Department of Mathematics and Statistics Coastal Carolina University P.O. Box 261954 Conway, SC 29528-6054

Phone: (843) 349-2556 email: npritcha@coastal.edu

#### **Education**

December 2008	Ph.D., Statistics, The University of South Carolina
August 2004	M.S., Statistics, Mississippi State University
May 2002	B.S., Mathematics, Freed Hardeman University

## **Academic Experience**

2019 - present	Professor, Department of Mathematics and Statistics,
0011 0010	Coastal Carolina University
2014 - 2019	Associate Professor, Department of Mathematics and Statistics, Coastal Carolina University
2008 - 2014	Assistant Professor, Department of Mathematics and Statistics,
	Coastal Carolina University
2004 - 2008	Graduate Teaching Assistant, Department of Statistics,
	The University of South Carolina
2002 - 2004	Graduate Teaching Assistant, Department of Mathematics and
	Statistics, Mississippi State University

## **Research Experience**

Summer 2005	Research Assistant (Internship), Division of Biostatistics and Health GIS,
	South Carolina Department of Health and Environmental Control

## **Research Interests**

Group testing, categorical data analysis, statistical education, sports analytics, epidemiology/public health, biomedical applications.

#### **Refereed Publications**

1. **Pritchard, N.**, Jagannathan, K., and Bell, L. (2018). *Understanding Statistics: Activities and Exercises for a First Statistics Course.* 2nd ed. Dubuque: Kendall Hunt.

2. Ratcliff, N., Carroll, K., Savage-Davis, E., Costner, R., Jones, C., **Pritchard, N.**, and Hunt, G. (2017). Oral language usage in prekindergarten classrooms. *Education*, **137**, 306-319.

- 3. Leake, J. and **Pritchard**, **N.**. (2016). The advantage of the coin toss for the new overtime system in the National Football League. *College Mathematics Journal*, **47**, 2-9.
- 4. Ratcliff, N., **Pritchard, N.**, Knight, C., Costner, R., Jones, C., and Hunt, G. (2014). The interaction of school organization and classroom dynamics: Factors impacting student achievement. *Journal of Research in Education*, **24**, 3-17.
- 5. **Pritchard, N.**, Jagannathan, K., and Bell, L. (2014). *Understanding Statistics: Class Activities for an Introductory Statistics Course.* Rev. ed. Dubuque: Kendall Hunt.
- 6. **Pritchard, N.**, Jagannathan, K., and Bell, L. (2012). *Understanding Statistics: Class Activities for an Introductory Statistics Course*. Dubuque: Kendall Hunt.
- 7. **Pritchard, N.** and Tebbs, J. (2011). Estimating disease prevalence using inverse binomial pooled testing. *Journal of Agricultural, Biological, and Environmental Statistics*, **16**, 70-87.
- 8. **Pritchard, N.** and Tebbs, J. (2011). Bayesian inference for disease prevalence using negative binomial group testing. *Biometrical Journal*, **53**, 40-56.

### **Manuscripts in Preparation**

- 1. Bell, L., Hill, P., Jagannathan, K., and **Pritchard, N.** (2022+). The effects of COVID-19 on performance in a coordinated multi-section introductory statistics course.
- 2. Bell, L., Jagannathan, K., and **Pritchard, N.** (2022+). Applied Statistics with R: a beginner's guide.
- 3. Dunn, M., Yannessa, J., and **Pritchard, N.** (2022+). Ten-year trends in sexual behavior of teens.

## **Grants: External**

- South Carolina Department of Education (2015). Coastal math science partner between Horry County Schools and Coastal Carolina University. Funded at \$700,000 (CCU's share is \$100,800). **Role: Content Expert**. Funding timeline: 09/2015-08/2018.
- South Carolina Department of Education (2011). Coastal math science partnership between Horry County Schools and Coastal Carolina University. Funded at \$686,000 (CCU's share is \$143,000). **Role: Statistics Consultant**. Funding timeline: 04/2011 03/2014.
- National Science Foundation (2011). Atmospheric and oceanographic controls on coastal fish population dynamics: An interdisciplinary project linking physical, mathematical, and fishery sciences. \$483,947. **Role: Co-Pl. Pl:** Kehui Xu, Coastal Carolina University. Not Funded.

#### **Grants: Internal**

Coastal Carolina University (2016). Applied Statistics with R: a beginners guide. Funded at \$1,400. **Role: Co-Investigator**. Investigators: Lindsey Bell and Keshav Jagannathan, Coastal Carolina University. Funding timeline: 12/2016-8/2017.

Coastal Carolina University (2011). Traffic Collision Analysis for the State of South Carolina and Myrtle Beach. Funded at \$1,400. **Role: Co-Investigator**. Investigator: Lindsey Bell, Coastal Carolina University. Funding timeline: 10/2011 - 8/2012.

