

## FACULTY VITAE

November 12, 2010

**NAME:** Schaffer, Jay R.

**POSITION:** Associate Professor of Applied Statistics and  
Research Methods  
College of Education & Behavioral Sciences  
University of Northern Colorado  
Greeley, CO 80639

**HOME ADDRESS:** 3405 Sheltered Harbor Dr.  
Evans, CO 80620

**TELEPHONE:** Office: (970) 351-1676  
Home: (970) 330-0552  
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### EDUCATION:

| <u>Year</u> | <u>Degree</u> | <u>Institution</u>              | <u>Area of Study</u>                     |
|-------------|---------------|---------------------------------|------------------------------------------|
| 1997        | Ph.D.         | University of Northern Colorado | Applied Statistics &<br>Research Methods |

Dissertation: A Multivariate Application of the Q Chart

Nominated for the Graduate School Dean's Citation of Excellence

|      |      |                                                                        |             |
|------|------|------------------------------------------------------------------------|-------------|
| 1993 | M.S. | South Dakota State University                                          | Mathematics |
|      |      | Thesis: Predicting Daily Low Temperatures Using<br>Regression Analysis |             |

|      |      |                               |             |
|------|------|-------------------------------|-------------|
| 1991 | B.S. | South Dakota State University | Mathematics |
|------|------|-------------------------------|-------------|

### WORK EXPERIENCE—Professional Academic:

| <u>Year(s)</u> | <u>Institution/Organization</u>                | <u>Position</u>        | <u>Responsibilities</u>                                                   |
|----------------|------------------------------------------------|------------------------|---------------------------------------------------------------------------|
| 2009-Present   | University of Northern Colorado                | Associate<br>Professor | Department Chair<br>Teaching, Research, Service,<br>Advising & Consulting |
| 2005-2009      | University of Northern Colorado<br>Greeley, CO | Associate<br>Professor | Teaching, Research, Service,<br>Advising, & Consulting                    |

|           |                                                                 |                        |                                                        |
|-----------|-----------------------------------------------------------------|------------------------|--------------------------------------------------------|
| 2005      | Tenured in the Program of Applied Statistics & Research Methods |                        |                                                        |
| 1998-2005 | University of Northern Colorado<br>Greeley, CO                  | Assistant<br>Professor | Teaching, Research, Service,<br>Advising, & Consulting |
| 1997-1998 | Pennsylvania State University -<br>Behrend College, Erie, PA    | Assistant<br>Professor | Teaching, Research, Service,<br>Advising, & Consulting |
| 1994-1997 | University of Northern Colorado<br>Greeley, CO                  | Graduate<br>Assistant  | Teaching & Research                                    |
| 1994      | Colorado State University<br>Ft. Collins, CO                    | Graduate<br>Assistant  | Teaching & Computer<br>Programming                     |
| 1991-1993 | South Dakota State University<br>Brookings, SD                  | Graduate<br>Assistant  | Teaching & Research                                    |

#### **AREAS OF SPECIALIZATION:**

Mathematical Statistics, Sampling Techniques, Nonparametric Statistics, Quality Control, Statistical Education

#### **RESEARCH AREAS / INTERESTS:**

Quality Control, Statistics in Sports/Games, Statistical Education, Applied Statistics, Consulting--Academia and Industry

#### **JURIED PUBLICATIONS:**

##### **ARTICLES:**

Schaffer, Jay R. and Alkahtani, Saad, (submitted). A Double Multivariate Exponentially Weighted Moving Average Control Chart, Journal of Quality Technology.

Mundfrom, D., Schaffer, J., Shaw, D. Preecha, C., Ussawarujikulchai, A., Supawan, P., & Kim, M., (submitted). Number of Replications Required in Monte Carlo Simulation Studies: A Synthesis of Four Studies. Journal of Modern Applied Statistical Methods.

Mundfrom, Daniel J., Lopez, Javier, and Schaffer, Jay R., (submitted). What Makes a Winning Baseball Team?, Multiple Linear Regression Viewpoints.

Schaffer, Jay R., (2009), Can Money Buy You Playoff Spots and Championships in Major League Baseball?, Multiple Linear Regression Viewpoints, 35(2), 27-35.

DeGraff, Al, and Schaffer, Jay, (2008), Emotion-Focused Coping: The Primary Defensive Against Stress For People Living With Spinal Cord Injury, Journal of Rehabilitation 74(1), 19-24.

Schaffer, Jay R., and Chandran, Raj, (2007). Coors Field: Pitchers Graveyard?, Multiple Linear Regression Viewpoints 33(2), 22-29.

Schaffer, Jay R., and Kim, Myoung-Jin, (2007), Number of Replications Required in Control Chart Monte Carlo Simulation Studies, Communications in Statistics – Simulation and Computation, 36(5), 1075-1087.

Mundfrom, D. J., Perrett, J. J., Schaffer, J., Piccone, A., & Roozeboom, M. (2006). Bonferroni Adjustments in Tests for Regression Coefficients, Multiple Linear Regression Viewpoints, 32(1), 1-6.

Schaffer, Jay R. and Heiny, Erik, (2006), The Effects of Elevation on Slugging Percentage in Major League Baseball, Chance, 19(1), 28-34.

Battaglini, Claudio, Dennehy, Cad, Hyslop, Richard, Schaffer, Jay, Kemme, Douglas, and Heise, Gary, (2004). Os Efeitos De Atividades Fisicas Individualmente Prescritas Nas Modificacoes De Massa Muscular E Fidiga Em Pacientes Portadores De Cancer De Mama Recebendo Tratamento. Revista Portuguesa de Ciencias do Desporto, 4(2), 266-267.

Schaffer, Jay R. and VandenHul, Shawn, (2004). A Power Analysis of Variable Deletion Within the MEWMA Statistic. InterStat, March 2004, #1.

Shaw, Dale, Young, Suzanne, Schaffer, Jay, and Mundfrom, Daniel, (2003). A Strategy for Addressing the Validity of a Teacher Effectiveness Instrument. Multiple Linear Regression Viewpoints, 29(1), 23-28.

Schaffer, Jay R. (2002). Why Haven't All Four NCAA Men's Basketball #1 Seeds Advanced to the Final Four, Multiple Linear Regression Viewpoints, 28(2), 14-18.

### **BOOKS/MANUALS:**

Schaffer, Jay R. (in press). *Student's Study Guide, Elementary Statistics: Picturing the World*, 5<sup>th</sup> ed., New Jersey: Prentice-Hall, Inc.

