT 2012, Będlewo, Poland
- GEOINT: San Antonio, 2011
- The Society for Environmental Geochemistry and Health: New Orleans, 2007; Galway, Ireland, 2010
- International Medical Geography Symposium: Ft. Worth, TX, 2005
- GEOMED 2005: U. of Cambridge
- Spatial Ecology Workshop, U. of Miami: 2005
- P20 Exploratory Centers Program Workshop, U. of Miami: 2005
- TIMS/ORSA annual meeting: Chicago, 1993
- Sigma Xi Forum & Sigma Xi annual meeting, Minneapolis, 1999 (2)
- PRSCO: Wellington (& ANZRSA; NZ), 1997; Valdivia (Chile), 2004
- Canadian Association of Geographers: U. of Western Ontario, 1978; Queen's U., 1991; Waterloo, 1994; Montreal, 1995 (2)
- Quantitative Methods Study Group, Institute of British Geographers: U. of Sheffield, 1983
- 10th International Time Series Meeting: Toronto, 1983
- British Section, Regional Science Association: U. of Leeds, 1983
- ISPRS-IGU: Toronto, 2014
- IGU Mathematical Models Working Group: Madrid, Spain, 1986; Canberra, Australia, 1988; Princeton, NJ, 1992.
- IGU Regional Congress: Brisbane, Australia, 2006
- Canadian Regional Science Association: McMaster U., 1987
- European Colloquium on Quantitative & Theoretical Geography: Bardonecchia, Italy, (5th) 1987; Chantilly, France, (6th) 1989; Dourdan, France, (18th) 2013
- European Congress of the Regional Science Association: Louvain-la-Neuve, Belgium (32nd), 1992; Volos, Greece, 2006; Liverpool, UK, 2008; Lodz, Poland, 2009
- 3rd ICA Workshop on Geospatial Analysis and Modeling, Gävle, Sweden, 2009
- StatGIS 2009, Milos, Greece, 2009
- (with D. Johnson and K. McDade) Rocky Mountain Section of the S.E.G. H., Salt Lake City, 1994
- East Lakes Division of the Association of American Geographers: Kent State U., 1971; U. of Pittsburgh, 1973; Edinboro U. of Pennsylvania, 1974; Brock U., 1975; U. of Michigan, 1976; U. of Western Ontario, 1980
- Middle States Division of the Association of American Geographers: Rochester, 1981; Montclair State College, 1982; West Point, 1983; (with F. Csillag; Dave Smith) Syracuse U., 1992 (2)
- Pittsburgh Modelling and Simulation Conference: U. of Pittsburgh (14th), 1983
- Pennsylvania Academy of Sciences: Carlow College, Pittsburgh, 1971; Lafayette College, 1972
- Pennsylvania Council for Geographic Education: Indiana U. of Pennsylvania, 1971
- Ontario Division of the Canadian Association of Geographers: Ryerson Polytechnical U., 1978
- ISOLDE 81, Skodsborg, Denmark, 1981
- CLAG, SUNY/Buffalo, 1981
- "Spatial Distributions and Pattern Analysis" Colloquium: SUNY/Buffalo, 1981
- International Geographic Information Systems Symposium: The Research Agenda, Crystal City, VA, 1987
- Western Regional Science Association: San Diego, 1989
- International Workshop on Spatial Econometrics and Statistics: Rome, 2006 (2)

- Jean Paelinck Seminar on Spatial Econometrics: Zaragoza, Spain (2nd), 2006
- American Society of Agronomy annual meeting: (with D. Long, S. DeGloria, G. Carlson, and G. Nielsen) Denver, 1991
- Northeast Regional Science Association: (with L. Layne and A. Sone) Binghamton, NY, 1996
- American Society of Tropical Medicine and Hygiene: New Orleans, 2008

PANELS

- Association of American Geographers annual meeting: Portland (83rd), 1987; Phoenix (84th), 1988; Baltimore (85th), 1989 (2); Toronto (86th), 1990; Chicago (102nd), 2006
- Geocomputation: Wuhan, 2013

PROFESSIONAL MEMBERSHIPS AND ACTIVITIES

Offices Held

- Councilor at Large, Regional Science Association International (2015-17)
- Chair of the Steering Committee, International Spatial Accuracy Research Association (ISARA; 2014-present)
- vice president (1998-99), president (1999-2000), past president (2000-01), Syracuse Chapter of Sigma Xi
- elected chairman of the MM&QM Specialty Group, AAG (1987-1988)
- elected Board Member of the MM&QM Specialty Group, AAG (1989-1991)
- elected Board Member of the Microcomputer Specialty Group, AAG (1993-1996)
- elected Board Member, Syracuse Chapter of the American Statistical Assn., (1991-92; 1993-95)
- Secretary-treasurer, Syracuse Chapter of the American Statistical Association, (2000-2003)

