

KURSADTOSUN



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Office Faculty of Medicine - Ground Floor - Room 002

EDUCATION

Ph.D.	Mathematics, Southern Illinois University, Carbondale, IL	August 2013
M.S.	Statistics, West Virginia University, Morgantown, WV	August 2010
M.S.	Mathematics, Bilkent University, Ankara, Turkey	October 2004
B.S.	Mathematics & Computer, Cankaya University, Ankara, Turkey	June 2002

ACADEMIC POSITIONS

Assistant Professor	Near East University, Nicosia, NORTH CYPRUS	2015-present
Assistant Professor	Vassar College, Poughkeepsie, NY, USA	2013-2015
Teaching Assistant	<ul style="list-style-type: none">Southern Illinois University, Carbondale, ILAtılım University, Ankara, TURKEY	2008-2013 2002-2005
Research Assistant	M.B.R. Cancer Center, West Virginia University, Morgantown, WV, USA	2005-2008

PUBLICATIONS

Research papers (published)

- Stochastic asymptotic stability of SIR model with variable diffusion rates. Schurz H., **Tosun K.** (2015). *Journal of Dynamics and Differential Equations*, 27(1), 69-82.
- Impact and interactions between smoking and traditional prognostic factors in lung cancer progression. Guo N.L., **Tosun K.**, Horn K. (2009). *Lung Cancer*, 66(3), 386-392.
- An integrative genomic and proteomic approach to chemosensitivity prediction. Ma Y., Ding Z., Qian Y., Wan Y.W., **Tosun K.**, Shi X., Castra V., Harner E.J., Guo N.L. (2009). *International Journal of Oncology*, 34(1), 107-115.
- Confirmation of gene expression-based prediction of survival in non-small cell lung cancer. Guo N.L., Wan Y.W., **Tosun K.**, Lin H., Msiska Z., Flynn D.C., Remick S.C., Vallyathan V., Dowlati A., Shi X., Castranova V., Beer D.G., Qian Y. (2008). *Clinical Cancer Research*, 14, 8213-8220.

Research papers (submitted or in preparation)

- Stability of Stochastic SIS model with disease deaths and variable rates. Schurz H., **Tosun K.** *Applied Mathematical Modelling*, submitted.
- Numerical analysis of stochastic SIR and SIS models. Schurz H., **Tosun K.** *Applied Mathematics and Computation*, submitted.
- Comparison of control policies for bioterrorist smallpox epidemic. **Tosun K.**, Adivar B. to be submitted to *Computational and Mathematical Methods in Medicine*, in preparation.
- A mathematical model for Crimean-Congo hemorrhagic fever, **Tosun K.**, Ergonul O. to be submitted to *Mathematical Biosciences*, in preparation.

Theses and Manuals

- Qualitative and Quantitative Analysis of Stochastic Models in Mathematical Epidemiology. **Tosun K.** (2013). PhD Thesis, Southern Illinois University Carbondale, IL. Advisor: Henri Schurz
- *A Manual of Mathematica for Calculus*. Baskaya T., Bayezit D., Tosmur N., **Tosun K.** (2005). Atilim University Press, Ankara.
- Backlund Transformations of Painleve Equations and Discrete Equations of Painleve Type. **Tosun K.** (2004). Ms. Thesis, Bilkent University, Turkey. Advisor: Ugurhan Mugan.