Schaffer, Jay R. (in press). *Instructor's Solution Manual, Elementary Statistics: Picturing the World*, 5<sup>th</sup> ed., New Jersey: Prentice-Hall, Inc.

Schaffer, Jay R. (2008). *Student's Study Guide, Elementary Statistics: Picturing the World*, 4<sup>th</sup> ed., New Jersey: Prentice-Hall, Inc. (31,157 copies sold)

Schaffer, Jay R. (2008). *Instructor's Solution Manual, Elementary Statistics: Picturing the World*, 4<sup>th</sup> ed., New Jersey: Prentice-Hall, Inc.

Schaffer, Jay R. (2005). *Student's Study Guide, Elementary Statistics: Picturing the World*, 3<sup>rd</sup> ed., New Jersey: Prentice-Hall, Inc. (45,444 copies sold).

Schaffer, Jay R. (2005). *Instructor's Solution Manual, Elementary Statistics: Picturing the World*, 3<sup>rd</sup> ed., New Jersey: Prentice-Hall, Inc.

Schaffer, Jay R. (2002). *Student's Study Guide, Elementary Statistics: Picturing the World*, 2<sup>nd</sup> ed., New Jersey: Prentice-Hall, Inc. (28,156 copies sold).

Schaffer, Jay R. (2002). *Instructor's Solution Manual, Elementary Statistics: Picturing the World*, 2<sup>nd</sup> ed., New Jersey: Prentice-Hall, Inc.

Schaffer, Jay R. (1999). *Student's Study Guide, Elementary Statistics: Picturing the World*, New Jersey: Prentice-Hall, Inc. (10,572 copies sold).

Schaffer, Jay R. (1999). *Instructor's Solution Manual, Elementary Statistics: Picturing the World*, New Jersey: Prentice-Hall, Inc.

#### **PROCEEDINGS:**

Schaffer, Jay, and Vandenhul, Shawn, (2003), A Graphical Examination of Variable Deletion Within the MEWMA Statistic, Proceedings of the 2003 Hawaii International Conference on Statistics and Related Fields.

Schaffer, Jay R. and Vandenhul, Shawn, (2002). The Decomposition of the MEWMA. American Statistical Association, 2001 Proceedings of the Joint Statistical Meetings.

Al-Tukife, Fahad and Schaffer, Jay R., (2002). A Nonparametric Control Chart Based on Order Statistics. American Statistical Association, 2001 Proceedings of the Joint Statistical Meetings.

Schaffer, Jay R. (2001). Why Haven't All Four #1 Seeds Advanced to the Final Four, American Statistical Association, 2000 Proceedings of the Section on Statistics in Sports.

Schaffer, Jay R. (2000). Updating Multivariate Sample Mean and Covariance Formulas. American Statistical Association, 1999 Proceedings of the Section on Statistical Computing.

#### **JURIED PRESENTATIONS:**

Schaffer, Jay R., (2010). Money Can't Buy You Love (But It Can Buy You Playoff Spots and Championships in Major League Baseball), Paper presented at the Joint Statistical Meetings of the American Statistical Association, Vancouver, Canada, August 2010.

Mundfrom, Daniel J., Lopez, Javier, and Schaffer, Jay R., (2010). What Makes a Winning Baseball Team?, Paper presented at the Joint Statistical Meetings of the American Statistical Association, Vancouver, Canada, August 2010.

Mundfrom, Daniel J., Schaffer, Jay R., Kim, Myoung-Jin, Shaw, Dale, Thongteeraparp, Ampai, Preecha, Chana, and Supawan, Pornsin, (2010). Number of Replications Required in Simulation Studies: A Synthesis of Four Studies, Paper presented at the Joint Statistical Meetings of the American Statistical Association, Vancouver, Canada, August 2010.

Pollock, Emily, and Schaffer, Jay R., (2010). Using Stepwise Discriminant Analysis as a Post-Hoc Procedure to a Significant Hotelling's  $T^2$  Control Chart, Paper presented at the Joint Statistical Meetings of the American Statistical Association, Vancouver, Canada, August 2010.

Schaffer, Jay R. and Alkahtani, Saad, (2009). A Double Multivariate Exponentially Weighted Moving Average Control Chart, Paper presented at the Joint Statistical Meetings of the American Statistical Association, Washington, D.C. August 2009.

Schamber, Walter, D'Amato, Rick, & Schaffer, Jay, (2009). Evaluating the Executive Functions of Children Who Have Experienced Trauma Using Selected Subtests from The Delis Kaplan Executive Function System, Paper presented at the American Psychological Association Conference, Toronto, Canada August 2009.

Schaffer, Jay R., and Eshelman, Chad, (2008). Development of Chart Parameters and ARLS for the Expansion of the MEWMS and MEWMV with Individual Observations, Paper presented at the Joint Statistical Meetings of the American Statistical Association, Denver, CO August 2008.

Schaffer, Jay R., and Pollock, Emily, (2008). Using Stepwise Discriminant Analysis as a Post Hoc Procedure to a Significant Hotelling's  $T^2$  Control Chart, Paper presented at the Joint Statistical Meetings of the American Statistical Association, Denver, CO August 2008.

Schaffer, Jay R., and Chandran, Raj, (2007). Coors Field: Pitchers Graveyard?, Paper presented at the Joint Statistical Meetings of the American Statistical Association, Salt Lake City, UT, August 2007.

Schaffer, Jay R., Heiny, Erik, and Tracey, Jann, (2006). Home Runs and Hole-in-One: Statisticians Show That High Altitude Makes Hits Longer. *Science Daily*. Paper presented via television interview at Coors Field, Denver, CO, December 2006. [http://www.sciencedaily.com/videos/2006/1201-home\\_runs\\_amp\\_holeinone.htm](http://www.sciencedaily.com/videos/2006/1201-home_runs_amp_holeinone.htm)

Schaffer, Jay R., Heiny, Erik, & Tracey, Jann, (2006). The Coors Field Effect. *Discoveries and Breakthroughs Inside Science--American Institute of Physics, Ivanhoe*

*Broadcast News*. Paper presented via television interview at Coors Field, Denver, CO, August 2006. <http://www.aip.org/dbis/stories/2006/15254.html>

Schaffer, Jay R., and Eshelman, Chad, (2006), Is Average Run Length a Good Measure of Performance?, Paper presented at the Joint Statistical Meetings of the American Statistical Association, Seattle, WA, August 2006.

