

# Robin A. Donatello

Associate Professor of Statistics

Curriculum Vitae  
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📍 Department of Mathematics and Statistics,  
California State University, Chico  
🏠 norcalbiostat.com  
✉ rdonatello@csuchico.edu  
🐦 @norcalbiostat  
🌐 norcalbiostat  
🌐 rajeffries

## Education

2007 - 2013	<b>Dr. Public Health in Biostatistics</b>	University of California, Los Angeles
2005 - 2007	<b>Masters of Science in Biostatistics</b>	University of California, Los Angeles
2001 - 2005	<b>Bachelors of Science - Statistics</b>	California State University, Chico
2001 - 2005	<b>Bachelors of Science - Biology, Minor in Chemistry</b>	California State University, Chico

## Employment

2020 - Present	<b>Associate Professor</b>	Department of Mathematics and Statistics, California State University, Chico
2014 - 2020	<b>Assistant Professor</b>	Department of Mathematics and Statistics, California State University, Chico
2012 - 2015	<b>Database Administrator</b>	Keeping It Real LAC ➤ Joint employment between the Institute for Health Promotion and Disease Prevention Research, University of Southern California and the Los Angeles County Department of Public Health, HIV and STD Program Office
2007 - 2012	<b>Data Analyst</b>	Project Connect, Health Research Association, University of Southern California

## Academic leadership

- **Data Science Program Coordinator** (2014-Present)
  - In collaboration with the Department of Computer Science, I developed the Undergraduate Certificate in Data Science at CSU, Chico. Program started Fall 2018
  - Currently working to expand into the Freshman/GE and Graduate space; Create a student internship program, and fee-based data-services practice.
  - Website developer and maintainer for campus based website (<https://www.csuchico.edu/datascience>) and external blog based website (<http://datascience.csuchico.edu>)
- **DataFest Event Coordinator** (2018-Present)
  - Organize and host the annual DataFest at Chico State, a weekend long data hackathon where teams of undergraduate students tackle a surprise real world dataset and compete for fame and prizes.
  - Website: <https://chicodatafest.netlify.app/>

## Teaching

I teach the Intro and Applied Statistics courses for majors and non-majors, as well as an Intro and Advanced Data Science course at Chico State. Courses marked with a <sup>†</sup> indicate that I developed and introduced that course. Most of my course materials are available on my website: [www.norcalbiostat.com](http://www.norcalbiostat.com).

- **Statistics** (Math 105) - General Education
- <sup>†</sup>**Introduction to R** (Math 130) - Short course
- **Applied Statistics I** (Math 315) - Non Majors, mostly Natural Sciences
- **Applied Statistics II** (Math 456) - Majors, Minors, Data Science Certificate
- <sup>†</sup>**Introduction to Data Science** (Math 385)
- <sup>†</sup>**Advanced Topics in Data Science** (Math 485)
- <sup>†</sup>**Data Science Project Capstone** (Math 490)

## Workshops

In addition to teaching traditional courses, I occasionally teach reproducible research and data analysis skills using R at workshops.

2020	<b>Promote yourself - make your own professional website without knowing HTML</b> International Conference on Health Policy Statistics ➤ <a href="https://norcalbiostat.github.io/ichps20_workshops/">https://norcalbiostat.github.io/ichps20_workshops/</a>	San Diego, California
2019	<b>Data Carpentry Workshop - Center for Healthy Communities</b> Chico State Data Science Initiative ➤ <a href="https://csucdsi.github.io/2019-06-19-chicostate/">https://csucdsi.github.io/2019-06-19-chicostate/</a>	Chico, CA
2018	<b>Data Carpentry Workshop - General Campus</b> Chico State Data Science Initiative ➤ <a href="https://csucdsi.github.io/2018-08-13-chicostate/">https://csucdsi.github.io/2018-08-13-chicostate/</a>	Chico, CA
2017	<b>Data Carpentry Workshop</b> UC Davis Data Lab ➤ Wandering Helper	Davis, CA

