

Curriculum Vita
Edward F. Wolff

Education:

University of Massachusetts, Ph.D., Dept. of Mathematics and Statistics, 1977.
Dissertation title: Measures of Dependence Derived from Copulas

Dartmouth College, B.A. Mathematics, 1968.

Professional Experience:

Arcadia University Department of Computer Science and Mathematics.

Assistant Professor 1977 – 1982

Associate Professor 1982 – 2009

Professor 2009 - present

Department Chair Sept. 1981 – Aug. 1993; Sept. 1999 – Aug. 2003;

Aug. 2006 – Dec. 2006

(Courses taught include among others: Elementary Statistics, Intermediate Statistics, Probability, Mathematical Statistics I, II, Pre-calculus, Calculus I, II, Linear Algebra, Abstract Algebra, Introduction to Analysis, Actuarial Seminar, Capstone Project Seminar.)

University of Massachusetts, Dept. of Mathematics and Statistics

Graduate Assistant 1972 - 1975

Graduate Associate 1975 – 1977

Taught (fully responsible) classes in Pre-Calculus, Elementary Statistics, and Finite Mathematics

Coventry High School, Coventry, CT 1968 – 1972

Mathematics Teacher

Taught Algebra 1, 2, Geometry, Elementary Functions, Mathematical Analysis

Dartmouth College 1967 – 1968

Apprentice Teacher of French

Led drill classes for French I and II classes (Rassias Method)

Honors and Awards:

Lloyd M. Abernethy Service Award, Arcadia University 2001

Honors and Awards (continued):

Finalist, Mathematics Association of America, Eastern Pennsylvania and Delaware chapter, Professor of the Year 1995-96 and 1996-97
(Nominated by Louis Friedler. Letters of recommendation and related materials reviewed by selection committee.)

Professor of the Year, Arcadia University 1988
Lindbach Teaching Award, Arcadia University, 1979

Campus-wide award for Excellence in Teaching, Graduate Student Category, University of Massachusetts, 1977 (Selection made by a student-faculty committee based on distinguished classroom performance.)

Student-voted Teacher of the Year Award, Coventry High School
Original recipient, 1969; First repeat recipient, 1972

Citation for Excellence in Teaching French, Dartmouth College, 1968
(Awarded by Professor John A. Rassias, Chair, Department of French and Italian and supervisor/trainer of apprentice teachers)

Grant-related activities:

Co-PI, Reform Math Students' Transition from High School to College NSF Discovery Grant (\$350,000). September 2007 to present. Responsible for administrative oversight of grant and preparation of research reports and dissemination of findings with Steven Kramer, PI.

Math Science Partnership of Greater Philadelphia (NSF) (\$13.3 million), PI of Arcadia University sub-award, October 2003 – present. Worked with several Arcadia math and science colleagues, helping them design and implement projects in STEM (Science, Technology, Engineering, and Mathematics) education. Supervised all Arcadia activities and reporting. Served on the project-wide Leadership Team, the Research, Evaluation and Data Services Team, the Statistical Analysis Study Group, the Mathematics Professional Learning Community, and the IHE-PI team. Also supervised all the project-wide university data collection, participated in numerous pedagogical and research activities, and presented many workshops.

Grant-related activities (continued):

Co-PI, Greater Philadelphia Secondary Mathematics Program (an NSF local Systemic Change Project) (\$3.2 million), June 1998 – 2002. Supported regional urban and suburban school district implementation of standards-based mathematics curricula. Led more than twenty-five workshops and presentations for teachers, administrators and school boards including workshops co-facilitated with Louis Friedler on Teaching Reform Calculus and with Carlos Ortiz on Teaching A.P. Statistics.

