

# Svetlana K. Eden

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## EDUCATION

Moscow State University, Moscow, Russia, M.S., **Applied Mathematics**, 1992

Technion and University of Haifa, Haifa, Israel, M.S., **Economics**, 1998

University of Haifa, Haifa, Israel, Coursework for B.S. in **Computer Science**, 2003

Vanderbilt University, Nashville TN, PhD candidate in **Biostatistics**, Present

## EXPERIENCE

**Biostatistician III**, Department of Biostatistics, Vanderbilt University Medical Center, 2007 - 2014

- Provided statistical support regarding sample size, design, and analysis of medical and public health study data.
- Participated in writing abstracts and manuscripts.
- Designed and implemented R software tools for statistical reports.
- Facilitated use of R packages by developing relevant supporting R tools.
- Improved readability and reproducibility of statistical reporting by developing R code that converted data into LaTeX table format and by developing statistical data visualization routines.

**Biostatistician II**, Department of Biostatistics, Vanderbilt University Medical Center, 2004 - 2007

- Provided statistical summaries for independent data monitoring committee of the clinical research study To Reduce the Incidence of Prostate Cancer in Men Who are at Increased Risk (REDUCE, NCT00056407).
- Provided statistical summaries for independent data monitoring committee of the clinical trial on Platelet Aggregation Inhibition in Children on Clopidogrel (PICOLO, NCT00115375).

**Software Engineer**, Camelot Ltd., Haifa, Israel, 01/2000 - 11/2001

- Improved running time of the software product by identifying performance bottlenecks, and by implementing algorithms with reduced time complexity.
- Minimized time of code development by introducing and maintaining a system of efficient programming practices.

**Software Engineer**, Avionitek Ltd., Haifa, Israel, 09/1999 - 01/2001

- Designed and implemented methods for testing the main software product developed by the company, the operating system for airplanes.

**Programer**, Department of Mathematical Statistics, Moscow State University, Moscow, Russia, 09/1992 - 01/1994

- Participated in developing software tools for statistical analysis of time series.

## PUBLICATIONS

1. Shintani AK, Girard TD, **Eden SK**, Arbogast PG, Moons KG, Ely EW. Immortal time bias in critical care research: application of time-varying Cox regression for observational cohort studies. *Critical Care Medicine*. 2009 Nov; 37(11): 2939-45. PMID: 19770737
2. Schnipper JL, Roumie CL, Cawthon C, Businger A, Dalal AK, Mugalla I, **Eden SK**, Jacobson TA, Rask KJ, Vaccarino V, Gandhi TK, Bates DW, Johnson DC, Labonville S, Gregory D, Kripalani S; PILL-CVD Study Group. Rationale and design of the Pharmacist Intervention for Low Literacy in Cardiovascular Disease (PILL-CVD) study. *Circulation. Cardiovascular Quality and Outcomes*. 2010 Mar;3(2):212-9. PMID: 20233982
3. Han JH, Shintani AK, **Eden SK**, Morandi A, Solberg LM, Schnelle J, Dittus RS, Storrow AB, Wesley EE. Delirium in the Emergency Department: An Independent Predictor of Death Within 6 Months. *Annals of Emergency Medicine*. 2010 Sep;56(3):244-252. PMID: 20363527
4. Cavanaugh KL, Wingard RL, Hakim RM, **Eden SK**, Shintani AK, Wallston KA, Huizinga MM, Elasy TA, Rothman RL, Ikizler AT. Low Health Literacy Associates with Increased Mortality in ESRD, *JASN* 2010 Nov;21(11): 1979-85. PMID: 20671215
5. Smith HA, Boyd J, Fuchs DC, Melvin K, Berry P, Shintani A, **Eden SK**, Terrell MK, Boswell T, Wolfram K, Sopfe J, Barr FE, Pandharipande PP, Ely EW. Diagnosing delirium in critically ill children: Validity and reliability of the Pediatric Confusion Assessment Method for the Intensive Care Unit. *Critical Care Medicine*. 2011 Jan;39(1):150-7. PMID: 20959783
6. Marvanova M, Roumie CL, **Eden SK**, Cawthon C, Schnipper JL, Sunil Kripalani S. Health Literacy and Medication Understanding Among Hospitalized Adults. *Journal of Hospital Medicine* 2011 Nov; 6(9): 488493. PMID: 22139905
7. Wright JAN, Wallston KA, **Eden SK**, Shintani AK, Ikizler1 TA, Cavanaugh KL. Associations among perceived and objective disease knowledge and satisfaction with physician communication in patients with chronic kidney disease, *Kidney International* 2011 Dec;80(12):1344-51. PMID: 21832984
8. Siew ED, Peterson JF, **Eden SK**, Hung AM, Speroff T, Ikizler TA, Matheny ME. Outpatient Nephrology Referral Rates after Acute Kidney Injury, *JASN* 2012 Feb; 23(2):305-12. PMID: 22158435
9. Devasia R, Blackman A, **Eden SK**, Li H, Maruri F, Shintani A, Alexander C, Kaiga A, Stratton CW, Warkentin J, Tang YW, Sterling TR. High proportion of fluoroquinolone-resistant *Mycobacterium tuberculosis* isolates with novel gyrase polymorphisms and a *gyrA* region associated with fluoroquinolone susceptibility. *Journal of Clinical Microbiology*. 2012 Apr;50(4):1390-6. PMID: 22189117
10. Griffith ML, Boord JB, **Eden SK**, Matheny ME. Clinical inertia of discharge planning among patients with poorly controlled diabetes mellitus. *The Journal of Clinical Endocrinology and Metabolism*. 2012 Jun;97(6):2019-26. PMID: 22466346
11. Kripalani S, Roumie CL, Dalal AK, Cawthon C, Businger A, **Eden SK**, Shintani A, Sponsler KC, Harris LJ, Theobald C, Huang RL, Scheurer D, Hunt S, Jacobson TA, Rask KJ, Vaccarino V, Gandhi TK, Bates DW, Williams MV, Schnipper JL; PILL-CVD (Pharmacist Intervention for Low Literacy in Cardiovascular Disease) Study Group. Effect of a pharmacist intervention on clinically important medication errors after hospital discharge: a randomized trial. *Annals of Internal Medicine* 2012 Jul 3;157(1):1-10 PMID: 22751755