Schaffer, Jay R., and Kim, Myoung-Jin, (2006), Number of Replications Required in Control Chart Monte Carlo Simulation Studies, Paper presented at the Joint Statistical Meetings of the American Statistical Association, Seattle, WA, August 2006.

Mundfrom, Daniel J., Perrett, Jamie, Schaffer, Jay R., Piccone, Adam, (2006), Bonferroni Adjustments for Tests of Beta Coefficients in Multiple Linear Regression, Paper presented at the American Educational Research Association meeting, San Francisco, CA, April 2006.

Schaffer, Jay R., and Heiny, Erik, (2005), The Effects of Elevation on Slugging Percentage in Major League Baseball, Paper presented at the Joint Statistical Meetings of the American Statistical Association, Minneapolis, MN, August 2005.

Battaglini, Claudio, Dennehy, Cad, Hyslop, Richard, Schaffer, Jay, Kemme, Douglas, and Heise, Gary, (2004), A Randomized Study on the Effects of a Prescribed Exercise Intervention on Lean Mass and Fatigue Changes in Breast Cancer Patients During Treatment, Paper presented at the 10<sup>th</sup> Congress of Sport Science and Physical Education of Portuguese Speaking Countries, Porto, Portugal, September 2004.

Schaffer, Jay R., and Kim, Myoung-Jin, (2004), Simulations: How Many Do We Need?, Paper presented at the Joint Statistical Meetings of the American Statistical Association, Toronto, Canada, August 2004.

Schaffer, Jay R., and Vandenhul, Shawn, (2003), An Examination of Variable Deletion Within the MEWMA Statistic, Paper presented at the Joint Statistical Meetings of the American Statistical Association, San Francisco, CA, August 2003.

Schaffer, Jay R., and Young, John D., (2003), Analyzing the Effect of the Covariance Matrix on the Average Run Length of the MEWMA Control Chart, Paper presented at the Joint Statistical Meetings of the American Statistical Association, San Francisco, CA, August 2003.

Schaffer, Jay R., and Vandenhul, Shawn, (2003), A Graphical Examination of Variable Deletion Within the MEWMA Statistic, Paper presented at the Hawaii International Conference on Statistics and Related Fields in Honolulu, HI; June 2003.

Drum, S.N., Carter, S.D., Roozeboom, M.A., Hydock, M.A., Schaffer, J.R., Knofczynski, G.T., Hayward, R., and Schneider, C.M., (2003), Exercise Intervention and

the Effect on Cancer Patients. Paper presented at the American College of Sports Medicine, National ACSM meeting in San Francisco, CA; May 2003.

Hydock, D.S., Carter, S.D., Drum, S.N., Roozeboom, M.A., Schaffer, J.R., Hayward, R., Schneider, C.M., (2003), The Exercise Response is Patient Specific not Cancer Specific. Paper presented at the American College of Sports Medicine, National ACSM meeting in San Francisco, CA; May 2003.

Drum, S.N., Carter, S.D., Roozeboom, M.A., Hydock, M.A., Schaffer, J.R., Knofczynski, G.T., Hayward, R., and Schneider, C.M., (2003). Exercise Intervention and the Effect on Cancer Patients, Paper presented at the Rocky Mountain American College of Sports Medicine Meeting, Denver, CO; February 2003.

Shaw, Dale, Young, Suzanne, Schaffer, Jay, and Mundfrom, Daniel, (2002). Validating a Teacher Effectiveness Instrument. Paper presented at the Annual Meeting of the Northern Rocky Mountain Educational Research Association, Estes Park, CO; October 2002.

Al-Tukife, Fahad and Schaffer, Jay R., (2001). A Nonparametric Control Chart Based on Order Statistics. Paper presented at the Joint Statistical Meetings of the American Statistical Association, Atlanta, GA; August 2001.

Schaffer, Jay R. and VandenHul, Shawn, (2001). The Decomposition of the MEWMA. Paper presented at the Joint Statistical Meetings of the American Statistical Association, Atlanta, GA; August 2001.

Schaffer, Jay R., (2000). Why Haven't All Four #1 Seeds Advanced to the Final Four? Paper presented at the Joint Statistical Meetings of the American Statistical Association, Indianapolis, IN; August 2000.

Schaffer, Jay R., (1999). Updating Multivariate Sample Mean and Covariance Formulas. Paper presented at the Joint Statistical Meetings of the American Statistical Association, Baltimore, MD; August 1999.

Schaffer, Jay R., (1998). Multivariate Applications of the Q Chart. Paper presented at the Joint Statistical Meetings of the American Statistical Association, Dallas, TX; August 1998.

Schaffer, Jay R., (1997). A Multivariate Application of the Q Chart. Paper presented at the Colorado-Wyoming Chapter Meeting of the American Statistical Association, Laramie, WY; April 1997.

#### **INVITED SEMINARS:**

Schaffer, Jay R., (1999). Why Haven't All Four #1 Seeds Advanced to the Final Four? Invited Seminar, St. Cloud State University, St. Cloud, MN, March 1999.

Schaffer, Jay R., (1999). Why Haven't All Four #1 Seeds Advanced to the Final Four? Invited Seminar, Sam Houston State University, Huntsville, TX, March 1999.

Schaffer, Jay R., (1999). The Multivariate Q Chart and Its Applications. Invited seminar, University of Northern Colorado, Greeley, CO, March 1999.

Schaffer, Jay R., (1999). The Derivation and Analysis of the Multivariate Q Chart for Individual Measurement Vectors. Invited seminar, Pittsburg State University, Pittsburg, KS, March 1999.

Schaffer, Jay R., (1999). The Derivation and Analysis of the Multivariate Q Chart for Individual Measurement Vectors. Invited seminar, University of North Carolina at Wilmington, Wilmington, NC; February 1999.

Schaffer, Jay R., (1999). Why Haven't All Four #1 Seeds Advanced to the Final Four? Invited Seminar, University of Northern Colorado, Greeley, CO; February 1999.

Schaffer, Jay R., (1997). A Multivariate Application of the Q Chart. Invited seminar in the Division of Science, Pennsylvania State University – Behrend College, Erie, PA; March 1997.

#### **NON-JURIED PRESENTATIONS:**

Schaffer, Jay R. and Alkahtani, Saad, (2009). A Double Multivariate Exponentially Weighted Moving Average Control Chart, ASRM Colloquium, University of Northern Colorado, Greeley, CO; September 2009.

