

# Jessica Lynn Jaynes

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- CONTACT INFORMATION**      California State University, Fullerton      *Phone:* (657) 278-4662  
Department of Mathematics      *E-mail:* jjaynes@fullerton.edu
- RESEARCH INTERESTS**      Applied statistics; Experimental design; Discrete choice experiments; Drug combinations; Factorial Design, Public Health
- ACADEMIC APPOINTMENTS**      **California State University, Fullerton, California USA**      **Summer 2015 - Present**  
Assistant Professor of Statistics  
Department of Mathematics
- University of Nevada, Las Vegas, Nevada USA**      **Summer 2013 - Spring 2015**  
Assistant Professor of Statistics  
Department of Mathematical Sciences
- EDUCATION**      **University of California, Los Angeles, California USA**  
Ph.D. in Statistics, June 2013  
Co-Advisor's: Dr. Hongquan Xu (Statistics) and Dr. Weng Kee Wong (Biostatistics)
- University of California, Los Angeles, California USA**  
Master of Science in Statistics, Spring 2010
- California State University, Fullerton, California USA**  
BA in Mathematics with a Concentration in Probability and Statistics, Spring 2008  
Magna Cum Laude
- TEACHING**      **California State University, Fullerton, Fullerton, CA**      **Fall 2015 - Present**  
**Assistant Professor**
1. **Undergraduate:**
- MATH 338 - Statistics Applied to Natural Sciences (Fall 2015, Spring 2016, Spring 2017, Fall 2017)
- MATH 435 - Mathematical Statistics (Spring 2016, Spring 2017)
- MATH 497 - Undergraduate Research (Spring 2017)
2. **Graduate:**
- MATH 531T - Advanced Topics in Statistics: Experimental Design (Summer 2017)
- MATH 536 - Categorical Data Analysis (Fall 2017)
- University of Nevada, Las Vegas, Las Vegas, NV**      **Fall 2013 - Spring 2015**  
**Assistant Professor**
1. **Undergraduate:**
- STAT 152 - Introduction to Statistics (Fall 2013, Fall 2014)
- STAT 463 - Applied Statistics for Engineers (Fall 2014)
2. **Graduate:**
- STA 663 - Applied Statistics for Engineers (Fall 2014)
- STA 762 - Regression Analysis II (Spring 2014, Spring 2015)

## Student Research

### 1. Undergraduate:

- Ricardo Palafox, CSUF Undergraduate McNair Scholar. Research topic: Discrete choice experiments - construction, analysis, and applications. **Summer 2016 - Present**
- Ricardo Palafox, CSUF Undergraduate Graduate Readiness and Access in Mathematics. Research topic: Optimal Drug Combinations to Treat KB Cancer. **Fall 2017 - Present**
- Jose Toledo, CSUF Undergraduate Graduate Readiness and Access in Mathematics. Research topic: Optimal Drug Combinations to Treat KB Cancer. **Fall 2017 - Present**

### 2. Graduate:

- Randall Moya, CSUF Masters in Science Statistics Graduate Student. Research topic: Drug combinations and Kriging **Fall 2017 - Present**

## SCHOLARLY AND CREATIVE ACTIVITY

### Peer-Reviewed Publications

1. Rusmevichientong, P. **Jaynes, J.**, and Kazemi, S. Which Factors and Nutritional Ingredients Influence College Students' Snack Choices: Evidence from Discrete Choice Experiments. (Submitted Fall 2017).
2. **Jaynes, J.**, Xu, H., and Wong, W.K. Minimum Aberration Designs for Discrete Choice Experiments. (2017). *Journal of Statistical Theory and Practice*. doi: 10.1080/15598608.2017.1299055.
3. **Jaynes, J.** (2016) *Book Review: Journal of the American Statistical Association* Statistical Methods in Drug Combination Studies by Zhao, W and Yang, H. doi: 10.1080/01621459.2016.1235436.
4. **Jaynes, J.**, Wong, W. K. and Xu, H. (2016). Using Blocked Fractional Factorial Designs to Construct Discrete Choice Experiments for Health Care Studies. *Statistics in Medicine*. doi:10.1002/sim.6882.
5. **Jaynes, J.**, Zhao, Y., Xu, H., and Ho, C.M. (2015). Use of Orthogonal Array Composite Designs to Study Lipid Accumulation in a Cell-Free System. *Quality and Reliability Engineering International*. doi:10.1002/qre.1900.
6. Xu, H., **Jaynes, J.**, and Ding, X. (2014). Combining Two-Level and Three-Level Orthogonal Arrays for Factor Screening and Response Surface Exploration. *Statistica Sinica*. 24, 269-289. doi:10.5705/ss.2012.210.
7. **Jaynes, J.**, Ding, X., Xu, H., Wong, W. K., and Ho, C.M. (2013). Application of Fractional Factorial Designs to Study Drug Combinations. *Statistics in Medicine*. 32, 307-318. doi:10.1002/sim.5526.

### Professional Conferences/Presentations (within the last year)

1. **Design and Analysis of Experiments Conference** Invited talk: *Using blocked fractional factorial designs to construct discrete choice experiments*. October 2017. University of California, Los Angeles, CA.
2. **Women in Mathematics in Southern California Symposium**. Contributed talk: *Using Blocked Fractional Factorial Designs to Construct Discrete Choice Experiments for Healthcare Studies*. February 2017. University of Southern California, Los Angeles, CA.
3. **Orange County Women's Health Project**. Poster presentation: *Contributions in Design of Experiments for Healthcare Studies*. October 2016. California State University, Fullerton, Fullerton, CA.
4. **Society for Advancing Chicanos/Hispanics and Native Americans in Science Conference**. Attendance. October 2016. Long Beach, CA.

### Funding

University of Nevada, Las Vegas, Faculty Opportunity Award. (Funded \$15,864) Spring 2015.