12. Wester CW, **Eden SK**, Shepherd BE, Bussmann H, Novitsky V, Samuels DC, Hendrickson SL, Winkler CA, OBrien SJ, Essex M, DAquila RT, DeGruttola V, Marlink RG. Risk factors for symptomatic hyperlactatemia and lactic acidosis among combination antiretroviral therapy-treated adults in Botswana: results from a clinical trial. *AIDS Research and Human Retroviruses* 2012 Aug;28(8):759-65. PMID: 22540188
13. Siew ED, Peterson JF, **Eden SK**, Moons KG, Ikizler TA, Matheny ME. Use of Multiple Imputation Method to Improve Estimation of Missing Baseline Serum Creatinine in Acute Kidney Injury Research. *CJASN* 2013 Jan;8(1):10-18. PMID: 23037980
14. Wright NJ, Greene JH, Wallston K, **Eden SK**, Shintani A, Elasy T, Rothman RL, Ikizler TA, Cavanaugh KL. Pilot Study of a Physician-Delivered Education Tool to Increase Patient Knowledge About CKD. *American Journal of Kidney Disease* 2013 Jul;62(1):23-32. PMID: 23540261
15. Laboratory test surveillance following acute kidney injury. Matheny ME, Peterson JF, **Eden SK**, Hung AM, Speroff T, Abdel-Kader K, Parr SK, Ikizler TA, Siew ED. *PLOS*. 2014 Aug 12. PMID: 26264853
16. Siew ED, Parr SK, Abdel-Kader K, **Eden SK**, Peterson JF, Bansal N, Hung AM, Fly J, Speroff T, Ikizler TA, Matheny ME. Predictors of Recurrent AKI. *Journal of American Society of Nephrology*. 2015 Aug 11. PMID: 26264853

#### TEACHING ACTIVITIES

- Teaching assistant, Microeconomics, Department of Economics, University of Haifa, Haifa, Israel, fall semester of 1998 - 1999
- Teaching assistant, Introduction to Statistical Computing, Department of Biostatistics, Vanderbilt University Medical School, fall semesters, 2012-2014
- Teaching assistant, Introduction to Study Design, Department of Biostatistics, Vanderbilt University Medical School, fall semester, 2017
- Continuing education seminar for staff: Using library `chron` to create date objects in R, 2005
- Continuing education seminar for staff: Introduction to string matching and manipulation in R using regular expressions, 2007
- Continuing education seminar for staff: Using `apply()` functions in R, 2011
- Department seminar: Efficiency tips for basic R loops, 2012

#### INTRAMURAL ACTIVITIES

- Team leader of the Continuous Quality Improvement (CQI) project on improving communication skills, Department of Biostatistics, Vanderbilt University, 12/2005- 08/2006
- Organized a three-day seminar on Effective Scientific Writing 06/2010 Invited speaker Judith A. Swan, Ph.D. Oversaw all aspects of the seminar including fundraising, curriculum, and scheduling. The seminar was jointly sponsored by the Departments of Biostatistics, Biomedical Research Education and Training, Continuing Medical Education, Clinical Translational Scientist Development, and the Vanderbilt Writing Studio.

#### HONORS, AWARDS

- Scholarship for excellent academic performance University of Moscow, 1987 - 1992
- Fellowship for excellent academic performance University of Haifa, 1997 - 1999
- Excellence award by Department of Economics, Haifa University 1997

- Third Place Award for the Data Exposition Poster Competition at the 2006 JSM Joint Statistical Meetings of American Statistical Association sponsored by the section on Statistical Graphics, Section on Statistical Computing and Section on Statistics and the Environment

**LANGUAGES  
AND  
SOFTWARE**

- Operating systems: Linux, Windows, Mac
- Statistical software: proficient in R, basic skills in SAS and in STATA
- Programming languages: proficient in R; comfortable with Python and C++
- Reproducible reporting tools: LaTeX, Sweave/Knitr, Markdown

**HOBBIES AND  
OTHER INFO**

- Fluent in English, Hebrew, and Russian
- Hobbies: oil painting, drawing, hiking, swing dancing, swimming, landscaping