Co-PI, Philadelphia Interactive Mathematics Program (IMP) an NSF Curricular dissemination grant (\$1 million), June 1993 – August 1997. Piloted and supported a reform math curriculum in Philadelphia School District. Was released one course at Arcadia to teach a pilot section of the Interactive Mathematics Program at Central High School in Philadelphia. My teaching was highlighted in “Life by the Numbers: Making a Difference,” a 1998 documentary televised nationally on PBS. Also responsible for training and mentoring IMP teachers at several Philadelphia High Schools

Co-developed and taught (with Steve Horwitz from CCP) a Quantitative Reasoning course combining cognitive psychology, algebra, and statistics for CCP students planning to attend transfer to four-year universities. Supported by a William Penn Foundation grant (Jean Dowdall, PI, Barbara Nodine program head) Summer 1993.

With Elaine Maimon, wrote successful grant proposal to IBM to obtain Arcadia/Beaver’s first PC computer laboratory, January 1982

Developed Computer Assisted Instruction system to support Psychology 101 courses under an NSF grant written by Bernard Mausner (1980).

As then president of the Rassias Foundation, co-led a national meeting of teachers using the Rassias Method for teaching world languages, February 1980. Meeting supported by a successful grant proposal, “Proposal for funding for Dartmouth Intensive Language Model – Impact Program National Workshop,” co-written with John A. Rassias and Richard Newbold. Submitted to and funded by the Exxon Foundation, November 1979,

Grant-related activities (continued):

With Charles Moulton and Frances Lewis, Beaver College's Vice President of Development and College Relations co-wrote a (successful) \$125,000 grant proposal to the Glenn-Meade Trust that led to the campus' first Digital Equipment Corporation computer(1979).

Unfunded grant proposals:

“Towards Creating a Feedback Loop to Sustain STEM Educational Innovation: Investigating Perceptions of Teacher Preparedness, Teacher Beliefs and Attitudes Regarding Math and Science Learning, and Instructional Practices of Math and Science Teachers and University Faculty,” with Lorraine Bernotsky (principal investigator – I was to be co-PI) of West Chester University. Submitted to the National Science Foundation, February 2008

“Aligning Math Placement with Reform Mathematics”, with Dennis Ebersole , PI, (Northampton Community College), F. Joseph Merlino (La Salle University), Steven Kramer (a colleague from the Math Science Partnership of Greater Philadelphia). Submitted to the National Science Foundation, March 2007

“Comparison of stiffness and damping coefficients in individuals with and without knee osteoarthritis and their relationship to symptoms and disease severity,” with Carol A. Oatis (principal investigator – I was to be co-investigator along with Margery Lockard from Temple University). Submitted to the American College of Rheumatology Research and Education Foundation, July 2006

“Investigating further properties and applications of copulas,” with Berthold Schweizer (University of Massachusetts). Submitted to the National Science Foundation, March 1979

Off-campus workshops presented*

Led invited teacher workshops related to the Interactive Mathematics Program in NYC (May and June 2001, May and June 2002), Chicago (March 2001), Boston (March 1998), and at the University of Delaware (February, 1997).

* This list does not include the more than fifty grant-related curriculum and pedagogy workshops that I have presented from 1993 through 2007 for teachers from twenty-two Philadelphia high schools and twenty-eight suburban high schools in Pennsylvania and New Jersey.

Off-campus workshops presented (continued):

Gave invited two-day workshop on curriculum innovations in secondary Mathematics at the University of New Hampshire, supported by Knowles Foundation. June 1994

Doctoral Committees:

Arcadia University (2007)

Lehigh University (1997)

Temple University (1996)

Professional Collaborations (off campus):

With Victor Donnay, Professor of Mathematics at Bryn Mawr College, wrote introductions from mathematicians' point of view for two video cases units produced by another NSF grant and for a unit of the second edition of the Interactive Mathematics Program, 2006 – 2007

Member of Board of Advisors of the Rassias Foundation (Dartmouth College), 1983 – present.

Served on Computer Advisory Council of the Community College of Philadelphia, 1987-91

Served on the Mathematics Advisory Council of the Upper Dublin School District, 1996.