CONFERENCE AND SEMINAR PRESENTATIONS

- Analysis of Stochastic SIR model, February 6, 2015; Clarkson University, Potsdam, NY, USA
- Mathematical Models in Epidemiology, January 27, 2015; Ithaca College, Ithaca, NY, USA
- Stochastic Modeling of Infectious Diseases, May 24, 2014; School of Public Health, SUNY-Albany, NY
- Mathematical Epidemiology and Introduction to R; International Summer Course on Research Methodology and Ethics in Health Sciences, June 25, 2014; Koc University, Istanbul, Turkey
- Asymptotic Stability of Stochastic SIS Model, June 9, 2014; Izmir Institute of Technology, Turkey
- Qualitative Analysis of Stochastic SIR Model with Disease Deaths, AMS Sectional Meeting, March 2, 2013; University of Mississippi, Oxford, MS, USA
- How to Control a Disease Outbreak Using Mathematics? June 23, 2014; April 10, 2013; Augustana College, Rock Island, IL, USA
- Stochastic Lotka-Volterra Systems, Seminar on Stochastic Processes, March 23, 2012; University of Kansas, Lawrence, KN, USA
- Convergence of Numerical Approximations of Stochastic Models in Mathematical Epidemiology, Applied Mathematics Seminar, Feb. 20, 2013; Southern Illinois University, Carbondale, IL, USA
- Stability Analysis of Stochastic Models in Mathematical Epidemiology, Applied Mathematics Seminar, Feb. 13, 2013; Southern Illinois University, Carbondale, IL, USA
- Existence of a Unique Global Solution of Stochastic SIR Model, Mathematics Department Seminar, April 12, 2012; Southern Illinois University, Carbondale, IL, USA

CONFERENCE/WORKSHOP ATTENDED WITH TRAVEL GRANTS

- New England Isolated Statisticians Meeting, November 1, 2014; Boston College, Chestnut Hill, MA
- From Within Host Dynamics to the Epidemiology of Infectious Disease, April 7-11, 2014; Mathematical Biosciences Institute, The Ohio State University, Columbus, OH
- AMS Sectional Meeting, March 30 - April 1, 2012; University of Kansas, Lawrence, KS
- Large Data Sets in Medical Informatics, November 14-18, 2011; Institute for Mathematics and its Applications, University of Minnesota, Minneapolis, MN
- 33rd Midwest Probability Colloquium, October 13-15, 2011; Northwestern University, Evanston, IL
- Mathematical Epidemiology with Applications, July 25-29, 2011; East Tennessee State University, Johnson City, TN
- Seminar on Stochastic Processes, March 23-26, 2011; University of California Irvine, Irvine, CA

POSTER PRESENTATIONS

- Impact of Smoking in Lung Cancer Progression, Large Data Sets in Medical Informatics, IMA, University of Minnesota, Minneapolis, MN; November 15, 2011
- An accurate chemosensitivity prediction, Department of Community Medicine Annual Poster Presentation, West Virginia University, Morgantown, WV; April 29, 2008
- An Accurate Predictor of Survival in Non-Small Cell Lung Cancer: 35-Gene Signature, Health Science Center Research Day, West Virginia University, Morgantown, WV; April 22-23, 2008

TEACHING EXPERIENCE

Near East University	Applied Regression Analysis Using R, <i>Fall 2015</i> Probability Theory, <i>Fall 2015</i> Calculus I, <i>Fall 2015</i> Linear Algebra, <i>Fall 2015</i>
Muğla University	Calculus I, <i>Summer 2015</i>
Vassar College	Multivariable Calculus, <i>Fall 2013, Fall 2014</i> Linear Algebra, <i>Spring 2015</i> Mathematical Statistics, <i>Spring 2014</i> Probability Models, <i>Fall 2014</i> Introduction to Statistics, <i>Spring 2014, Spring 2015</i>
Southern Illinois University	Differential Equations, <i>Fall 2012</i> Short Course in Calculus, <i>Fall 2008 & 2009, Spring 2009, Summer 2010</i> Pre-Calculus, <i>Fall 2011</i> Trigonometry and Analytic Geometry, <i>Summer 2011</i> College Algebra, <i>Spring 2010, Fall 2010</i> Statistics, <i>Spring 2013, Summer 2013</i>
Atılım University	Calculus I & II, 2002 – 2005 (as recitation instructor)

ACADEMIC HONORS AND AWARDS

- Research Committee Award, Vassar College (Fall 2014)
- John M.H. Olmsted Outstanding PhD Teaching Assistant Award for **Excellence in Teaching**– Southern Illinois University (April 14, 2013)
- Eberly College of Arts and Sciences Fellowship – West Virginia University (2005-2007)
- Merit-based Tuition Waiver Scholarship – Bilkent University (2002-2005)
- Merit-based Tuition Waiver Scholarship – Cankaya University (1997-2002)

PROFESSIONAL MEMBERSHIP

- Member, Society of Mathematical Biology
- Member, American Mathematical Society
- Member, American Statistical Association