





Nehemias Ulloa

| | | |
|------------------------|---|--|
| CONTACT INFORMATION |  661.428.5419 |  nehemiasulloa@gmail.com |
| |  nulloa.github.io |  Chula Vista, CA |
| POSITION | Biostatistician | |
| EDUCATION | PhD in Statistics | June 2019 |
| | Iowa State University | |
| | <i>Thesis:</i> Bayesian Hierarchical Modeling and Analysis for Disease Outbreaks | |
| | <i>Advisor:</i> Dr. Jarad Niemi | |
| | <ul style="list-style-type: none">• Compared the predictive capabilities of different Bayesian hierarchical models to forecast influenza outbreaks | |
| | MS in Statistics | May 2017 |
| | Iowa State University | |
| | <i>Creative Component:</i> Application of Polynomial Regression to Dyadic Data | |
| | <i>Advisor:</i> Dr. Fred Lorenz | |
| | <ul style="list-style-type: none">• Data from a multigenerational study was used to tease out relationship dynamics in young adults | |
| | BS in Mathematics | May 2013 |
| | California State University, Bakersfield | |
| WORK EXPERIENCE | Center for Veterinary Biologics (CVB), APHIS, USDA | July 2019 - Present |
| | Remote - Chula Vista, CA, Main Office - Ames, IA | |
| | Senior Staff Statistician | Nov 2022 - Present |
| | <ul style="list-style-type: none">• Evaluated experimental designs and resulting data from vaccine safety and efficacy trials• Created statistical methods to evaluate new assay technologies• Consulted with scientists to provide statistical advice on their projects (study design and analysis)• Acted as supervisor & trained junior staff on statistical procedure• Communicated results via written reports and oral presentations to internal and external clients• Worked with IT to implement Shiny applications and the purchase of a Shiny server | |
| | Staff Statistician | July 2019 - Nov 2022 |
| | <ul style="list-style-type: none">• Evaluated experimental designs and resulting data from vaccine safety and efficacy trials• Managed multiple projects related to statistical consultation for scientist and researchers• Provided statistical advice on sound study design to regulators for new regulations• Communicated findings both in writing and orally to scientists | |
| | Iowa Monarch Conservation Consortium | Jan 2019 - June 2019 |
| | Ames, IA | |
| | Research Assistant | |
| | <ul style="list-style-type: none">• Maintained and cleaned datasets for a R package• Created scripts to automatically create figures and tables for grant reports | |
| | After, Inc. | May 2018 - Dec 2018 |
| | Norwalk, CT | |
| | R Shiny Developer Intern | |
| | <ul style="list-style-type: none">• Maintained and developed over 100 client reports with R Shiny• Created and improved reporting templates to standardize reports across clients• Researched new features for Shiny applications and documents | |
| | Iowa State University | Aug 2013 - May 2018; Jan 2019 - June 2019 |
| | Ames, IA | |
| | Instructor/Teaching Assistant | |
| | <ul style="list-style-type: none">• Taught introductory statistics both in person and online• Ran labs and graded for both undergraduate and graduate courses• Held office hours to help students with a one-on-one emphasis | |

| | | |
|-------------------------------------|---|--|
| UNDERGRADUATE RESEARCH EXPERIENCE | CREST(NSF) California State University, Bakersfield <ul style="list-style-type: none"> Investigated methods of fitting a penalized broken cubic spline and compared using AIC, AICcorr, BIC, CV, and GCV criteria's to the RSE | June 2012 - June 2013 |
| | Interdisciplinary Program in High Performance Computing, University of Maryland, Baltimore County <ul style="list-style-type: none"> Completed Math 447: Introduction to Parallel Computing Collaborated with the Department of Natural Resources of Maryland to identify trouble areas of the Chesapeake Bay using different statistical methods and ranking systems. | Summer 2012 |
| VETERINARY SERVICES MEMORANDA (VSM) | VSM 800.110: Label Warnings Concerning Bovine Rhinotracheitis Vaccine, Modified Live Virus, and Bovine Virus Diarrhea Vaccine, Modified Live Virus, for Pregnant Cows or Calves Nursing Pregnant Cows VSM 800.124: Guidelines for Potency Specifications of Biological Products Administered to Animals | |
| PUBLICATIONS | Eduardo L. Montoya, Nehemias Ulloa, and Victoria Miller. (2014) A Simulation Study Comparing Knot Selection Methods With Equally Spaced Knots in a Penalized Regression Spline. <i>International Journal of Statistics and Probability</i> , v.3, n.3, p. p96. (URL) Rosemary K. Le, Christopher V. Rackauckas, Anne S. Ross, and Nehemias Ulloa. (2013) Assessment of Statistical Methods for Water Quality Monitoring in Maryland's Tidal Waterways. <i>SIAM Undergraduate Research Online (SIURO)</i> , vol. 6. (URL) | |
| AWARDS | Center for Veterinary Biologics (CVB), APHIS, USDA <ul style="list-style-type: none"> Individual Cash Award NRB (Not Ratings Based) Individual Cash Award NRB (Not Ratings Based) Individual Cash Award NRB (Not Ratings Based) Iowa State University <ul style="list-style-type: none"> Alliance for Graduate Education and the Professoriate Fellowship | Sep 2021 Sep 2021 Aug 2023 Aug 2013 - June 2018 |
| PRESENTATIONS | JSM: Joint Statistical Meeting Baltimore, MD <ul style="list-style-type: none"> Contributed Poster Presentations: Social Statistics Section - An Application of Polynomial Regression to Dyadic Data JSM: Joint Statistical Meeting Vancouver, BC, CA <ul style="list-style-type: none"> Bayesian Generalized Linear Models for Medicine — Contributed Talk - Bayesian Hierarchical Models and Influenza Modeling CDC: Flusight Annual Conference Atlanta, GA <ul style="list-style-type: none"> Bayesian Hierarchical Models and Influenza Modeling | Aug 2017 Aug 2018 Sep 2018 |
| ACTIVITIES | STAT-ers: Statistics graduate student organization Iowa State University <ul style="list-style-type: none"> Vice President President StatCom: Statistics in the Community Iowa State University | Aug 2013 - May 2019 2015 - 2016 2016 - 2017 Aug 2015 - May 2019 |

- Ran statistics station at Meeker Elementary’s Science Night
- Helped a non-profit with data clean-up and summary statistics

Meeker Elementary
 Ames, IA

2021-2022

- Help facilitate game nights for the community
- Helped run the walk-a-thon weekly events for the school children

King Chavez High School
 San Diego, CA

2025

- Presented to various math course about the field of statistics and job paths

TECHNICAL
 SKILLS

Programming: R, SAS, C++, SPSS, MPLUS, Git, SQL, \LaTeX
Statistical Computing: Stan, JAGS, Shiny, JMP

PROFESSIONAL
 MEMBERSHIPS

American Statistical Association

LANGUAGES

English, Spanish