Colin Lewis-Beck

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RESEARCH INTERESTS

Agricultural statistics, hierarchical modeling, spatial statistics, and reliability

EDUCATION

PhD in Statistics

Iowa State University, Expected: Fall 2018

Dual MPP/MA in Public Policy and Applied Statistics

University of Michigan, 2010

BA in French and Film Studies

Middlebury College, 2005

Publications

Mittman E., Lewis-Beck C., Meeker W.Q., "A Hierarchical Model for Heterogenous Reliability Field Data." *Under Review*

Lewis-Beck C., Lewis-Beck M. <u>Applied Regression: An Introduction</u>, Second Edition, Sage Publications, 2015

Lewis-Beck C., Abouzaid S., Xie L., Baser O., Kim E. "Analysis of relationship between psoriasis severity and quality of life, work productivity, and activity impairment among patients with moderate to severe psoriasis using structural equation modeling" *Preference and Adherence*. 2013:7 1-7

Wang, L., Lewis-Beck, C., Baser, E., Fritschel, E. and Baser, O. "Applied comparison of meta-analysis techniques." *Value in Health.* 2013 Nov 1; 16(7):A701

Work Experience Software Developer, NIMBLE, Berkeley, CA

Summer 2017

Interned as part of the Google Summer of Code program

- Wrote and tested an R package to fit ecological statistical models
- Collaborated with other programmers using GitHub
- Wrote code that went into the main nimble R package

 ${\bf Statistical~Analyst},\,{\rm STATinMED~Research},\,{\rm Ann~Arbor},\,{\rm MI}$

2011-2012

Research Department

- Analyzed large claim databases using advanced statistical techniques (e.g., GLMs, SEMs, propensity score matching, and meta-analysis)
- Drafted statistical protocols and wrote final manuscripts analyzing and interpreting study results for client, as well as academic, publication
- Worked directly with clients, senior researchers, and programmers to ensure projects were completed correctly and on schedule

TEACHING EXPERIENCE **Instructor**, Iowa State University

2017-Present

Give weekly lectures, write exams and homework, and hold office hours for the following courses:

• Engineering Probability (Spring 2018)

• Statistics for Engineers (Spring 2017, Fall 2017)

Teaching Assistant, Iowa State University

2014-2015

Taught lab sections, graded, and held office hours for the following courses:

- Applied Statistical Modeling (Graduate Course) (Fall 2015)
- Introduction to Statistics (Fall 2014, Spring 2015)

Graduate Student Instructor, University of Michigan

2007-2010

Taught lab sections, graded homework and exams, and prepared weekly lessons and activities for the following courses:

- Introduction to Statistical Reasoning (Fall 2009, Spring 2010)
- Introduction to Statistics and Data Analysis (Spring 2009)
- Statistics for Public Policy (Graduate Course) (Spring 2008, Fall 2008)
- Introduction to Microeconomics for Public Policy (Fall 2007)

Presentations and Workshops

Poster Presentation, Joint Statistical Meetings (JSM), Baltimore, MD (August 2017)

Graduate Workshop on Environmental Data Analytics, National Center for Atmospheric Research (NCAR), Boulder, CO (June 2017)

Speaker (with Hal Stern), Center for Statistics and Applications in Forensic Evidence (CSAFE), "An Introduction to Statistical Thinking for Forensic Practitioners" Palm Beach County Sheriffs Office, Palm Beach, FL (March 2016)

Invited Blalock Lecturer (with Michael Lewis-Beck), Interuniversity Consortium for Political and Social Research (ICPSR), University of Michigan, "Regression Questions You Always Wanted to Ask" (July 2015)

Poster Presentation, International Society for Pharmacoeconomics and Outcomes Research (ISPOR), Washington, DC (June 2012)

AWARDS

SAGE Cornerstone Author Award for publication (with Michael Lewis-Beck) of Applied Regression: An Introduction, Second Edition (2015)

Outstanding Teaching Award, University of Michigan, Dept. of Statistics (2010)

OTHER EXPERIENCE

Summer Program Computing Consultant

Summer (2006, 2013, 2014)

ICPSR, University of Michigan

- Assisted program participants and faculty with a wide range of statistical and programming backgrounds with questions in R, Stata, SPSS, and SAS
- Promoted to Team Leader (2013, 2014). Responsible for supervising a staff of 8 Computer Consultants.

Computer Skills

Mathematical Computing: R, Rcpp, Rstan, Stata, and JMP

Other: LaTeX, GitHub, Microsoft Office

Professional Memberships

American Statistical Association