Memberships

- The Association of American Geographers
- The Regional Science Association
- The American Mathematical Society
- The American Statistical Association
- The Mathematical Association of America
- The Fulbright Association
- Sigma Xi
- American Association for the Advancement of Science
- Spatial Econometrics Association

Meeting Organization Activities

- Space-time integration in Geography and GIScience, Association of American Geographers, Seattle, 2011
- Program Committee for the 35th Regional Science Association, Toronto, 1988
- NATO Advanced Studies Institute: Chateau de Bonas, France, 1980; San Miniato, Italy, 1982; Hanstholm, Denmark, 1985
- Mathematical Models & Quantitative Methods Specialty Group, Association. of American Geographers: San Antonio, 1982; (with D. Mark) West Point, 1983; Washington, D. C., 1984; (with L. Anselin) Phoenix, 1988
- Association of American Geographers annual meeting: Milwaukee, 1974 (see Vol. 7, 1975, A. A. G. Proceedings, pp. 297-298); Baltimore, 1989 (2; 1 with Grant Thrall); San Diego, 1992; Las Vegas, 2009 (2); Washington, DC, 2010 (2); Seattle, WA, 2011 (2); New York City, 2012 (2); Los Angeles, 2013 (2); Tampa, 2014 (2)
- North American Regional Science Association annual meeting: (with L. Anselin) New Orleans, 1991 (2); Niagara Falls, Canada, 1994; Cincinnati, 1995
- Dept. of Geography Colloquium entitled "Spatial Distributions and Pattern Analysis" under the joint auspices of NATO Scientific Affairs Division, SUNY/Buffalo, AAG MM&QMSG, and IGU: WGSAMM, 1981.
- Syracuse U. Department of Geography Symposium, 1989; (with Jim Newman) 1991.
- (with M. Monmonier, S. DeGloria, L. Herrington, R. McMaster) "NYSPGIA Minnowbrook workshop," Minnowbrook Conference Center (Syracuse U.), Blue Mountain Lake, 1990
- Canadian Association of Geographers: Montreal, 1995
- (with R. Tata) CLAG, SUNY/Buffalo, 1981
- (with J. Pipkin, C. Willmott) Middle States Division, Assn. of Am. Geographers, Rutgers U., 1979

Conference Session Chairperson

- Association of American Geographers annual meeting: Los Angeles, 1981; Toronto, 1990; Los Angeles, 2002; Washington, DC, 2010 (2); Seattle, WA, 2011; New York City, 2012; Los Angeles, 2013; Tampa, 2014
- Regional Science Association annual meeting: Toronto, 1988; Santa Barbara (CA), 1989; New Orleans, 1991; Niagara Falls, Canada, 1994; Cincinnati, 1995; Boston, 1998; Atlanta, 2013
- Spatial Statistics: Enschede, 2011; Columbus, 2013
- ISPRS-IGU International Conference: Toronto, 2014
- Spatial Econometrics Association: Cambridge, 2007
- 10th International Symposium on Spatial Accuracy Assessment in Natural Resources and Environmental Sciences (Accuracy 2012), Florianópolis, SC, Brazil
- Spatial Econometrics and Regional Economic Analysis Conference, Lodz, Poland
- Geocomputation: Wuhan, 2013
- Quantitative Methods Study Group, Institute of British Geographers meeting: U. of Sheffield, 1983
- Western Regional Science Association: San Diego, 1989
- Sixth European Colloquium on Quantitative and Theoretical Geography, Chantilly, France, 1989
- 1992 International Geographical Union Commission on Mathematical Models Symposium, Princeton U.
- European Congress of the Regional Science Association, Louvain-la-Neuve, Belgium, 1992
- International Workshop on Spatial Econometrics and Statistics: Rome, 2006
- World Conference of the Spatial Econometrics Association: 2009
- Jean Paelinck Seminar on Spatial Econometrics: Zaragoza, Spain, 2006
- NATO ARW, Amsterdam, 1983
- "Spatial Distributions and Pattern Analysis," Session 2, Dept. of Geography, SUNY/Buffalo, 1981
- "Complexity, Evolution and Learning," Institute Para Limes, Barchem, The Netherlands, 2007