## Grants & Contracts

2020	<b>College of BSS Strategic Performance Award</b> Building Community of Data-Science Enabled Research in the Social Sciences ➤ Project Report: <a href="https://data485-s20.github.io/campfire_tweets/">https://data485-s20.github.io/campfire_tweets/</a>	Internal \$2500
2018-2020	<b>NSF IUOE</b> A Data-Driven, Multidisciplinary Curriculum Providing Access to the Data Analytics Economy through Project-based Learning ➤ Implementation partner. During S20 providing grant-wide student support in R programming. Abstract: <a href="https://www.nsf.gov/awardsearch/showAward?AWD_ID=1820766">https://www.nsf.gov/awardsearch/showAward?AWD_ID=1820766</a>	External \$1600
2017	<b>Exceptional Levels of Service to Students</b> Digging deeper to look beyond the DFW rate: A practical guide to analyze student success interventions. ➤ Guidelines for using campus owned data in rigorous program evaluation of student success interventions.	Internal \$5200
2016	<b>Department of Chemistry and Biochemistry</b> Mining historical data for predictive intervention in General Chemistry Course Redesign. ➤ Project Report: <a href="https://norcalbiostat.github.io/chem_ss">https://norcalbiostat.github.io/chem_ss</a>	Internal \$5200
2015	<b>American Statistical Association Conference Travel Grant</b> ASA Statistical Programmers and Analysts Section ➤ Funding to attend 2015 Joint Statistical Meetings	External \$500

## Consulting

I often consult with internal and external people and organizations to provide Statistical or Data Science assistance that do not directly result in a manuscript.

2019-Present	<b>Jennifer Wilking, Susan Roll</b>	Department of Political Science, School of Social Work, CSU Chico
	➤ Statistical analysis support for a housing insecurity study.	
2019	<b>Brady Hayes</b>	Enloe Medical Center, Chico, CA
	➤ Statistical consulting for PHd Thesis research	
2018-Present	<b>Center for Healthy Communities</b>	CSU, Chico
	➤ On retainer as Interim Research & Evaluation co-lead. Supervise data science interns and technical program analysts. Automation of program administrative tasks. Creating scripts to automate program reporting, research analysis, manuscript writing, grant writing	
2018	<b>Dr. Ben Van Deusen</b>	Department of Science Education, CSU Chico
	➤ R programming assistance for missing data models.	
2017	<b>BLDD Architects</b>	Illinois
	➤ Data analysis to analyze the effect of building and campus structural changes on middle- and high-school students academic performance and rate of referrals to the principal.	
2016	<b>Driscoll Berries</b>	Red Bluff, CA
	➤ Sampling design and analysis of the effects of varying growing conditions on strawberry plants.	
2015-present	<b>Keeping It Real Together</b>	Los Angeles, CA
	➤ Program evaluation of a federally funded Teen Pregnancy Prevention program.	
2014-2017	<b>Dr. Bill Loker</b>	CSUC Department of Undergraduate Education
	➤ Predictive modeling of students at risk of dropping out after the second year.	
2013-2015	<b>UCLA Fielding School of Public Health, Center for Health Advancement</b>	Los Angeles, CA
	➤ Create and implement methods to improve the quality of local area estimates in LA County and forecast changes in risk factors and disease rates through 2030 using empirical Bayesian methods and MCMC simulation.	
2013	<b>Absolute Return for Kids</b>	Mozambique, Africa
	➤ Assess the impact of mobile technology on patient retention in HIV care. Study design, enrollment simulation using and power analysis.	
2013	<b>UCLA Luskin School of Public Affairs</b>	Los Angeles, CA
	➤ Assess the correlation between DUI arrestees with prior violent criminal histories and motor vehicle crashes resulting in death or injury. Study design, statistical consultation, and data analysis.	
2011	<b>Dr. David S. Finley</b>	Institute of Urologic Oncology, David Geffen School of Medicine, UCLA
	➤ Analysis of staining patterns for aggressive tumors.	
2009-11	<b>Media Genus, Diversified Mercury Communications, LLC</b>	Santa Monica, CA
	➤ Predictive marketing analysis using Bayesian hierarchical modeling and MCMC on large and sparse data.	
2008	<b>Dr. Aarne Jyrala</b>	Heart Institute, Department of Cardiothoracic Surgery, Good Samaritan Hospital
	➤ Analyzed the effect of Euroscore variables and hyperthyroidism on post-operative patients undergoing renal failure.	
2007	<b>Agata Rozga, graduate student</b>	UCLA Center for Autism Research and Treatment
	➤ Consult on analysis and interpretation of the effects of withdrawing attention on infants with autistic siblings.	
2007	<b>Dennis Corbin</b>	CSU Dominguez Hills
	➤ Data analysis on the relationship between spirituality and HIV/Sexual risk behaviors in teens.	