#### **Contributed Talks**

- A Ten-Year Trend Analysis of Condom Use Behavior Among a Nationally Representative Sample of US High School Students. APHA Annual Meeting and Expo, Virtual, October 2020 \*Poster Presentation by John Yannessa.
- Determinants of Relationship Violence Among a Nationally Representative Sample of Male Teens. APHA Annual Meeting and Expo, San Diego, November 2018 \*Poster Presentation by John Yannessa.
- Determinants of Sexual Coercion Among a Nationally Representative Sample of Male Teens. APHA Annual Meeting and Expo, Atlanta, November 2017 \*Poster Presentation by John Yannessa.
- The Advantage of the Coin Toss for the New Overtime System in the National Football League. Coastal Carolina University High School Mathematics Contest, Conway, March 2014. \*Joint presentation with Keshav Jagannathan.
- The Advantage of the Coin Toss for the New Overtime System in the National Football League. Carolinas Sports Analytics Meetings, Greenville, April 2013.
- The Advantage of the Coin Toss for the New Overtime System in the National Football League.

  MAA Southeastern Section Meetings Presentation, Rock Hill, March 2013.
- An analysis of vehicular collisions in the Myrtle Beach area. MAA Southeastern Section Meetings, Rock Hill, March 2013. \*Oral presentation by Robert Pickus (an undergraduate student).
- An analysis of vehicular collisions in the Myrtle Beach area. Wall Interdisciplinary Talks Presentation, Conway, October 2012. \*Joint presentation with Lindsey Bell, John Marcis, and Robert Pickus (an undergraduate student).
- An introduction to group testing. MATH 190 (Freshman seminar) Presentation, Conway, January 2012.
- An introduction to group testing. MATH 190 (Freshman seminar) Presentation, Conway, February 2011.
- Estimating disease prevalence using inverse binomial pooled screening. Poster Presentation at ENAR Spring Meetings, New Orleans, March, 2010. \*Poster Presentation by Joshua Tebbs.

Estimating disease prevalence using inverse binomial pooled screening. Presentation at the Kansas State University Conference on Applied Statistics in Agriculture, Manhattan, April, 2010. \*Presentation by Joshua Tebbs.

An introduction to group testing. MATH 190 (Freshman seminar) Presentation, Conway, March 2010.

A regression model for geometric group testing. SCASA Annual Meetings, Columbia, April 2008.

#### **Honors and Awards**

2017	Guest Coach of the Game, Coastal Carolina University Women's Basketball
2017	Guest Coach of the Game, Coastal Carolina University Women's Basketball
2017	Student-Athlete Faculty Members of the Year, Coastal Carolina
2017	University, *Joint award with Mrs. Lindsey Pritchard
2007	Outstanding Graduate Teaching Assistant Award for the Department of
	Statistics, The University of South Carolina
2006	Outstanding Graduate Teaching Assistant Award for the Department of
	Statistics, The University of South Carolina
2005	Outstanding Graduate Teaching Assistant Award for the Department of
	Statistics, The University of South Carolina
2004	Donald Zacharias Teaching Assistant of the Year at the Master's Level,
	Mississippi State University
2004	Graduate Teaching Assistant of the Year for the Department of Mathematics and Statistics, Mississippi State University
2002	Graduated Summa Cum Laude, Freed Hardeman University
2001 - 2002	Alpha Chi National Honor Society
1998 - 2002	Dean's Scholarship, Freed Hardeman University
1998 - 2002	Mathematics Scholarship, Freed Hardeman University
1999 - 2000	John W. and Rosemary Kopel Brown Scholarship in Mathematics,
	Freed Hardeman University
1998	Lee Chance Citizenship Award, The Town of Huntingdon

#### **Student Direction**

Natasa Savovic, Math 490, Fall 2017.

Green Jackson, Math 490, Fall 2017.

John Horgan, CCU Internal Grant, Spring-Summer 2017.

Tyler Keane, Math 490, Fall 2016.

Robert Pickus, Math 490, Fall 2016.

Sierra Doherty, Math 490, Fall 2015.

Emily Deborde, Math 490, Fall 2014.

Robert Pickus, Math 490, Fall 2013.

Jacqueline Leake, Math 490, Fall 2012.

Robert Pickus, CCU Internal Grant, Summer 2012.

Gina Austin, Math 490, Fall 2011.

Kristen Kilheeney, Math 490, Fall 2010.

