Short Curriculum Vita H. Hyune-Ju Kim

EDUCATION

Ph.D., Statistics, Stanford University, 1988 B.S., Mathematics, Seoul National University, 1983

PROFESSIONAL EXPERIENCE

| 2009-Present | Professor, Department of Mathematics, Syracuse University |
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| 1997 Summer-Present | |
| | Guest Researcher/Contractor, |
| | Cancer Control and Population Sciences, National Cancer Institute |
| 1995-2009 | Associate Professor, Department of Mathematics, Syracuse University |
| 2003-2005 | Contractor, University of Massachusetts, Worcester |
| 1997-1999 | Statistical Consultant, SUNY Upstate Medical University |
| 1993 (January-December) | |
| | Visiting Assistant Professor, Department of Biostatistics, Harvard University |
| 1992 Summer | Visiting Scholar, Department of Statistics, Stanford University |
| 1989-1995 | Assistant Professor, Department of Mathematics, Syracuse University |
| 1988-1989 | Visiting Assistant Professor, Department of Mathematics, Syracuse University |

GRANTS AND AWARDS

National Cancer Institute Research Contracts, 1997- 2013, 2015-2018, 2020-present
Intergovernmental Personnel Act Program, National Institute of Health, 2014 (February-August), 2019 (February-August)
Innovative Summer Program Development Fund, 2013, University College, Syracuse University
National Institute of Health R03 Grant, 2010-2012
National Science Foundation Career Advancement Award, 1997-1999
National Science Foundation Research Initiation Grant, 1991-1993
National Science Foundation Research Planning Grant, 1990-1991

AREAS OF INTEREST

Change-point problems, Permutation test, Regression model selection, Sequential analysis, Statistics in genetics

SELECTED PUBLICATIONS

Research Papers

H.-J. Kim and D. Siegmund (1989), Likelihood Ratio Tests for a Change-Point in Simple Linear Regression, *Biometrical* 76, 409-423.

H.-J. Kim (1992), Boundary Crossing Probabilities by Nondifferentiable Processes and Applications to Two-Phase Regression, *Statistics & Probability Letters* 14, 97-102.

H.-J. Kim (1993), Two-Phase Regression with Nonhomogeneous Errors, *Communications in Statistics-Theory and Methods* 22, 647-657.

H.-J. Kim and L. Cai (1993), Robustness of the Likelihood Ratio Test for a Change in Simple Linear Regression, *Journal of the American Statistical Association* 88, 864-871.

H.-J. Kim (1994), A Repeated Significance Test in a Linear Model, Sequential Analysis 13, 113-126.

H.-J. Kim (1994), The Likelihood Ratio and Kusum Tests for a Change-Point in Linear Regression, *Journal of Multivariate Analysis* 51, 54-70.

H.-J. Kim (1994), Approximations in Group Sequential Tests, *Communications in Statistics-Simulation and Computation* 23, 915-924.

H.-J. Kim (1994), Tests for a Change-Point in Linear Regression, Change-Point Problems, IMS Lecture Notes-Monograph Series Vol. 23 (E. Carlstein, H-G Muller and D. Siegmund, Editors), 170-176.

H.-J. Kim (1996), Change-Point Detection with Correlated Observations, Statistica Sinica 6, 275-287.

H.-J. Kim, M. P. Fay, E. J. Feuer, and D. N. Midthune (2000), Permutation Tests for Joinpoint Regression with Applications in Cancer Rates, *Statistics in Medicine* 19, 335-351. (Correction: *Statistics in Medicine* (2001) 20, 655)

H.-J. Kim, M. P. Fay, B. Yu, M. J. Barrett, and E. J. Feuer (2004), Comparability of Segmented Line Regression Models, *Biometrics* 60, 1005-1014.

B. Yu, M. J. Barrett, H.-J. Kim, and E. J. Feuer (2007), Estimating Joinpoints in Continuous Time Scale for Multiple Change-Point Models, *Computational Statistics and Data Analysis* 51, 2420-2427.

M. P. Fay, H.-J. Kim, and M. Hachey (2007), On Using Truncated Sequential Probability Ratio Test Boundaries for Monte Carlo Implementation of Hypothesis Tests, *Journal of Computational and Graphical Statistics* 16, 946-967.

W. Ning and H.-J. Kim (2008), Residual Pattern Based Test for Interactions in Two-Way ANOVA, *Biometrical Journal* 50, 431-445.

