

Curriculum Vitae
RICHARD C. OTT

CURRENT EMPLOYER

COLORADO MESA UNIVERSITY (formerly Mesa State College), Grand Junction, CO

Associate Professor of Statistics, 8/06-present

Undergraduate Courses taught: Probability and Statistics, Statistical Methods, Mathematical Statistics I & II, Sampling Techniques, Design of Experiments, Topics in Biostatistics, College Algebra, Mathematics Colloquium, Statistics for the Social and Behavioral Sciences, Correlation and Regression, Statistics & Quality Control for Engineering

Graduate Courses taught: Statistics for the Health Sciences

Technology incorporated: R, SPSS, Excel, PowerPoint, Word, MyStatLab., Graphing Calculators

EDUCATION

Rice University, Houston, TX

Ph.D. in Statistics: May 2005

Dissertation: *On the Operating Characteristics of Some Non-parametric Methodologies for the Classification of Distributions by Tail Behavior*, Advisor: Javier Rojo

University of Missouri - Rolla, Rolla, MO

M.S. in Applied Mathematics: December 1996

ST. MARY'S UNIVERSITY, San Antonio, TX

B.S. in Electrical Engineering: May 1994

MATH & SCIENCE PARTNERSHIP GRANTS

- Colorado Mesa University & Western Colorado School Districts), Elementary Mathematics Teacher Coaching Intervention; US Department of Education Grant issued through Colorado Department of Education, 2013 – present; Grant Co-author & Evaluator
- Mesa State Middle School Math & Science Partnership Extension Grant; \$164,000; “No Child Left Behind” US Department of Education Grant issued through Colorado Department of Education, 2010 – 2011; Principal Investigator and Director of Year Long Professional Development Program for Middle School Math & Science Teachers; Duties Included Advertising, Registration, Scheduling, Purchasing, Budgeting, Evaluation, Annual Reporting
- Mesa State Middle School Math & Science Partnership; \$500,000; “No Child Left Behind” US Department of Education Grant issued through Colorado Department of Education, 2007 – 2010; Director of Year Long Professional Development Program for Middle School Math & Science Teachers; Duties Included Advertising, Registration, Scheduling, Purchasing, Budgeting, Evaluation, Annual Reporting

PROFESSIONAL EXPERIENCE

RICE UNIVERSITY SUMMER INSTITUTE OF STATISTICS (NSF REU SITE), Houston, TX

INSTRUCTOR, 5/07-7/07

UNIVERSITY OF MISSOURI - COLUMBIA, Columbia, MO

Resident Instruction Assistant Professor, 8/05-7/06

Courses taught: Introduction to Mathematical Statistics, Elementary Statistics for Agriculture, Analysis of Variance

RICE UNIVERSITY, Houston, TX

Instructor, 8/01-5/05

Courses taught: Data Analysis and System Optimization, Elementary Applied Statistics

Teaching Assistant, 8/01-5/03

Course: Data, Models, Reality: An Introduction to the Scientific Method

ARKANSAS GOVERNOR'S SCHOOL, Hendrix College, Conway, AR

Instructor, 6/02-7/02

Courses taught: Probability and Statistics with NASA Applications

BARRIOS TECHNOLOGY, Johnson Space Center, Houston, TX

NASA Space Shuttle Flight Design Engineer, 1/97-7/99

- Space Shuttle Landing Team Real Time Support
- Mission Control Room Winds Coordinator

UNIVERSITY OF MISSOURI - ROLLA, Rolla, MO

Instructor, 8/95-5/96

Course taught: Calculus II

MEMC ELECTRONICS, St. Louis, MO

Quality Control Summer Internship, Summers 95, 96

LOCAL GRANTS

- 2011 Montrose County Citizen Survey Grant, \$500 for support of undergraduate research
- 2010 Town of Palisade Community Survey, \$500 for support of undergraduate research

RESEARCH ACTIVITY**PUBLISHED MANUSCRIPTS**

Lower levels of harvest traffic on alfalfa (Medicago sativa L.) have minimum impact on long-term yields, with T. Novotny and E. Rechel, Accepted for publication in Canadian Journal of Plant Science, Vol. 92, Number 5, Manuscript cjps2012-038, November 2012.

Space Shuttle GPS Figure of Merit Chimney Analysis, United Space Alliance (Johnson Space Center) STF No. AFDDFD-99-48200-112, August 1999 (Classified)

STS-085 Alpha Corridor Violation STAMPS Monte Carlo Simulation Correction Procedure, United Space Alliance (Johnson Space Center), STF No. DFD-97-4235-050, July 1997 (Classified)

ADDITIONAL MANUSCRIPTS

Testing for Tail Behavior Using Extreme Spacings, with J. Rojo, Cornell University Library, Article ID: 1011.6458, Nov. 2010.

