

# CURRICULUM VITAE

## GÁBOR J. SZÉKELY

### Academic degrees:

- 1986 Doctor of Sciences (D. Sc.) Hungarian Academy of Sciences  
1976 Candidate Degree (Ph. D.) Hungarian Academy of Sciences  
Advisors: P. Erdős and A.N. Kolmogorov  
1970 National Merit Scholar, Summa Cum Laude Diploma from the  
Eötvös Loránd University, Budapest, Advisor: A. Rényi.

### Current positions:

- 2006- Statistics and Probability Program Director, National Science  
Foundation  
1997- Senior Researcher of the Rényi Institute of the Hungarian Academy  
of Sciences  
2004- Academic Consultant, Morgan Stanley, NY

### Academic positions:

- 2006- Program Director, National Science Foundation  
1999-2006 Director of the Actuarial Science Program, BGSU  
1997- Senior Researcher of the Rényi Institute of the Hungarian Academy  
of Sciences  
1995-2009 Professor, Department of Mathematics and Statistics  
Bowling Green State University, Bowling Green, Ohio  
1990-1997 Chair, Department of Mathematics and Statistics,  
Budapest Institute of Technology  
1990-2005 Professor of Eötvös University, Budapest  
1990-1991 Eugene Lukacs Distinguished Research Professor, BGSU  
1989 Visiting Professor, Department of Statistics, Yale University  
1988 Visiting Professor, Department of Mathematics & Statistics, BGSU  
1985-1995 Program Manager of Budapest Semesters in Mathematics  
1980-1987 Senior Research Fellow, Eötvös University  
1976 Visiting Research Fellow, University of Amsterdam

### Honors:

- 2010 Elected Fellow of the Institute of Mathematical Statistics  
2005 Elected Fellow of the Ohio Academy of Science  
2005-2006 Trustee, Toledo Opera

2000 Elected Fellow of the American Statistical Association  
1996 Elected Member of the International Statistical Institute  
1990-1991 Eugene Lukacs Distinguished Research Professor of Ohio  
1988 Rollo Davidson Mathematical Prize, University of Cambridge  
1986 Sc. D., Doctor of Hungarian Academy of Sciences  
1964-1965 High School Mathematical Olympiad Team Member

### **Editorships:**

1996-2004 Problem Corner editor of CHANCE (ASA, Springer)  
1993-2005 Statistical Theory and Methods Abstracts (Journal of the  
International Statistical Institute)  
1993-2006 Annales Univ. Sci. Budapest  
1992-2000 Periodica Polytechnica  
1990-1995 Editor-in-Chief, Matematikai Lapok (Official Journal of the Bolyai  
Janos Mathematical Society)

### **Grants:**

2002-2004 PI of the NSA Grant "Singular Kernel Nonparametric Tests"  
1995-1997 Director (PI) of Probability Measures Research Project of the  
Hungarian National Science Foundation  
1991-1994 Director (PI) of Reliability Theory Research Project of  
the Hungarian National Science Foundation

### **Selected Lectures:**

28. *The Energy of Data*, MIT Institute for Data, Systems, and Society, April 15, 2016.  
27. *Dependence measures*, Harvard University, April 20, 2015.  
26. *Data Energy*, Georgetown University, October 2, 2015.  
25. *Partial Distance Correlation*, Univ. of Maryland, College Park, February 12, 2015.  
24. *Distance Correlation and Energy Statistics*, Columbia University, Workshop on  
distance correlation and energy statistics, April 28 - May 2, 2014.  
23. *Distance correlation*, Stanford University, Dept. of Statistics, October 1, 2013.  
22. *Energy and Brownian motion in Statistical Tests*, Rényi Institute of Mathematics,  
Budapest, Hungary, December 11, 2009.

21. *Distance, Gini, and independence tests*, Georgia Tech and University of Georgia, October 29-30, 2009.
20. *An unpublished thought of Karl Pearson*, Department of Statistics, Rutgers University, October 8, 2008.
19. *Brownian distance correlation*, Department of Statistics, University of Wisconsin, Madison, February 14, 2008.
18. *Brownian covariance vs. strong mixing. How to model the world where past and present observations may have considerable influence on observations in the near future, but rather weak influence on observations in the far future?* Columbia University, New York, September 17, 2007.
17. *On the subadditivity of Brownian covariance and the CLT for stationary sequences*, Department of Mathematics, University of Maryland, College Park, April 12, 2007.
16. *Pearson vs. Wiener*, Department of Statistics, University of Illinois, Chicago, March 22, 2007.
15. *Dependence or Independence: How to measure a Dream?*, Department of Statistics, George Washington University, Washington, D.C., January 19, 2007.
14. *Stochastic Jump Processes in Financial Mathematics*, Opening Lecture Series of the Morgan Stanley Mathematical Institute, Budapest, July 10-14, 2006.
13. *Beyond Gauss: Absolute Statistics for Business*, Opening Plenary Lecture of the Institute of Applied Mathematics (BMI) in Warsaw, July 7, 2006.
12. *Signed distributions*, Invited Lecture, Probability Measures on Groups, August 2, 2004, Budapest.
11. *Newton's potential energy in probability and statistics*, Plenary talk, 26<sup>nd</sup> Summer School on Probability, May 31 – June 4, 2004, Finland.
10. *Student's t-test for scale mixture errors*, 2<sup>nd</sup> E. Lehmann Symposium, Houston, TX, May 19-22, 2004.
9. *Matrix means and random permanents*, Institute for Advanced Studies, Princeton, March 2, 2001.
8. *A unified approach for nonparametric statistical tests*, March 16-19, 2000, San Antonio, Texas Invited talk.

7. *Probability theory without probabilities*, Invited AMS Lecture, Gainesville, FL, March 12, 1999.
6. *How to transform random quantities into uncorrelated ones*, St. Petersburg, Euler Institute, Invited address, June 27, 1998.
5. *Design of experiments and the geometry of lottery*, Colloquium talk, Department of Statistics University of Michigan, October 3, 1997.
4. *Reminiscences of Paul Erdos*, MAA Invited Plenary Talk, Youngstone, OH April 11, 1997.
3. *Probabilistic Designs*, Colloquium talk, Montreal, McGill University, October 29, 1996.
2. *Characterizations in Statistics*, Invited series of 5 lectures, Universite Pierre et Marie Curie, Paris, 1992-94.
1. *K.F. Gauss and Extremal Problems in Probability and Statistics*, Plenary Lecture, Centenary of Dortmund University, Germany, 1994.

### **Teaching Experience:**

I have teaching experience in the U.S. and also in Hungary, Holland, Germany and France. Courses I have been teaching are the following: Survival Analysis, Reliability Theory, Martingales in Statistics, Advanced Probability Theory, Random Vibrations, Statistics for Engineers, Stochastic Processes, History and Philosophy of Statistics, Game Theory, Mathematics of Finance, Stochastic Optimizations, Stochastic Programming, Bioinformatics, Actuarial Science.

Two of my former Budapest Semester undergraduate students got the Schafer Prize (this prize recognizes women undergraduates who display excellence).

I have had 10 Ph.D. students; six of them graduated from Bowling Green State University, OH (John Steele, Maria Rizzo, Jay Kerns, Deniz Yenigun, Ceren Vardar, Vidyahar Phadke).

**Academic Consulting:** Budapest Institute of Technology (1989-95), Morgan Stanley, NY, and Bunge, Chicago.

**Selected Publications:** see [GJSzekely\\_publications.pdf](#).