Committees and Other Service Activities:

Major Committees:

Promotion and Tenure Committee (Eleven years in all): 1984-85; 1985-86; 1986-87; 1990-91; 1992-93; 1996-97; 1997-98; 1998-99; 2002-03; 2003-04; 2004-05. Just elected to serve new term starting fall 2009.

Faculty Council (Seven years in all): 1979-80; 1980-81; 1982-83; 1983-84; 1989-90; 2000-01.

Other Committees/Task Forces (This list is not all-inclusive.)

Numerous other committees including (among others) Academic Standing and Petitions (six years); Commencement Committee (five years); Instructional Resources (formerly Computer Users Committee: (five years); Evening/Weekend Council (two years); Institutional Advancement (Board Committee: one year); Merck Fellows Selection Committee (P.I.: Deborah Pomeroy) (three years).

Task forces included 1988-89 Co-education Task Force (which I chaired), General Education Task Force (2005-06), University Name-Change Task Force (2001), ARAC, CE Development, “Tenurable” Task Force (1985) and several Middle States Accreditation task forces. Also served on numerous search committees.

I have served as first- or third-year mentor (as assigned by P & T) for more than a dozen colleagues.

Papers Presented at Professional Conferences:

Wolff, E.F., Pomeroy, D., Clancy, R.M., “Excitement and Challenges of Virtual Tutoring Pilot Program: Questions and Considerations for the Future.” Paper presented at Third Annual MSPGP Conference on Research in STEM Education, West Chester University, November 15, 2008

Curotto, E., Wolff, E.F, Gaun, S, “Student perceptions of the importance of math skills in a general chemistry course.” Poster presented at Third Annual MSPGP Conference on Research in STEM Education, West Chester University, November 15, 2008

Pomeroy, D., Wolff, E.F., “Analysis of reported attrition out of science majors – four pilot case studies.” Paper presented at the Second Annual MSPGP Conference on Research in STEM Education, Bryn Mawr, October 27, 2007

Weissman, N.J, Wolff, E.F., “The Economic Impact of the Environmental Benefits of Green Space.” Paper presented at the American Water Resources Association Mid-Atlantic Conference, Newark, DE, September 20, 2007

Papers Presented at Professional Conferences (continued):

“A survey and review of statistical analyses on the effectiveness of the Rassias Method.” Paper presented at the annual meeting of the Rassias Foundation Board of Advisors, NYC, March 13, 2006.

Cai, J., Marcus, R., Kramer, S., Cooper, L., Merlino, F. J., & Wolff, E. (April, 2005). Impact of Connected Mathematics Program on students’ achievement measured by the Pennsylvania and New Jersey State Assessments. Paper presented at the symposium, “Impact of Four NSF-Funded Curricula on Students’ Learning: Evidence from Ten School Districts in NJ and PA” at the Annual Meeting of the American Educational Research Association at Montreal, Canada, April 11-15, 2005.

Kramer, S., Marcus, R., Cai, J., Cooper, L., Merlino, F. J., & Wolff, E. (April, 2005). Impact of four NSF-funded mathematics curricula on students’ achievement. Paper presented at the symposium, “What Works: Evidence from the Greater Philadelphia Secondary Math Project,” at the Research Pre-session of the National Council of Teachers of Mathematics 83 rd annual conference in Anaheim, CA, April 4-6, 2005.

Kramer, S., Cai, J., Marcus, R., Cooper, L., Merlino, F. J., & Wolff, E. (April, 2005). Impact of Mathematics in Context on students’ achievement measured by the Pennsylvania System of School Assessment. Paper presented at the symposium, “Impact of Four NSF-Funded Curricula on Students’ Learning: Evidence from Ten School Districts in NJ and PA” at the Annual Meeting of the American Educational Research Association at Montreal, Canada, April 11-15, 2005.