Schaffer, Jay R., and Chandran, Raj, (2007). Coors Field: Pitchers Graveyard?, ASRM Colloquium, University of Northern Colorado, Greeley, CO; April 2007.

Schaffer, Jay R., and Eshelman, Chad, (2006), Is Average Run Length a Good Measure of Performance?, ASRM Colloquium, University of Northern Colorado, Greeley, CO; April 2006.

Schaffer, Jay R., and Heiny, Erik, (2006), The Effects of Elevation on Slugging Percentage in Major League Baseball, ASRM Colloquium, University of Northern Colorado, Greeley, CO; February 2006.

Schaffer, Jay R., and Kim, Myoung-Jin, (2005), Minimum Number of Replications Required in a Control Chart Simulation Study, ASRM Colloquium, University of Northern Colorado, Greeley, CO; November 2005.

Schaffer, Jay R., and Heiny, Erik, (2005), The Effects of Elevation on Slugging Percentage in Major League Baseball, Paper presented at the University of Northern Colorado Research Day, Greeley, CO; April 2005.

Schaffer, Jay R., and Kim, Myoung-Jin, (2004), Simulations: How Many Do We Need?, ASRM Colloquium, University of Northern Colorado, Greeley, CO; October 2004.

Schaffer, Jay R., and Young, John D., (2003), Analyzing the Effect of the Covariance Matrix on the Average Run Length of the MEWMA Control Chart, ASRM Colloquium, University of Northern Colorado, Greeley, CO; September 2003.

Schaffer, Jay R. and VandenHul, Shawn, (2003). An Examination of the Power of Variable Deletion Within the MEWMA Statistic Through the Creation of Critical Values. ASRM Colloquium, University of Northern Colorado, Greeley, CO; April 2003.

S. N. Drum, S. D. Carter, M. A. Roozeboom, D. S. Hydock, J. R. Schaffer, G. T. Knofczynski, R. Hayward, and C. M. Schneider, (2003), Exercise Intervention and the Effect on Cancer Patients. Paper presented at the University of Northern Colorado Research Day, Greeley, CO; April 2003.

D.S. Hydock, , S.D. Carter, S.N. Drum, M.A. Roozeboom, J.R. Schaffer, R. Hayward, C.M. Schneider, (2003), The Exercise Response is Patient Specific not Cancer Specific. Paper presented at the University of Northern Colorado Research Day, Greeley, CO; April 2003.

Schaffer, Jay R. and VandenHul, Shawn, (2002). A Monte Carlo Study of the Decomposition of the MEWMA. Paper presented at the University of Northern Colorado Research Day, Greeley, CO; April 2002.

Schaffer, Jay R. and VandenHul, Shawn, (2001). The Decomposition of the MEWMA. ASRM Colloquium, University of Northern Colorado, Greeley, CO; September 2001.

Al-Tukife, Fahad and Schaffer, Jay R., (2001). A Nonparametric Control Chart Based on Order Statistics. ASRM Colloquium, University of Northern Colorado, Greeley, CO; April 2001.

Schaffer, Jay R. and VandenHul, Shawn, (2001). The Decomposition of the MEWMA. Paper presented at the University of Northern Colorado Research Day, Greeley, CO; April 2001.

Al-Tukife, Fahad and Schaffer, Jay R., (2001). A Nonparametric Control Chart Based on Order Statistics. Paper presented at the University of Northern Colorado Research Day, Greeley, CO; April 2001.

## BOOK REVIEWS:

Flynn, Judy & Foster, Irene, (2009). Research Methods for the Fashion Industry, New York: Fairchild Books Condé Nast Publications.

Larose, Daniel T., (2009). Discovering Statistics, New York: W.H. Freeman and Co.

## GRANT PROPOSALS:

Heald, Greg, McCarthy Patrick, and Schaffer, Jay, (2002). Information Literacy Retention Study. Grant proposal submitted to the Lumina Foundation for Education, Indianapolis, IN.

## RESEARCH CITED:

Hawkins, D. M. & Maboudou-Tchao, E. M., (2007). Self-Starting Multivariate Exponentially Weighted Moving Average Control Chart. *Technometrics*, 49,199-209. Cited: Schaffer, Jay R., (1998). Multivariate Applications of the Q Chart. Paper presented at the Joint Statistical Meetings of the American Statistical Association, Dallas, TX; August 1998.

Tracey, Jann, (2006). Home Runs and Hole-in-One: Statisticians Show That High Altitude Makes Hits Longer. *Science Daily*. Cited: Schaffer, Jay R. and Heiny, Erik, (2006), The Effects of Elevation on Slugging Percentage in Major League Baseball, *Chance*, 19(1), 28-34.

Tracey, Jann, & Discoveries and Breakthroughs Inside Science--American Institute of Physics, (2006). The Coors Field Effect. *Ivanhoe Broadcast News*. Cited: Schaffer, Jay R. and Heiny, Erik, (2006), The Effects of Elevation on Slugging Percentage in Major League Baseball, *Chance*, 19(1), 28-34.

Sullivan, Joe & Jones, Allison, (2002). A Self-Starting Control Chart for Multivariate Individual Observations. *Technometrics*, 44,24-33. Cited: Schaffer, Jay R., (1998). Multivariate Applications of the Q Chart. Paper presented at the Joint Statistical Meetings of the American Statistical Association, Dallas, TX; August 1998.

Sullivan, Joe & Jones, Allison, (2000). A Self-Starting EWMA Control Chart for Multivariate Observations. American Statistical Association, 1999 Proceedings of the Quality & Productivity Section. Cited: Schaffer, Jay R., (1998). Multivariate Applications of the Q Chart. Paper presented at the Joint Statistical Meetings of the American Statistical Association, Dallas, TX; August 1998.