# Teaching

	Number of sections
Coastal Carolina University	
MATH 132: Calculus for Business and Social Science	1
MATH 202: Mathematics for Early Childhood and Elementary Education Majors II	1
MATH 490: Seminar in Mathematics	4
STAT 201: Elementary Statistics	48
STAT 201L: Elementary Statistics Computer Laboratory	46
STAT 315: Regression Analysis	3
STAT 316: Experimental Design	1
STAT 317: Nonparametric Statistical Methods	2
STAT 318: Applied Statistical Methods	5
STAT 319: Categorical Data Analysis	3
STAT 323: Survey and Sampling Designs	2
STAT 390: Case Studies in Statistics	1
STAT 412: Statistical Inference I	11
STAT 414: Time Series Analysis	1
The University of South Carolina	
STAT 110: Introduction to Descriptive Statistics	5
STAT 201: Elementary Statistics	3
STAT 515: Statistical Methods I	1
STAT 516: Statistical Methods II	3
Mississippi State University	
ST 2113: Statistics for the Behavioral Sciences	2
ST 2113: Statistics for the Behavioral Sciences(TA)	2

## **University Service**

Faculty Associate, CCU Women's Volleyball, Fall 2016 - Fall 2017.

Volunteer, Freshman Orientation, Summer 2015.

Member, Core Curriculum Subcommittee on Rubrics, Fall 2014 - Spring 2015.

Chair, Core Curriculum Committee, Fall 2013 - Summer 2014.

College Representative, Core Curriculum Committee, Fall 2011 - Summer 2014.

Member, QEP Assessment Team, Summer 2011 - Spring 2012.

Senator, Departmental Representative, Faculty Senate, Fall 2010 - Summer 2013.

Faculty Judge, Undergraduate Research Competition (April 2, 2011).

Faculty Judge, Undergraduate Research Competition at the Celebration of Inquiry Conference (February 18, 2010).

### **College Service**

Dean's Representative, CMWS Graduate Committee, Fall 2011 - Summer 2013.

CMWS Representative, COS Graduate Committee, Fall 2011 - Summer 2013.

## **Departmental Service**

Member, Assistant Professor Search Committee, Spring 2022.

Academic Advisor for Statistics Majors, Fall 2021 - present.

Chair, Lecturer Search Committee, Spring 2021.

Chair, Lecturer Search Committee, Fall 2019 - Summer 2020.

Academic Adviser for Statistics Minors, Spring 2018 - Summer 2021.

Quantitative Literacy Core Skill Area Assessment Coordinator, Fall 2017 - present.

Member, Departmental Promotion and Tenure Committee, Fall 2014 - Fall 2020.

Member, Core Goal 2 Assessment Committee, Fall 2012 - Spring 2017.

Course Coordinator, STAT 201 and STAT 201L, Fall 2011 - Summer 2013; Spring 2018 - present.

Member, Assistant Professor Search Committee, 2011.

Member, Departmental Assessment Committee, Spring 2010 - Summer 2021.

Academic Adviser for Mathematics Majors, Fall 2010 - Spring 2013.

Member, Lecturer Search Committee, Spring 2010.

Volunteer, Coastal Carolina University Annual Math Contest (March 27, 2009).

Member, Statistics Committee, Fall 2008 - present.

#### **Professional Service**

Referee for 4 papers:

- Statistics in Medicine (2)
- PloS ONE
- Studies in Theoretical and Applied Statistics: Recent Developments in Modeling and Applications in Statistics

Paid Statistical Consultant (for Dr. Megan McIlreavy), Fall 2009 - Summer 2010.

Unpaid Statistical Consultant (for Dr. Nanci Howard), Spring 2009 - Fall 2010.

Textbook Reviewer, Unit 1: *Workshop Statistics: Discovery with Data* (4th edition) by Rossman and Chance for John Wiley and Sons, Inc. February 2009.

Textbook Reviewer, Chapters 10 & 11: *Introductory Statistics: Exploring the World With Data Analysis* (1st edition) by Ryan and Gould for Pearson. February 2009.

#### **Community Service**

Volunteer, Horry County Schools, Spring 2016 - Present.

Chair, Youth Ministry Support Team, Grand Strand Church of Christ, Fall 2017 - Summer 2018.

Chair, Youth Minister Search Committee, Grand Strand Church of Christ, Fall 2016.

Deacon, Grand Strand Church of Christ, Fall 2011 - Fall 2021.

Leader of the K-5 Ministry, Grand Strand Church of Christ, Spring 2011 - Spring 2018.

Leader of the Greeter's Ministry, Grand Strand Church of Christ, Spring 2009 - Summer 2011.

#### **Professional Affiliations**

Mu Sigma Rho

Mathematical Association of America

# **Computing Skills**

R/RStudio, ActivePresenter, SAS, S-Plus, Minitab, Fathom, WinBUGS, Maple, Blackboard, Moodle, Microsoft Office, LATEX

Some experience with SPSS, Unix, Fortran, HTML, Mathematica, DoStat