Marcus, R., Cooper, L., Kramer, S., & Cai, J., Merlino, F. J., & Wolff, E. (April, 2005). Impact of Core-Plus Mathematics Project on students’ achievement. Paper presented at the symposium, “Impact of Four NSF-Funded Curricula on Students’ Learning: Evidence from Ten School Districts in NJ and PA” at the Annual Meeting of the American Educational Research Association at Montreal, Canada, April 11-15, 2005.

Pomeroy, D., Wolff, E.F., “Math Science Partnership of Greater Philadelphia.” Poster presented at Faculty Beyond the Classroom poster show as part of Beaver/Arcadia Sesqui-centennial Celebration, October 2003

Papers Presented at Professional Conferences (continued):

Wolff, E.F., Merlino, F.J, “Mathematicians’ Analysis of the New Jersey GEPA Scoring Rubric,” Paper presented at Eastern Evaluation Research Society, Absecon, NJ, April 30, 2002

Wolff, E.F., “Statistical analyses of IMP vs. traditionally taught students in Philadelphia,” Annual National IMP Directors’ Meeting, San Diego, March 16, 2001

Wolff, E.F., “Comparing IMP and traditionally taught students at Central and Girls’ High Schools.” Paper presented at annual meeting of principal investigators of NSF Local Systemic Change projects, Washington D.C., January 28, 2000

Wolff, E.F., “ANCOVA study of student outcomes at the Philadelphia High School for Girls.” Paper presented at the annual meeting of National IMP Directors, Santa Cruz, March 20, 1999

Wolff, E.F., “A summary of the Walters dissertation on the efficacy of the Rassias Method,” paper presented at the annual meeting of the board of advisors of the Rassias Foundation, New York City, April 17, 1984

Selected Oral Presentations (not including grant-related presentations made to teachers, administrators, and boards of education):

Invited participant on panel to discuss “Collaborations Between Mathematics and Science Faculty and Education Faculty To Increase the Number of Excellent Math and Science Teachers in the Philadelphia Public School System,” at conference of the same name sponsored by the Philadelphia Education Fund, Arcadia University, December 12, 2008

“The quantitative side of the mixed-methods research design.” Presented as part of a panel on action research at the First Annual MSPGP Conference on Research in STEM Education, Bryn Mawr, March 25, 2006

“A review of the Kramer Dissertation on the impact of IMP at Strath Haven High School. “ With R. Keller. Annual National IMP Directors Meeting, Zion, Illinois, March 11, 2006

Selected Oral Presentations (continued):

“Lessons learned from ten years of working towards reform,” Bryn Mawr College, April 15, 2004

“Some thought-provoking problems in probability,” Pennridge High School, May 18, 2004.

“Adventures in Math Reform” Bryn Mawr College, April 15, 2004

“Using case studies to prepare teachers for reform.” With R. Keller and B Stankus. Annual National IMP Directors’ Meeting, Kauai Hawaii March 7, 2004

“Introducing the Math Science Partnership of Greater Philadelphia,” With M.A. Jensen. Meeting of the Association of Teachers of Mathematics of Philadelphia and Vacity (ATMOPAV), November 8, 2003.

“The Interactive Mathematics Program.” With Anna May Davidson and Dorothy Sloan, at the fall 2003 meeting of ATMOPAV (Association of Teachers of Mathematics of Philadelphia and Vicinity.) October 23, 2003

“Caught in the Storm of Reform,” Annual National IMP Directors meeting, Charleston, March 24, 2003

“Gains of IMP students at Strath Haven H.S.” Annual National IMP Directors meeting, Charleston, March 23, 2003.