## FUNDED PROJECTS:

1999                      Principal Investigator  
The derivation and analysis of a new multivariate control chart,

UNC Graduate School Summer Graduate Research Assistantship  
\$2027 plus tuition assistance

**PROFESSIONAL CONSULTATION:**

| <u>Year</u> | <u>Institution/Organization</u>                                     | <u>Role</u>                                                                                                                                                  |
|-------------|---------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2010        | Linda Osterlund, PhD student in Counselor Education                 | Discussed a confirmatory factor analysis on three wisdom instruments and a multiple linear regression model relating therapeutic working alliance to wisdom. |
| 2010        | Cody Harvard, PhD student in Sports and Exercise Science            | Discussed a confirmatory factor analysis and a multiple linear regression model for fan participation related to the level of a fan/team rivalry.            |
| 2010        | CJ McKinney, PhD student in Applied Statistics & Research Methods   | Discussed the development of a Random Coefficient Regression Model CUSUM Control Chart.                                                                      |
| 2010        | Ryan Jordan, PhD student in Kinesiology                             | Discussed a multiple linear regression model for explaining the relationship between knee and foot/ankle motion.                                             |
| 2010        | Terry Eddy, PhD student in Sports and Exercise Science              | Discussed a MANOVA investigating student enrollment after a winning football season.                                                                         |
| 2010        | Amy Williams, PhD student in Counselor Education                    | Discussed the use of path analysis on counselors who have a pre-condition of mental trauma.                                                                  |
| 2010        | Emily Pollock, PhD student in Applied Statistics & Research Methods | Discussed the development of using stepwise discriminant analysis after receiving a signal from a Hotelling's $T^2$ control chart.                           |
| 2010        | Dennis Armstrong, PhD student in Educational Technology             | Discussed a MANOVA investigating behavioral variables after participating in a computer simulation used by the Air Force War College.                        |

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| 2010 | Elyse Manteris, PhD student in School Psychology                                  | Discussed the appropriate sample size to use a MANOVA when examining the effect of ADHD and ASD groups on theory of mind and cognitive behavior.       |
| 2010 | Saad Alkahtani, PhD student in Applied Statistics & Research Methods              | Discussed the theoretical development of the Double Multivariate Exponentially Weighted Moving Average Control Chart.                                  |
| 2010 | Dan Maas, PhD student in Educational Leadership                                   | Discussed a MANOVA design for investigating the differences in duties and expectations of a technology officer between superintendents and principals. |
| 2009 | Stephanie Greufe, PhD student in Sports and Exercise Science                      | Discussed a repeated measures design for cancer related physical therapy.                                                                              |
| 2009 | Justin Rodgers, PhD student in ASRM                                               | Discussed the application of the u-chart and c-chart in a multivariate setting.                                                                        |
| 2009 | Walter Schamber, PhD & Certified School Psychologist                              | Discussed the interpretation of some SPSS output of a paired t-test.                                                                                   |
| 2009 | Elyse Manteris, PhD student in School Psychology, University of Northern Colorado | Discussed the use of MANOVA when examining the effect of ADHD and ASD groups on theory of mind and cognitive behavior.                                 |
| 2009 | Mathew Willey, PhD student in Biology Education, University of Northern Colorado  | Discussed the use of MANOVA when examining the effect of elevation on various biological variables.                                                    |
| 2009 | Becky Stensen, PhD student in School Psychology, University of Northern Colorado  | Discussed the use of MANOVA when examining the effect of a pre-school treatment program on multiple teacher efficacy variables.                        |
| 2009 | Mark Hayes, PhD student in Biology,                                               | Discussed the use of 2-Factor                                                                                                                          |

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|      | University of Northern Colorado                                                                      | ANOVA when examining gender effects and reproductive effects in bats.                               |
| 2009 | Kirk Ketelson, PhD student in Applied Statistics & Research Methods, University of Northern Colorado | Discussed the use of the paired t-test when examining pre and post test measurements.               |
| 2008 | Sung Ho Wei, PhD student in Educational Technology, University of Northern Colorado                  | Discussed the use of correlations to measure the linear relationship between pairs of variables.    |
| 2008 | Kristin Kushmider, PhD student in Counselor Education, University of Northern Colorado               | Discussed the use of the simple linear regression to relate experienced trauma to vicarious trauma. |
| 2008 | Gannon White, PhD student in PE: Sports & Exercise, University of Northern Colorado                  | Discussed the use of the binomial test.                                                             |
| 2008 | Jennifer Beebe, PhD student in Counselor Education, University of Northern Colorado                  | Discussed the use of simple linear regression to relate cyber-bullying to anxiety.                  |
| 2008 | Sung Ho Chen, PhD student in Educational Technology, University of Northern Colorado                 | Discussed properties of transformations of random variables.                                        |
| 2008 | Anthony Pothoff, PhD student in Educational Biology, University of Northern Colorado                 | Discussed how Cronbach's alpha is used to measure internal reliability.                             |
| 2008 | Hung-Wei Chang, PhD student in Sports Exercise, University of Northern Colorado                      | Discussed two factor repeated measures ANOVA study.                                                 |
| 2008 | Brendan Dwyer, PhD student in Sports Administration, University of Northern Colorado                 | Discussed sampling designs for a fantasy football survey.                                           |
| 2008 | Daniel Larose, Professor in Statistics, Central Connecticut University                               | Discussed confidence intervals for a chapter in the book, <i>Discovering Statistics</i> .           |
| 2008 | Andrea Petroczi, Professor in Life                                                                   | Discussed the comparison of two                                                                     |

|      |                                                                                       |                                                                                                                                                                       |
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|      | Sciences, Kingston University, UK                                                     | simple linear regression models.                                                                                                                                      |
| 2008 | Irene Foster, Professor in Fashion Design & Retailing, Framingham State College       | Discussed descriptive statistics for an analysis chapter in the book, <i>Research Methods for the Fashion Industry</i> .                                              |
| 2007 | Travis Pape and Aman Sahni, masters students in ASRM, University of Northern Colorado | Discussed a study that used a two independent population test for the difference between two means while examining the temperature difference in snakes.              |
| 2007 | Wendy Leader, doctoral student in Psychology, University of Arizona                   | Discussed a study that used 2 Factor ANOVA with repeated measures on one factor to examine the effects of metacognitive issues and giftedness on various test scores. |
| 2006 | Michelle Handley, doctoral student in Special Education, UNC                          | Discussed and coded differences between experimental, quasi-experimental, and ex-post facto research articles.                                                        |
| 2006 | Amy Molina, doctoral student in School Psychology, UNC                                | Compared and contrasted t-test vs ANOVA vs MANOVA, Discriminant vs Cluster Analysis, and Simple vs Multiple Linear Regression in preparation for doctoral oral exam.  |
| 2006 | Carol Bjerke, doctoral student in School Psychology, UNC                              | Discussed a study that used 1-Way MANOVA to compare 4 dependent variables between 8 schools.                                                                          |
| 2006 | Andrea Petroczi, professor in Life Sciences, Kingston University, UK                  | Discussed how the phi-coefficient is used to measure correlational relationships between items with dichotomous responses.                                            |
| 2006 | Andrea Petroczi, professor in Life Sciences, Kingston University, UK                  | Discussed various transformation techniques to use in multiple linear regression and why they are needed.                                                             |
| 2006 | Briana VonFeldt, doctoral student in Special Education, UNC                           | Discussed a study that used a Bonferroni adjustment on many                                                                                                           |