H.-J. Kim, B. Yu, and E. J. Feuer (2008), Inference in Segmented Line Regression: A Simulation Study, *Journal of Statistical Computation and Simulation* 78 (11), 1087-1103.

J. Kim and H.-J. Kim (2008), Asymptotic Results in Segmented Multiple Regression, *Journal of Multivariate Analysis* 99, 2016–2038. (Correction: Corrigendum to "Asymptotic results in segmented

multiple regression'' [J. Multivariate Anal. 99 (2008) 2016–2038], *Journal of Multivariate Analysis* (2017) 159, 134–137)

H.-J. Kim, B. Yu, and E. J. Feuer (2009), Selecting the Number of Change-Points in Segmented Line Regression, *Statistica Sinica* 19, 597-609.

H.-J. Kim (2010), Bounding the Resampling Risk for Sequential Monte Carlo Implementation of Hypothesis Tests, *Journal of Statistical Planning and Inference* 140, 1834-1843.

H.-S. Chen, K. Portier, K. Goush, D. Naishadham, H.-J. Kim, L. Zhi, L.W. Pickle, M. Krapcho, S. Scoppa, A. Jemal, and E. Feuer (2012), Predicting US and State-Level Cancer Counts for the Current Calendar Year: Part I-Evaluation of Temporal Projection Methods for Mortality, *Cancer*, 1091-1099.

L. Zhu, L.W. Pickle, K. Goush, D. Naishadham, K. Portier, H.-S. Chen, H.-J. Kim, Z Zou, J. Cucinelli, B. Kohler, B.K.Edwards, J. King, E. J. Feuer, and A. Jemal (2012), Predicting US and State-Level Cancer Counts for the Current Calendar Year: Part II-Evaluation of Temporal Projection Methods for Incidence, *Cancer*, 1100-1109.

H.-S. Chen, A. B. Mariotto, L. Zhu, H.-J. Kim, H. Cho, and E. J. Feuer (2014), Developments and Challenges in Statistical Methods in Cancer Surveillance, *Statistics and Its Interface* 7(1); 135-151.

H.-J. Kim, J. Luo, J. Kim, H.-S. Chen, and E.J. Feuer (2014), Clustering of Trend Data Using Joinpoint Regression Models, *Statistics in Medicine* 33(23), 4087-4103.

J. Kim and H.-J. Kim (2016), Consistent Model Selection in Segmented Line Regression, *Journal of Statistical Planning and Inference* 170, 106-116.

H.-J. Kim, J. Luo, H.-S. Chen, D. Green, D. Buckman, J. Byrne, and E.J. Feuer (2017), Improved Confidence Interval for Average Annual Percent Change in Trend Analysis, *Statistics in Medicine* 36 (19), 3059-3074.

H.-S. Chen, S. Zeichner, R. Anderson, D. Espey, H.-J. Kim, and E.J. Feuer (2020), Joinpoint-Jump Model in Trend Analysis with Applications to Coding Changes in Health Statistics, *Journal of Official Statistics* 36(1), 49-62.

J. Kim and H.-J. Kim (2021), Applications of Asymptotic Inference in Segmented Line Regression, *Communications in Statistics-Theory and Methods* 50, 5585-5606.

H.-J. Kim, H.-S. Chen, J. Byrne, B. Wheeler, and E. J. Feuer (2022), Twenty Years since Joinpoint 1.0: Two Major Enhancements, Their Justification, and Impact. *Statistics in Medicine* 20;41(16):3102-3130.

B. Liu, H.-J. Kim, E. J. Feuer, and B. I. Graubard (2023), Joinpoint Regression Methods of Aggregate Outcomes for Complex Survey Data, *Journal of Survey Statistics and Methodology*, 11(4), 967–989.

H.-J. Kim, H.-S. Chen, D. Midthune, B. Wheeler, D. W. Buckman, D. Green, J. Byrne, J. Luo, and E. J. Feuer (2023), Data-Driven Choice of a Model Selection Method in Joinpoint Regression, *Journal of Applied Statistics*, 50(9), 1992–2013.

Software

V 5,4,0 JOINPOINT (April 2025 release), Statistical software for the analysis of trends using joinpoint models (with M. J. Barrett, D. Buckman, J. Byrne, H.-S. Chen, M. P. Fay, E. J. Feuer, D. Green, B. Liu, J. Luo, B. Wheeler, and B. Yu), available at <u>http://surveillance.cancer.gov/joinpoint</u> for public to download.

Revision history can be found at

https://surveillance.cancer.gov/help/joinpoint/tech-help/joinpoint-revision-history .