2007	<b>Dr. Judith Currier</b>	UCLA School of Medicine
	➤ Data analysis of Coronary Atherosclerosis in HIV-infected Patients	

## Professional Society Memberships

2007 - Present	<b>American Statistical Association</b>	Member
	Sections on Statistics and Data Science Education, Statistical Programmers and Analysts, Teaching Statistics in Health Sciences	
2012 - 2013	<b>Western Users of SAS Software</b>	Student Member
2011 - 2013	<b>American Public Health Association</b>	Member
	Section on Public Health Statistics	

## Professional Service

2016-2020	<b>Western Users of SAS Software Annual Conference and Educational Forum</b>	Conference Planning Committee
	Academic Scholarship Co-Chair	
2015	<b>Joint Statistical Meetings</b>	Conference Session Chair
	Invited oral presentations on Big Data	
2014	<b>American Public Health Association 2012 Annual Conference</b>	Conference Abstract Reviewer
2014	<b>The American Statistician</b>	Publication Reviewer
2013	<b>Western Users of SAS Software Annual Conference and Educational Forum</b>	Conference Session Chair
	Section on Statistics and Analytics	
2011	<b>American Journal of Public Health</b>	Publication Reviewer
2009	<b>Joint Statistical Meetings</b>	Conference Session Chair
	Section on Bayesian Statistical Science	

## Publications

### Books

1. Afifi, A, S May, R Donatello, and V Clark (2020). *Practical Multivariate Analysis*. 6th ed. Boca Raton, FL: Chapman and Hall/CRC.

### Peer-reviewed manuscripts

1. Knipe, GA, SD Fox, and RA Donatello (2020). Deliberate Practice in Simulation: Evaluation of Repetitive Code Training on Nursing Students' BLS Team Skills. *Clinical Simulation in Nursing* **48**, 8–14.
2. Nissen, J, R Donatello, and B Van Dusen (July 2019). Missing data and bias in physics education research: A case for using multiple imputation. *Phys. Rev. Phys. Educ. Res.* **15** (2), 020106.
3. Rohrbach, LA, RA Donatello, BD Moulton, AA Afifi, KI Meyer, and CJD Rosa (2019). Effectiveness Evaluation of It's Your Game: Keep It Real, a Middle School HIV/Sexually Transmitted Infection/Pregnancy Prevention Program. *Journal of Adolescent Health* **64**(3), 382–389.
4. Fleming, EJ, T Woyke, RA Donatello, MMM Kuypers, A Sczyrba, S Littmann, and D Emerson (2018). Insights into the Fundamental Physiology of the Uncultured Fe-Oxidizing Bacterium *Leptothrix ochracea*. *Applied and Environmental Microbiology* **84**(9). Ed. by HL Drake. eprint: <https://aem.asm.org/content/84/9/e02239-17.full.pdf>.
5. Dittus, P, C Harper, J Becasen, R Donatello, and K Ethier (Nov. 2017). Structural Intervention With School Nurses Increases Receipt of Sexual Health Care Among Male High School Students. *Journal of Adolescent Health* **62**.
6. Donatello, RA, CJD Rosa, BD Moulton, EQ Chung, R Viola, LA Rohrbach, and AA Afifi (2017). Patterns of Sexual Experience Among Urban Latino and African American Ninth Grade Students. *The Journal of Sex Research* **54**(4-5). PMID: 27135138, 619–630.
7. Montoya, V, D Ludwig, E Simchuk, R Donatello, A Coates, and J Todd (2017). Preventing nausea after sleeve gastrectomy. What works and what doesn't. *Surgery for Obesity and Related Diseases* **13** (0), 206–207.
8. Dittus, PJ, CJ De Rosa, RA Jeffries, AA Afifi, WG Cumberland, EQ Chung, E Martinez, PR Kerndt, and KA Ethier (2014). The Project Connect Health Systems Intervention: Linking sexually experienced youth to sexual and reproductive health care. *Journal of Adolescent Health* **55**(4), 528–534.
9. Gorbach, PM, H Pines, M Javanbakht, RE Weiss, R Jeffries, RD Cranston, EJ Fuchs, M Hezerah, S Brown, A Voskanian, et al. (2014). Order of Orifices: Sequence of Condom Use and Ejaculation by Orifice During Anal Intercourse Among Women: Implications for HIV Transmission. *JAIDS Journal of Acquired Immune Deficiency Syndromes* **67**(4), 424–429.
10. Dittus, P, R Jeffries, C De Rosa, P Loosier, and K Ethier (2013). Sexual Behavior and Receipt of Sexual and Reproductive Healthcare Among Sexually Experienced Sexual Minority Youth: The Role of Parenting Behaviors. *Journal of Adolescent Health* **52**(2), S13–S14.
11. Logan, J, D Finley, N Kroeger, R Donatello, A Afifi, J Said, F Kabbinavar, A Belldgrun, and A Pantuck (Apr. 2013). Expression Patterns of seven molecular markers in chromophobe renal cell carcinoma with distinct expression changes identified in high grade lesions. *The Journal of Urology* **189**, e193.
12. De Rosa, CJ, RA Jeffries, AA Afifi, WG Cumberland, EQ Chung, PR Kerndt, KA Ethier, E Martinez, RV Loya, and PJ Dittus (2012). Improving the Implementation of a Condom Availability Program in Urban High Schools. *Journal of Adolescent Health* **51**(6), 572–579.
13. Gorbach, PM, RE Weiss, E Fuchs, RA Jeffries, M Hezerah, S Brown, A Voskanian, E Robbie, P Anton, and RD Cranston (2012). The slippery slope: lubricant use and rectal sexually transmitted infections: a newly identified risk. *Sexually Transmitted Diseases* **39**(1), 59.
14. Jyrala, A, RE Weiss, RA Jeffries, and GL Kay (2012). Is Hypothyroidism Overlooked in Cardiac Surgery Patients? *Open Journal of Thoracic Surgery* **2**(02), 29.
15. Dittus, P, C De Rosa, R Jeffries, A Afifi, W Cumberland, K Ethier, E Chung, E Martinez, R Loya, and P Kerndt (2011). Employing school nurses as a healthcare point of contact for male high school students: a school-based intervention to prevent STD, HIV, and teen pregnancy. *Sexually Transmitted Infections* **87**(Suppl 1), A88–A89.
16. Dittus, P, C De Rosa, R Jeffries, A Afifi, W Cumberland, P Loosier, K Ethier, E Chung, E Martinez, and P Kerndt (2011). The project connect health systems intervention: STD screening and HIV testing outcomes for female adolescents. *Sexually Transmitted Infections* **87**(Suppl 1), A56–A56.
17. Dittus, P, P Loosier, C DeRosa, K Ethier, R Jeffries, A Afifi, W Cumberland, E Chung, E Martinez, and P Kerndt (2011). The Project Connect Health Systems Intervention: Sexual and Reproductive Health Outcomes for Sexually Active Youth. *Journal of Adolescent Health* **48**(2), S9.
18. Finley, DS, B Shuch, JW Said, G Galliano, RA Jeffries, AA Afifi, B Castor, C Magyar, A Sadaat, FF Kabbinavar, et al. (2011). The chromophobe tumor grading system is the preferred grading scheme for chromophobe renal cell carcinoma. *The Journal of urology* **186**(6), 2168–2174.