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|      |                                                                                          | simultaneous hypothesis tests. Explained the conservative nature of the Bonferroni adjustment and discussed how MANOVA would have been a more appropriate procedure.  |
| 2006 | Stephen Shapiro & Alan Morse, doctoral students in SES-Sports Administration, UNC        | Discussed various multivariate statistical procedures that could be used to model ticket sales at athletic events.                                                    |
| 2006 | Andrea Petroczi, professor in Life Sciences, Kingston University, UK                     | Discussed various nonparametric procedures and the use of random response modeling to estimate the proportion of athletes that use performance-enhancing drugs.       |
| 2006 | David Reavill, doctoral student in Biology Education, UNC                                | Discussed the aspects of advanced ANOVA designs using partially nested factors.                                                                                       |
| 2006 | Stephen Shapiro & Alan Morse, doctoral students in SES-Sports Administration, UNC        | Discussed the differences between multiple linear regression and logistic regression models for analyzing sell-outs of NBA basketball games.                          |
| 2005 | Janet Houser, professor in Health Services Administration & Management, Regis University | Discussed large sample size applications of the Central Limit Theorem to ordinal data when comparing measures of center of two independent samples.                   |
| 2005 | Jennifer Clark, professor in Biology, UNC                                                | Discussed the calculation of exact p-values of the Mann-Whitney test when using small sample sizes.                                                                   |
| 2005 | Al DeGraff, doctoral student in Human Services-Rehabilitation, UNC                       | Discussed the appropriate statistical analyses to measure the effect of religion and spirituality on the ability to cope for people living with spinal cord injuries. |
| 2005 | Lynnette Parker, masters student in                                                      | Discussed various types of statistical                                                                                                                                |

|      |                                                                          |                                                                                                                                                |
|------|--------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
|      | ASRM, UNC                                                                | methods used in survey analysis examining ethnic group attitudes.                                                                              |
| 2004 | Cindy Kronauge, doctoral student in ASRM, UNC                            | Discussed sampling sub-populations of English language learners within classrooms of 4 <sup>th</sup> graders in a local school district.       |
| 2004 | Al DeGraff, doctoral student in Human Services-Rehabilitation, UNC       | Discussed the use of regression analysis to measure the effect of spirituality in rehabilitation of the physically disabled.                   |
| 2004 | Erik Heiny, doctoral student in ASRM, UNC                                | Developed a research paper measuring the effect of altitude in baseball statistics.                                                            |
| 2004 | Myoung-Jin Kim, doctoral student in ASRM, UNC                            | Developed a research paper investigating the appropriate number of replications needed to accurately predict unknown parameters in SPC charts. |
| 2004 | Aaron Banks, professor in PE-Sports Administration, Concordia University | Discussed appropriate degrees of freedom for an ANOVA design in a research paper.                                                              |
| 2004 | Courtney Willis, professor in Physics                                    | Discussed analysis of an instrument measuring knowledge of physics and appropriate use of factor analysis.                                     |
| 2004 | John Young, doctoral student in ASRM, UNC                                | Discussed sampling schemes to measure safety standards for a telecommunications company.                                                       |
| 2003 | Lyndsay Noble, doctoral student in ASRM, UNC                             | Discussed the use of Cochran's nonparametric test to detect differences between various strains of bacteria.                                   |
| 2003 | Kathryn Bryant, masters student in ASRM, UNC                             | Discussed use of 2 Factor MANOVA to analyze spousal abuse data.                                                                                |
| 2003 | Jonathan Casper, doctoral student in                                     | Discussed advantages of ANOVA vs                                                                                                               |

|      |                                                                                                 |                                                                                                                     |
|------|-------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
|      | PE-Sports Administration, UNC                                                                   | multiple t-tests and the use of the Bonferroni adjustment.                                                          |
| 2003 | Achilles Bardos, professor in School Psychology, UNC                                            | Discussed application of weighting mechanisms in sampling designs.                                                  |
| 2003 | Lyndsay Noble, doctoral student in ASRM, UNC                                                    | Discussed various techniques to fit a curve to sample data and use to simulate additional data.                     |
| 2003 | Scott Chamberlain, instructor in Center for Urban Education and Post-Baccalaureate Program, UNC | Discussed the benefits of using MANOVA over t-tests. Also missing data procedures.                                  |
| 2002 | Brian Larson, investment representative, Edward Jones, Greeley, CO                              | Discussed sample size issues regarding a survey administered to the Northern Colorado Medical Center employees.     |
| 2002 | Tracy Allen, masters student in Biological Sciences, UNC                                        | Discussed appropriate post hoc test after Kruskal Wallis Test has been used and significance found.                 |
| 2002 | Nathan Tomasini, doctoral student in PE-Sports Administration, UNC                              | Discussed appropriate multivariate design to evaluate university characteristics of Div I-A, I-AA, and Div II.      |
| 2002 | Carol Schnieder, professor in PE-Kinesiology, UNC                                               | Discussed the appropriate multivariate analysis to compare the effects of exercise in chemotherapy patients.        |
| 2002 | Andrea Petroczi, doctoral student in PE-Sports Administration, UNC                              | Discussed the appropriate multivariate analysis to measure ten forms of muscle fatigue over a short period of time. |
| 2002 | Fahad Alkhezzi , doctoral student in Educational Technology, UNC                                | Discussed various methods to analyze survey data examining the impact of the www on university education.           |
| 2002 | Lance Phair, Manager, Analytic Group, Household Credit Services, Las Vegas, NV                  | Recommended a UMP test to determine the threshold of significance for liquidation rates                             |