Conference Paper Discussant

- Session in Honor of Walter Isard, "Distance inputs and spatial markets," by M. Beckmann, paper presented to the Regional Science Association, Toronto, 1988
- Regional Science Association annual meeting: Baltimore, 1987; Toronto, 1988; Santa Barbara (CA), 1989; New Orleans, 1991; Houston, 1993; Niagara Falls, Canada, 1994; Santa Fe, 1998; Montreal, 1999; Chicago, 2000; Charleston, 2001; San Juan, PR, 2002; Seattle, 2004; Las Vegas, 2005; Toronto, 2006
- Association of American Geographers annual meeting: Phoenix, 1988; Baltimore, 1989 (2); Denver, 2010
- 1992 Symposium of the International Geographical Union Commission on Mathematical Models: Princeton U. (2)
- European Congress of the Regional Science Association: Louvain-la-Neuve, Belgium, 1992
- PRSCO/ANZRSA Conference presentation, Wellington, NZ, 1997
- International Workshop on Spatial Econometrics and Statistics: Rome, 2006
- World Conference of the Spatial Econometrics Association: 2009
- moderator for Accuracy 2000 session, Amsterdam

Conference paper/workshop selection reviews

- Spatial Accuracy: 1998 (8), 2002 (8), 2008 (5), 2010 (5), 2012 (8), 2014 (5)
- ISPRS & IGU: 2013 (4)
- GIScience: 2012 (3), 2014 (7)
- ICSDM: 2011 (7)
- ICAGAM: 2011 (2)
- StatGIS: 2009 (2)
- Geocomputation: 2013 (7)
- Spatial Statistics: 2011 (17), 2013 (37)
- Spatial Econometrics Association: 2011 (8)

Journal Papers, Book Chapters, and Research Projects Reviewed

- Acta Tropica: 2009 2010 2012
- American Economic Review: 1991

- American J. of Political Science: 2006 (2)
- American J. of Preventive Medicine: 2004
- American J. of Tropical Medicine and Hygiene: 2006 (2)
- Annals of Applied Statistics 2011
- Annals of Operations Research: 2002 (2) 2011
- Annals of Regional Science: 1990 1991 1994 1998 (2) 2013 (2) 2014 (2)
- Annals, Association of American Geographers: 1981-90 (20) 1993-99 (3) 2000-10 (9) 2011 (3) 2013 2014
- Bridging Scales in Soil Physics (edited volume): 2002
- Canadian J. of Regional Science: 1998
- Cartography and Geographic Information Systems: 1993 2014 (4)
- Communications in Statistics: 1994 1996
- Computational and Applied Mathematics: 2009
- Computational Statistics & Data Analysis: 2001 2008 2009 2010
- Computers & Geosciences: 1995 2005 (2)
- Computers, Environment and Urban Systems: 1997 1998 (2) 1999 2000 2004 (2) 2007 (2) 2008
- Demographic Research: 2012
- Demography: 1990
- Discrete Dynamics in Nature and Society: 2010
- Ecography: 2008
- Ecological Modeling: 2005
- Ecology: 2004 2007
- Econometric Theory 2011
- Economic Geography: 1982-87 (4) 1992 1993
- EcoTrack: 2009
- Electoral Studies: 2010 2012 (2) 2014
- Empirical Economics: 2006 2007
- Encyclopedia of Social Measurement: 2002
- Environment & Planning A: 1988-90 (5) 1992-99 (7) 2000-10 (16) 2011 (2) 2012 (3)
- Environment & Planning B: 2000 (2) 2004 2005 2009 (2) 2010 (2) 2011 2012
- Environment & Planning D: Government & Policy: 1984
- Environmental and Ecological Statistics: 2007 2008
- Environmental Geochemistry and Health: 2012
- ESAIM: Probability and Statistics: 1998
- Estadística Española 2011
- European J. of Operations Research: 1981 (2)
- Geoderma: 1991 1997
- Geographical & Environmental Modelling: 1997 1999
- Geographical Analysis: 1977-80 (5) 1981-90 (34) 1992-99 (6) 2000-10 (17) 2012 (2) 2013
- Geography Research Forum: 1987
- GeoJournal: 2014
- Growth & Change: 1987 1998 (2) 2002 2006 2007
- Handbook of Agricultural Statistics: 1998
- IMAge: 1987
- International J. of Geographical Information Systems/Science: 1988-98 (10) 2000 (2) 2003 2004 2010
- International J. of Health Geographics: 2004 2006 2007 2013
- International J. of Remote Sensing: 2006
- International Regional Science Review: 1986 1996 2005 2011
- J. of Applied Ecology: 2007
- J. of Geographic Information Science
- (J. of) Geographical Systems: 1993-99 (5) 2000-10 (21) 2012(2) 2013 (4) 2014 (2)
- J. of Health and Place: 2004 2006
- J. of Historical Geography: 2001 2005
- J. of Latin American Geography: 2006 2014
- J. of Latin American Studies: 2004