19. Gorbach, PM, RE Weiss, R Jeffries, M Javanbakht, LN Drumright, ES Daar, and SJ Little (2011). Behaviors of recently HIV-infected men who have sex with men in the year post-diagnosis: effects of drug use and partner types. *Journal of acquired immune deficiency syndromes (1999)* **56**(2), 176.
20. Jyrala, A, RE Weiss, RA Jeffries, and GL Kay (2010). Effect of mild renal dysfunction (s-crea 1.2–2.2 mg/dl) on presentation characteristics and short-and long-term outcomes of on-pump cardiac surgery patients. *Interactive cardiovascular and thoracic surgery* **10**(5), 777–782.
21. Micheletti, RG, GA Fishbein, MC Fishbein, EJ Singer, RE Weiss, RA Jeffries, and JS Currier (2009). Coronary atherosclerotic lesions in human immunodeficiency virus–infected patients: a histopathologic study. *Cardiovascular Pathology* **18**(1), 28–36.

### Presentations

1. De Rosa, C, R Jeffries, E Chung, S Walker, and B Moulton (2014). Implementing an evidence-based sexual health education curriculum in middle schools: Implementation fidelity and teacher reporting over two implementation years. In: *SEXUALLY TRANSMITTED DISEASES*. Vol. 41. LIPPINCOTT WILLIAMS & WILKINS TWO COMMERCE SQ, 2001 MARKET ST, PHILADELPHIA, PA 19103 USA, pp.S112–S112.
2. Jeffries, R (2013). Patterns of sexual experience among an urban sample of Latino and African-American 9th grade students. In: *141st APHA Annual Meeting (November 2–November 6, 2013)*. APHA.
3. Jeffries, R (2012). Early Adolescents' Expectations about Future Sexual Behavior and Sexual Initiation One Year Later. In: *2012 National STD Prevention Conference*. CDC.
4. Gorbach, P, R Weiss, R Jeffries, E Fuchs, M Hezarah, S Brown, et al. (2010). Rectal lubricant use and risk for rectal STI. In: *2010 International Microbicides Conference*.