|      |                                                                         |                                                                                                                                                                               |
|------|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      |                                                                         | among collection agencies.                                                                                                                                                    |
| 2002 | Stephanie Roberts, doctoral student in Educational Technology, UNC      | Discussed various methods to collect quantitative data from web page to analyze patterns of special education usage.                                                          |
| 2002 | Tracy Nichols, masters student in Biology, UNC                          | Recommended ANCOVA design to determine if tadpole length is affected by toxic solution.                                                                                       |
| 2001 | Bob Knop, doctoral student in PE-Kinesiology, UNC                       | Recommended one factor repeated measures ANOVA for dissertation examining walking cadences, stationary heel movement, & stationary heel movement while playing an instrument. |
| 2001 | Amy Dahlstrom, doctor student in School Psychology, UNC                 | Recommended nonparametric test for dissertation examining the effectiveness of different instruments used to evaluate students.                                               |
| 2001 | Julian Reed, doctoral student in PE-Pedagogy, UNC                       | Discussed sampling techniques and sample size issues for dissertation ranking PE objectives.                                                                                  |
| 2001 | Karen Schneider, masters student in Psychology, UNC                     | Recommended several ANOVA designs to investigate effect of children imitating video-taped actions.                                                                            |
| 2001 | Paul Novak, Instructional Designer, Rhythms, Denver, CO                 | Constructed priority scale for incoming business projects.                                                                                                                    |
| 2001 | Vanessa Ewing & Stephanie Taylor, doctoral students in Educ. Psyc., UNC | Recommended use of nonparametric test examining relationship between various magazines and themes.                                                                            |
| 2001 | Nancy Kauffman, Director, Disability Access Center, UNC                 | Discussed use/features of MS Word Equation Editor for disabled students.                                                                                                      |
| 2000 | Paul Novak, Instructional Designer, Rhythms, Denver, CO                 | Recommended use of MLR to assign priority to projects and use                                                                                                                 |

|      |                                                                        |                                                                                                                                     |
|------|------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
|      |                                                                        | of queueing theory to process priority projects.                                                                                    |
| 2000 | Mark Schultz, doctoral student in ASRM, UNC                            | Discussed the application of a nonparametric confidence interval of the median for non-normal data.                                 |
| 2000 | Mark Schultz, doctoral student in ASRM, UNC                            | Discussed possible tests to analyze soil samples for chemical signatures                                                            |
| 2000 | Amy Dahlstrom, doctoral student in School Psychology, UNC              | Discussed interpretation of Chi-Squared Test of Independence.                                                                       |
| 2000 | Chad McEvoy, doctoral student in PE-Sport Administration, UNC          | Discussed applications of ANOVA to determine if winning sports programs have an effect on the following year's freshman enrollment. |
| 2000 | Julian Reed, doctoral student in PE-Pedagogy, UNC                      | Discussed the comparison of mean vectors for instructor and student rankings of PE objectives.                                      |
| 2000 | Cad Dennehy, professor in Kinesiology and PE, UNC                      | Discussed methods of measuring physical constructs with instruments.                                                                |
| 2000 | Jennifer Lewis, professor in Professional Psychology, UNC              | Discussed advantages of using two-factor ANOVA over one-factor ANOVA for psychology research paper.                                 |
| 2000 | Tom Willingham, research biologist, US Environmental Protection Agency | Review statistics paper                                                                                                             |
| 2000 | Jennifer Lewis, professor in Professional Psychology, UNC              | Investigating relationships in the training of counselors.                                                                          |
| 1999 | Fahad Al-Tukife, doctoral student in ASRM, UNC                         | Recommendation of a research idea for his dissertation (nonparametric process control chart).                                       |
| 1999 | Brian Johnson, professor in Professional Psychology, UNC               | Recommendation of a statistical model relating "emotional attachment" and "adjustment to college life" measurements.                |

|      |                                                                      |                                                                                                                                    |
|------|----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| 1999 | Janet Houser, doctoral student in ASRM, UNC                          | Recommendation on the proper use of various process control techniques to be applied to the medical field.                         |
| 1999 | Andrea Petroczi-Bachman, doctoral student in P.E.-Sports Admin, UNC  | Recommendation of a statistical design to analyze trends in registration for PE 100 classes since the construction of rec. center. |
| 1999 | Brandon Murry, doctoral student in Educational Technology, UNC       | Recommendation for statistical analysis on dissertation.                                                                           |
| 1999 | Shawn VandenHul, doctoral student in Applied Statistics, UNC         | Recommendation for the analysis of a new multivariate quality control chart.                                                       |
| 1999 | Guei-Ying Linou, doctoral student in Elementary Education, UNC       | Recommendation for statistical analysis on dissertation.                                                                           |
| 1999 | Mercedes Schneider, doctoral student in Professional Psychology, UNC | Explanation a confidence interval for use in research paper.                                                                       |
| 1999 | Joe Knight, doctoral student in Educational Technology, UNC          | Recommendation for statistical analysis on dissertation survey                                                                     |
| 1998 | Chris Mecklin, doctoral student in Applied Statistics, UNC           | Recommendation for the presentation of results from a simulation study                                                             |
| 1998 | Ron Wisniewski, physics instructor, Thorton H.S., Thorton, CO        | Research design and statistical analysis of educational study                                                                      |
| 1998 | Erie Magnetics, Erie, PA                                             | Derived non-linear regression model for the manufacturing of an experimental metal detector                                        |
| 1998 | Dan Houdek, M.D., Erie, PA                                           | Recommendation for medical study data analysis                                                                                     |
| 1998 | Julie Cain, Mathematics student, PSU-Behrend                         | Independent study - Regression Analysis                                                                                            |
| 1997 | Anthony Ricciardo, Mathematics student, PSU-Behrend                  | Recommendation for honors thesis design                                                                                            |

|      |                                                                 |                                                                                      |
|------|-----------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 1997 | Ron Wisniewski, doctoral student,<br>Mathematics Education, UNC | Recommendation for dissertation<br>research design                                   |
| 1996 | Statistical Consulting Lab, UNC                                 | Statistical & data analysis for<br>graduate students and faculty                     |
| 1996 | Matt Isom, doctoral student,<br>Mathematics Education, UNC      | Recommendation for dissertation<br>research design                                   |
| 1995 | The Burriss Co., Greeley, CO                                    | Recommendation for SPC<br>improvements throughout rifle scope<br>manufacturing plant |
| 1994 | Statistics Department, CSU                                      | Programmed an interactive statistics<br>tutorial and quiz package                    |

#### **AFFILIATIONS/MEMBERSHIPS:**

Senior Member of the American Society for Quality  
 Member of the American Statistical Association  
 Member of the American Statistical Association Colorado-Wyoming Chapter  
 Member of the Delta Sigma Phi Fraternity