Renal Impairment and Cerebral Dysfunction Following Cardiac Surgery: Is Embol-X Cannulation System an Effective Treatment?, with S. McCoy et. al. St. Mary's Regional Medical Center & University of Nebraska Medical Center.

A Binomial Test for Classifying Tail Behavior Using the Residual Life Function and the Extreme Spacing

TRAINING MANUAL

Introduction to Statistics for Flight Design, United Space Alliance (Johnson Space Center), May 1998 (Classified)

STATISTICAL ANALYSIS FOR PH.D. DISSERTATIONS

Assessing the Relationship between Job Satisfaction and Voluntary Turnover of Police Officers in Colorado, John Reece, Northcentral University May 2011

Metacognition Among Students Identified as Gifted or Nongifted Using the Discover Assessment, W. Leader, University of Arizona May 2008.

REVIEW OF MASTER'S THESIS

Model Selection: With the Application of Tumors in Childhood, A. Managa, University of Limpopo, South Africa, April 2006

Model Section in Regression: Factors Affecting Condom Usage, P. L. Ramulifho, University of Limpopo, South Africa, October 2006

CONFERENCE PRESENTATIONS

Student Improvement in Elementary Statistics Using Technology at Mesa State College, March 2011
International Conference on Technology in Collegiate Mathematics, Denver, CO

Science, Biology, Algebra, and Statistics Middle School Classroom Applications and Technology, March 2011

U.S. Department of Education Math and Science Partnerships Program Regional Conference, San Francisco, CA

Air Pollution is the Grand Valley, October 2010

The 2nd Annual Four Corners Conference, Colorado Mesa University

Physics Applied in a 21st Century Way, March 2010

U.S. Department of Education Math and Science Partnerships Program Regional Conference, New Orleans, LA

On the Operating Characteristics of Some Non-parametric Methodologies for the Classification of Distributions, May 2007

3rd Annual Erich Lehmann Symposium, Rice University, Houston TX; presenter and session chair

GPS FOM Chimney Analysis Using Generalized Extreme Value Distribution, with J. Frisbee and Kanan Saha, April 2004

American Institute of Aeronautics and Astronautics Houston Annual Technical Meeting, Johnson Space Center, Houston TX

ADDITIONAL PRESENTATIONS

Introduction to Bayesian Statistical Analysis, February 2012
Mathematics Colloquium, Colorado Mesa University

Calculus III in 3-D, September 2011
Mathematics Colloquium, Colorado Mesa University

A Moment in Time, November 2010
Mathematics Colloquium, Mesa State College

Bootstrapping Various Statistics, September 2009
Mathematics Colloquium, Mesa State College

Origin of Statistics, September 2009
Mathematics Colloquium, Mesa State College

NASA Space Shuttle: From Launch to Landing, February 2008
Math Extravaganza, Mesa State College

On the Operating Characteristics of Some Non-parametric Methodologies for the Classification of Distributions by Tail Behavior, 2005
Mathematics and Statistics Colloquium, University of Missouri-Rolla

STATISTICS STUDENT RESEARCH COLLABORATIONS (RESULTING IN A PAPER OR PRESENTATION)

Analysis of 2011 Montrose County Citizen Survey, presented by Tyler Nelson, April 2012
Montrose County Commissioner Meeting & Colorado Mesa Student Showcase, Colorado Mesa University

Analysis of 2010 Town of Palisade Community Survey, presented by Alex Hafer, December 2011
Palisade Town Meeting & Mathematics Colloquium, Colorado Mesa University

The Sum of Dependent Chi-Squared Random Variables, presented by Shane Chatfield, David Miller, and Mackenzie Schmalz, May 2010
Johnson Space Center, Houston TX, Sponsored by Colorado NASA Space Consortium Grant

Extreme Value Theory Analysis of Air Pollution in the Grand Valley, presented by Shane Chatfield, April 2010, Mesa State Student Scholar Symposium & Mathematics Colloquium, Mesa State College;
Awarded Symposium Session Winner

Sticks and Statistics, presented by David Miller, April 2010
Mesa State Student Scholar Symposium & Mathematics Colloquium, Mesa State College

The Effects of Wealth on Childhood Academic Achievement Determinants of Success, presented by Katherine Pearson, April 2009, Mesa State Student Scholar Symposium & Mathematics Colloquium, Mesa State College

Statistical Explanations of the West Nile Virus in Mesa County, presented by Cerise Moran, April 2009, Mesa State Student Scholar Symposium & Mathematics Colloquium, Mesa State College; **Awarded Symposium Session Winner**

That's Not Suppose to Happen!, presented by Mike Burkes, April 2009
Mesa State Student Scholar Symposium & Mathematics Colloquium, Mesa State College

The Random Voting Model, presented by Courtney Gibbon, April 2009
Mesa State Student Scholar Symposium & Mathematics Colloquium, Mesa State College