“The state of mathematics reform in the USA,” East China Normal University, Shanghai, May 24, 2002

“The Interactive Mathematics Program,” With S. Fraser. Joint Annual Meetings of the MAA and AMS, New Orleans, January 11, 2001. (Abstract published in Notices of the American Mathematical Society)

“Implementation of IMP at Central High School.” Part of a panel discussion on Student Voices organized by J. Shultz and A. Cook-Sather, American Educational Research Association, New Orleans, April 26, 2000

“ANCOVA verses gain scores to measure program effectiveness,” presented at Annual IMP National Directors’ Meeting, Kona, HI, March 18, 2000

Selected Oral Presentations (continued):

“How Standards-based secondary curricula can inform university courses,” presented to the general education curriculum committee at Bryn Mawr College, February 10, 2000

“Is this any way to teach mathematics?: an introduction to the Interactive Mathematics Program,” delivered before a meeting of university and secondary school teachers, Bryn Mawr College, February 10, 2000

“Caught in the storm of reform.” Part of a panel discussion organized by J. Shultz and A. Cook-Sather, American Educational Research Association, Montreal, April 23, 1999

“Measuring student outcomes.” Annual meeting of principal investigators of NSF Local Systemic Change projects, Washington D.C., January 22, 1999

“The Greater Philadelphia Secondary Mathematics Program.” With I. Eizen, A. Jordan and F. Joseph Merlino, ATMOPAV, October 24, 1998

“The Philadelphia Interactive Mathematics Program.” With A. Jordan, Annual Conference of the Pennsylvania Council of Teachers of Mathematics, Harrisburg, March 19, 1998

“The Philadelphia Interactive Mathematics Program.” Haverford College, July 9, 1996. (Talk repeated at Haverford, July 8, 1997)

“Introduction to Standards-based secondary math curricula.” Delivered to the math and science faculty of La Salle University, Philadelphia, January 8, 1997

“Student-centered activities in IMP,” Middle College Schools Association, Glen Cove, N.Y., August 23, 1996

“Implementing the Interactive Mathematics Program.” With A. Davidson and P. Potocny. Annual winter meeting of the Pennsylvania Council of Teachers of Mathematics, March 16, 1996

“Implications of NCTM Standards for College Teaching.” With C. Oblas. Math-Fest (Annual summer meeting of the Mathematics Association of America), Burlington, Vermont, August 6, 1995

Selected Oral Presentations (continued):

“The Pennsylvania and Massachusetts implementation of the Interactive Mathematics Project.” With C. Oblas and D. Resek, NSF Invitational Conference, February 24, 1995

“Reform math curricula and gifted students.” With Irene Eizen. Pennsylvania Association for Gifted Education (PACE), Philadelphia, December 21, 1994

“The Philadelphia Interactive Mathematics Program” with I. Eizen, A. Jordan, and F.J. Merlino. NSF Invitational Conference, February 25, 1994

“The Human Calculator,” Beaver College Graduate Colloquium, February 1992.

“Computer assisted instruction”, invited talk given to campus-wide faculty at Gwynedd Mercy College, May 1989.

“Geometric probability and the number pi.” presented at the Winter 1987 meeting of the Association of Math Teachers of Philadelphia and Vicinity.

“Writing to learn in mathematics”, presented with Winnie Peterson, at the spring meeting of the Pennsylvania Council of Teachers of Mathematics (PCTM), Harrisburg, March 1987

“Learning to write and writing to learn in mathematics,” with I. Eizen and W. Peterson at the fall meeting of ATMOPAV (Association of Teachers of Mathematics of Philadelphia and Vicinity.) Villanova, October 23, 1987

“Buffoonery with pi,” Cabrini College, March, 1985

“Writing to learn in collegiate mathematics courses,” presented to the Science and Math Faculty of Saint Joseph’s University, October, 1983

“Incorporating writing into the teaching of mathematics,” Community College of Philadelphia, April, 1982

“Writing to learn in mathematics,” Slippery Rock University, March, 1981

“Writing to learn in mathematics,” West Chester University, April, 1980

Selected Oral Presentations (continued):

“N-dimensional measures of independence derived from copulas,” Annual Joint Meetings of the American Mathematical Society and the Mathematical Association of America, Atlanta, January 1978

“Measures of dependence derived from copulas,” New England sectional meeting of the American Mathematical Society, Storrs, CT, October 1976

Publications:

Kramer, S.L., Bernotsky, L., Krier, K, Wolff, E.F., Merlino, F. J., Manderachi, T., “Investigating Students’ Transition from High School to College: How Can We Best Collect the Data?” In preparation.