- J. of Public Health Management: 2001
- J. of Quantitative Criminology: 2013 (2)
- J. of Regional Science: 1987-89 (5) 1992-96 (3) 2002 2007 (2) 2013 (2)
- J. of Statistical Computation and Simulation: 1992 2005
- J. of Stochastic Environmental Research & Risk Assessment: 2000 2006 (7) 2007 2009 (2) 2010
- J. of the American Statistical Association: 2001 2009
- J. of Time Series Analysis: 2013
- J. of Transport Geography: 1999
- Landscape and Urban Planning 2012
- Letters in Spatial and Resource Sciences: 2007 2008 2014
- Linear Algebra and Its Applications: 1996 1997
- Marine Ecology Progress Series: 2013
- Methods in Ecology and Evolution: 2014
- Ontario Geography: 1985
- Papers & Proceedings, RSA/Papers in Regional Science: 1984-90 (3) 1993-99 (5) 2000-07 (11) 2011 (2) 2014
- Photogrammetric Engineering and Remote Sensing: 1995
- PLOS ONE: 2014
- Population, Space and Place: 2012
- Professional Geographer: 1979-80 (2) 1982-89 (5) 1992 2005 2007 2011 2014
- Regional Science & Urban Economics: 1991 2006
- Risk Analysis: 2006 2007
- Science: 1980
- Sistemi Urbani: 1992 (2)
- Social Networks: 2007 2008 2011
- Social Science and Medicine: 2004
- Social Science Research: 1981
- Sociological Methodology: 1999
- Spatial Economic Analysis: 2010 2011 (3) 2012 2014 (2)
- Spatial Statistics: 2012 2013 (6) 2014 (6)
- Statistical Methodology: 2006
- The American Naturalist: 1980
- The Canadian Geographer: 1985 1989
- The Operational Geographer: 1989 1992 (6)
- The Statistician: 1993
- Transactions in GIS: 2010 2011 2014 (2)
- Transportation Review Board: 2000
- Urban Geography: 1980 1985 1988 (2) 1994 (2) 1995 2000 2002 2003 2006 (2) 2007 (2)
- URISA J.: 2000 (2) 2001 2003 2005
- EPA pre-journal submission: 2005

- CLAG Yearbook: 1982 (12), 1994
- Complexity, Evolution and Learning: in Search of Simplicity: 2008
- Advances in Spatial Science: 2008
- Spatial Analysis Handbook: 2008

- National Science Foundation: 1980-90 (15) 1991-1999 (32) 2000-2009 (115) 2010 2011 2012 2013 (17) 2014 (22)
- NATO Scientific Affairs Advisory Board: 1982-90 (4) 1991
- Marie Currie Individual Fellowship: 2005
- Rockefeller Foundation: 1996
- Hong Kong Research Grants Council: 2012 2013 2014
- SSHRC of Canada: 1987 1997 2006 2013 2104
- NSERC of Canada: 2005 2014
- Poland National Science Centre: 2014

- National Geographic: 2004 2006 2007
- USEPA: 1994 (17)
- USEPA Technical Report series: 1990 1991
- UK Economic and Social Research Council: 1993
- Cornell Theory Center (NSF supercomputer center): 1994
- MCUS: 2004 (4)

Book Manuscripts/New J. Proposals Reviewed

- Martinus Nijhoff, 1987, Advanced Studies in Theoretical and Applied Econometrics Series
- The Guilford Press, endorsement of G. Barber (1988), *Elementary Statistics for Geographers*.
- Pergamon Press, 1989
- Oxford University Press, 1991
- Prentice Hall, 1993
- Wiley, 1994, 2004
- Springer-Verlag, 1999
- Duxbury, 1999
- Arnold, 2002
- CRC Press, 2008 2009