Logistic Regression Applied to Football, presented by Will Zimmerer, April 2009
Mesa State Student Scholar Symposium & Mathematics Colloquium, Mesa State College

The Gambler's Ruin, presented by Mallory Reid, April 2009
Mesa State Student Scholar Symposium & Mathematics Colloquium, Mesa State College

Application of ANOVA, presented by Katherine Pearson, 2008
Mesa State Mathematics Colloquium, Mesa State College

Cardiac Surgery Embol-X Cannulation Treatment, presented by Mike Burkes, 2008
Mesa State Mathematics Colloquium, Mesa State College

MECHANICAL ENGINEERING STUDENT RESEARCH COLLABORATIONS (RESULTING IN A PAPER OR PRESENTATION)

Monitoring Deviation in Arbitrary Wave Form Generators, presented by Jesse Coquoz & K.C. Bretey, April 2012, Colorado Mesa Student Showcase, Colorado Mesa University

Momentum and Baseball, presented by Brandon Howell and Weston Vorderberg, April 2012
Colorado Mesa Student Showcase, Colorado Mesa University

On Vehicular Spoilers, presented by Isaac Hudson and Kelsi Middleton, April 2012
Colorado Mesa Student Showcase, Colorado Mesa University

The Effects of Humidity on Projectile Motion, presented by Aaron Clymer, April 2011
Colorado Mesa Student Showcase, Colorado Mesa University

Flexural Bending in T4 and T6 Aluminum, presented by Will Lostumbo, April 2011

Colorado Mesa Student Showcase, Colorado Mesa University

Projectile Motion Study, presented by Zack Black, April 2011

Colorado Mesa Student Showcase, Colorado Mesa University; **Awarded Showcase Session Winner**
Awarded Showcase Session Winner

Testing Coating Thickness vs. Coating Performance, presented by Pace Bates, April 2011

Colorado Mesa Student Showcase, Colorado Mesa University

Statistical Analysis of Input Random Variables that Significantly Impact Whether or Not a Drag Race is Won, presented by Jeremy Styers, April 2011

Colorado Mesa Student Showcase, Colorado Mesa University

PROFESSIONAL AFFILIATIONS

- American Statistical Association
- Kappa Mu Epsilon Mathematics Honor Society

SERVICE

COLORADO MESA UNIVERSITY / MESA STATE COLLEGE (Fall 2006-present)

- Tenure & Promotion Committee, 2014 - present
- Academic Policies Committee, Fall 2010 – Spring 2014
 - Vice-chair, Fall 2011 – Spring 2014
 - Chair, Fall 2010 – Spring 2011
- Search Committee Chair: Statistics Lecturer Positions, Spring 2012
- Search Committee: Mechanical Engineering Tenure-Track Position, Summer 2012
- Search Committee: Mathematics Tenure-Track Position, Spring 2011
- Search Committee: Mechanical Engineering Tenure-Track Position, Spring 2011
- Search Committee: AmeriCorps Position, Fall 2011
- Textbook Selection Committee Chair: Statistics, Spring 2010
- May Commencement Ceremonies Usher and Photo Section Monitor, 2012, 2011, 2010
- Center of Teacher Education ESOL Capstone Presider, 2009 & 2010
- Organized Visit and Hosted NASA Engineer David Mains for Sigma Xi Science Society, 2010

COMMUNITY

- Science Fair Judge, Spring 2012, Columbine Middle School
- Mesa County School District 51 AP Statistics Examination Preparation Session, Spring 2006 Grand Junction High School
- Faith Sharing Group Leader, Mesa State Catholic Newman Center, 2009-2010, 2014 - present
- Invited Speaker Grand Junction High School Mathematics Club, 2009
- Invited Speaker Garfield Middle School, 2008
- Junior Golf Clinic Volunteer, Tiara Rado Golf Course, 2008
- Treasurer, Lincoln Park Men's Golf Club, 2010-Present

Graduate School Presentations

On Tail Categorization of Probability Distributions, June 2003
Southern Regional Council of Statistics, Jekyll Island GA, Student Poster

Tail Categorization of a Sample, April 2003
Conference of Texas Statisticians, Texas A&M University, Student Poster

A Mode Detecting Control Chart, June 2002
Southern Regional Council of Statistics, Natchez MS, Student Poster

A Mode Detecting Control Chart, April 2002
Conference of Texas Statisticians, Houston TX, Student Poster Award Winner

Bootstrapping Extreme Order Statistics Despite a Small Sample Size, June 2001
Southern Regional Council of Statistics, St. Augustine FL, Student Poster

Bootstrapping Extreme Order Statistics Despite a Small Sample Size, April 2001
Conference of Texas Statisticians, San Antonio TX, Student Poster

- United Space Alliance: Applying Extreme Order Statistics Estimation Techniques to NASA Space Shuttle Global Positioning Satellite System, 2001-2003; Principal Investigator – Support for Graduate Research