Oatis C.A, Lockard M.A, Michener L.A, Wolff E.F, Lennon S.K. “The relationship between a measure of knee joint stiffness, gait, and WOMAC scores in individuals with knee osteoarthritis.” In preparation.

Wolff, Edward F.; Pomeroy, Deborah; Blanc, Sukey; and Clancy, Richard M., “Virtual Tutoring Pilot Program: Questions and Considerations for the Future.” MERLOT Journal of Online Learning and Teaching. Vol. 5, No. 2, June 2009, pp 325-335

Wolff, E.F., “Four Decades of the Rassias Method for Teaching World Languages”, accepted for publication in the Ram’s Horn, the journal of the Rassias Foundation (Dartmouth College). To appear fall 2009.

Appelbaum, P., Friedler, L.M., Ortiz, C.E., Wolff, E.F, “Internationalizing the University Mathematics Curriculum.” Accepted for publication in the Journal of Studies in International Education. (Scheduled to appear in December, 2008 and already accessible online at the journal website <http://jsi.sagepub.com/pap.dtl>)

Wolff, A.R., Wolff, E.F., Wolff, G.E., “Three Generations of Rassias Memories” in Breakthrough: Essays and Vignettes in Honor of John A. Rassias, Peter Lang Publishing, Inc., 2007

Oatis, C.A., Wolff, E. F, and Lennon, S., “Knee Joint Stiffness in Individuals With and Without Knee Osteoarthritis: A Preliminary Study”, Journal of Orthopaedic & Sports Physical Therapy (Vol. 36, No 12, 2006, pp 935-941).

Publications (continued):

Wolff, E.F.; “Mathematics Education in America,” in Global Education, Vol. 31, No. 10, 2002

Wolff, E.F., “IMP Graduates in Math and Science Speak About Program’s College Benefits,” IMPressions, Spring 2002.

Wolff, E. F.; Gann, E.; Gordon-Walinsky, S., Holt, D. V.;Klinger, E.; Toliver, R., “Caught in the Storm of Reform, The Implementation of the Interactive Mathematics Program” in In Our Own Words: Students Talk About School Issues, edited by Cook-Sather, A. and Shultz, J., Little and Brown, 2001.

Merlino, F.J, and Wolff, E.F., “Assessing the costs/benefits of an NSF Standards-based curriculum on student achievement.” (191 pages). Published online at <http://www.gphillymath.org/StudentAchievement/Reports/SupportData/TitlePage.htm>, 2001.

Wolff, E.F., “An ANCOVA Study comparing IMP and traditionally-taught students at the Philadelphia High School for Girls,” IMPressions, Fall 2000.

Schweizer, B; Wolff, E.F., “On nonparametric measures of dependence for random variables.” The Annals of Statistics, Vol. 9, No. 4, 879-885, 1981.

Wolff, E.F., “N-dimensional measures of dependence.” Stochastica 4;175-188, 1980.

Wolff, E.F., “N-dimensional measures of dependence derived from copulas.” Notices of the American Mathematical Society, A-159, 1978 (Abstract # 752-62-10)

Schweizer, B; Wolff, E.F., “Sur une mesure de dépendence pour les variables aléatoires.” C.R. Acad. Sci. Paris Sér A, **284**, 659-661, 1976.

Wolff, E.F., “More on a measure of dependence.” Notices of the American Mathematical Society, A-610, 1976 (Abstract #738-F1).