External Evaluations

- promotion to full professor, SUNY/Buffalo (1986), U. of Tennessee (1987), U. of Toronto (1990), Queen's U./Canada (1995), U. of Iowa (1997), McGill U. (2002), U. of Alaska (2006), U. of Utah (2007), U. of North Texas (2007), Wichita State U. (2008), UC/Santa Barbara (2011), U. of South Florida College of Public Health (2011), U. of Arizona (2012), McMaster (2013)
- tenure and promotion, U. of Florida (1992), U. of Georgia (1992, 1993), Indiana U. (1994), McGill U. (1997), SUNY/Health Science Center at Syracuse (1998), Macalester College (1999), Syracuse U. (2; 2003), UC/Santa Barbara (2004), Michigan State U. (2004), McMaster U. (2006), Purdue U. (2008), U. of Iowa (2009), U. of Miami Medical School (2011), SUNY/Buffalo (2013)
- Faculty university honors:
 - Excellence in Scholarship: SUNY Chancellor's Citation (2006)
 - Study leave: George Mason U. (2007)
 - Professor and Center Director: Ohio State U. (2009)
 - Crossing-of-pay-bands professor: Chinese University of Hong Kong
 - Distinguished Research Master honor: Louisiana State U.
 - Professor Extra-ordinaire: Université Catholique de Louvain
 - The Newton International Scholarship: to go to Cambridge U. from U. of Tokyo
 - COPH early career award, University of South Florida
 - USF College of Public Health Interdisciplinary Team Award program

Contributions to Professional Reports and Publications

- book endorsement: *Scale in Spatial Information and Analysis*, J. Zhang, P. Atkinson and M. Goodchild, CRC Press
- 1980-Assn. of American Geographers, Quantitative Methods and Mathematical Models Specialty Group's advisory memorandum to the Geography & Regional Science Program, National Science Foundation
- 1985-Geography and Regional Science Program, National Science Foundation
- "Geographers," by Chronicle Guidance Publications, January 1997 release
- "White paper on research-based education," as representative of Syracuse U. at UCGIS meetings, Bar Harbor, ME, 1997
- listing of National Academy of Sciences AAG members in *Guide to Programs in Geography/AAG Handbook and Directory of Geographers 1997-1998*
- external assessment for establishing the Center for Geographic Analysis, Harvard University

UNIVERSITY OF TEXAS @ DALLAS SERVICE

University Service

- Committee on Qualifications of Academic Personnel, 2012/13-2014/15
- Advisory Committee on Research, 2013/14
- ad hoc committee member for promotion to full professor case, 2006/7, 2013/14 (chair), 2014/15
- ad hoc committee member for tenure and promotion to associate professor case, 2014/15
- annual Compliance review, 2005-present
- dissertation defense chair, 2006 (Geosciences), 2008 (Literary Studies and Historical Studies)
- Information Resources Security, Planning, and Policy Committee, 2007/09
- Intellectual Property Committee, 2009/10- 2012/13
- invited “field tester” for new class on campus safety and violence prevention, 2008
- PI for UT System Graduate Programs Initiative pre-proposal, and invited full-proposal
- Presentation at the IIE Research & New Venture Showcase: Geospatial Sciences, 2008
- Execution of a Memorandum of Understanding between UTD and Wuhan University, 2012/13

School Service

- EPPS Dean’s Search Committee, 2012
- GEOG/GIS Program Committee, 2005-present
- Faculty Advisory Committee (FAC), ex officio, 2005-09; Dean’s appointment, 2009-present
- School Academic Review and Scholarship Committee, 2010/11, 2013/14-2014/15
- GISC Associate Unit Head, 2007-present
- GIS Program Director Search Committee, 2006/7
- Chair of Search Committee for new GISC Program Head, 2007 & 2008
- Graduate Programs Advisory Committee
- Panel member of the JSSR “How to publish” roundtable/workshop, 2007, 2008, 2014
- Hosted colloquium speaker: 2007 (1), 2008 (2), 2009 (2), 2013 (inaugural lecture, Irving J. Hock Interdisciplinary Speaker Series), 2014
- Hosted workshop, 2009
- Hosted visiting international scholars: 2009, 2010, 2013(2), 2014(2)

Community

- leader, Green Acres Cub Scout Pack, 1980-81
- helped a South Vietnam refugee family resettle to Syracuse
- co-chaperoned *Latin Day* at Syracuse U. for local high school students
- member of the Syracuse Regional Lead Task Force, 1996-2003
- science judge at the MOST Science Fair, junior division, Onondaga Community College, 2000-01