#### **AWARDS:**

| <u>Year(s)</u> | <u>Award</u>                                                                                           |
|----------------|--------------------------------------------------------------------------------------------------------|
| 2004           | Awarded the Graduate Dean's Citation of Excellence for Leadership and Service on the Graduate Council. |
| 2003-2004      | Nominated for COE Outstanding Service Provider Award                                                   |
| 2002-2003      | Department nominated for the Provost's Departmental Excellence in Teaching Award                       |
| 2002-2003      | Nominated for COE Outstanding Service Provider Award                                                   |
| 2001-2002      | Nominated for COE Outstanding Service Provider Award                                                   |
| 1996-1997      | Colorado Graduate Fellowship, University of Northern Colorado                                          |
| 1996-1997      | Graduate School Merit Fellowship, University of Northern Colorado                                      |

#### **SERVICE:**

**Department:**

| <u>Year(s)</u> | <u>Position</u>                                            |
|----------------|------------------------------------------------------------|
| 2010-Present   | Department Chair, ASRM                                     |
| 2009-2010      | Program Coordinator, ASRM                                  |
| 2008-2009      | Member, Search Committee (2 Statistician Positions)        |
| 2007-2008      | Member, Search Committee (Statistician Position)           |
| 2006-2007      | Chair, Search Committee (Statistician Position)            |
| 2005-2006      | Member, Search Committee (Statistician Position)           |
| 2004-2005      | Member, Search Committee (Statistician Position)           |
| 2004-2005      | Coordinator, ASRM M.S. Program                             |
| 2004-Present   | Recruiting Coordinator, ASRM Ph.D. and M.S. Programs       |
| 2004-2009      | Coordinator, ASRM Comprehensive Exams (Applied Statistics) |
| 2003-2004      | Member, Search Committee (Experimental Design Position)    |
| 2000-2001      | Member, Search Committee (Qualitative Position)            |
| 1999-2000      | Member, Search Committee (Consulting Lab Position)         |
| 1999-2000      | Member, Search Committee (Qualitative Position)            |
| 1999-2000      | Coordinator, ASRM Comprehensive Exams (Ph.D. and M.S.)     |
| 1999-2004      | Advisor, ASRM Student Association                          |
| 1998-2009      | Member, Department Evaluation Committee                    |
| 1998-2009      | Coordinator, Undergraduate Elementary Statistics Courses   |
| 1998-2000      | Administrator, Statistics Computer Lab Software            |
| 1997-1998      | Advisor, Statistics Minor                                  |
| 1997-1998      | Co-chair, Actuarial Science Development Program            |
| 1997-1998      | Member, Applied Mathematics Option Curriculum Committee    |

1997-1998 Author, Penn State-Behrend Statistics Minor Brochure

1996-1997 Member, Mathematics Department Graduate Committee

**University:**

| <u>Year(s)</u> | <u>Position</u>                                                           |
|----------------|---------------------------------------------------------------------------|
| 2010-Present   | Member, Tenure Appeal Committee                                           |
| 2009-Present   | Member, Faculty Grievance Committee                                       |
| 2009-Present   | Member, Leadership Council                                                |
| 2006-2010      | Member, Board of Athletic Control                                         |
| 2004-2005      | Member, Graduate Council Standards Committee                              |
| 2003-2004      | Member, Leadership Summit for Charting the Future                         |
| 2003           | Member, Graduate Dean's Summer GRA Review Committee                       |
| 2002           | Member, UNC Honorary Doctorate Review Committee for Joe Tennesen          |
| 2002           | Member, Graduate Dean's Summer GRA Review Committee                       |
| 2001-2004      | Chair, Graduate Council                                                   |
| 2001-2004      | Chair, Graduate Council Executive Committee                               |
| 2001-2004      | Member, Faculty Senate                                                    |
| 2001-2004      | Member, Academic Policies Committee                                       |
| 2001-2004      | Member, Graduate Dean's Dissertation of Excellence Award Review Committee |
| 2001-2004      | Member, Graduate Dean's Citation of Excellence Award Review Committee     |
| 2001-2002      | Member, COE Strategic Planning Committee                                  |
| 2000-2001      | Chair, Graduate Council Curriculum Committee                              |
| 2000-2001      | Member, Graduate Council Executive Committee                              |

|              |                                                       |
|--------------|-------------------------------------------------------|
| 2000-2001    | Member, Provost's Curriculum Approval Task Force      |
| 2000-2001    | Vice-Chair, College of Education Curriculum Committee |
| 2000         | Participant, McNair Scholars Program Panel Discussion |
| 1999-2005    | Member, Graduate Council                              |
| 1999-2001    | Member, Graduate Council Curriculum Committee         |
| 1999-2001    | Member, Academic Appeals Board                        |
| 1999-Present | Member, Teacher Education Faculty                     |
| 1998-2001    | Member, College of Education Curriculum Committee     |

**Municipal:**

| <u>Year(s)</u> | <u>Position</u>           |
|----------------|---------------------------|
| 2010-Present   | Councilman, City of Evans |

**National:**

| <u>Year(s)</u> | <u>Position</u>                                                                                                                                                                                                              |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2000           | Session Chair, <u>Western Statistics Teachers Conference</u> , WeSTCo 2000, University of Northern Colorado, Greeley, CO.                                                                                                    |
| 1999           | Referee, <u>Communications in Statistics: Theory and Methods</u><br>Reviewed paper for publication. "Economic Statistical Design for X-Bar and $s^2$ control charts: A Markov Chain Approach" by S. F. Yang and M. A. Rahim. |

**International:**

| <u>Year(s)</u> | <u>Position</u>                                                                                                                                                 |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2010-Present   | Member, Ten person committee of scientists, social scientists, and statisticians from Europe and North American representing the World Anti-Doping Association. |

**Graduate Student Committees:**

| <u>Year(s)</u> | <u>Student</u>                            | <u>Role</u>                                 |
|----------------|-------------------------------------------|---------------------------------------------|
| 2010-Present   | Christopher Cobb, (PhD, Higher Education) | Co-Chair/Co-Chair<br>Oral Exam/Dissertation |
| 2010-Present   | Cody Havard, (PhD, Sports                 | Faculty Rep/Statistician                    |

|              |                                                                 |                                                    |
|--------------|-----------------------------------------------------------------|----------------------------------------------------|
|              | & Exercise Science)                                             | Oral Exam/Dissertation                             |
| 2010-Present | Amanda DeWar, (PhD<br>Counselor Education)                      | Faculty Rep/Statistician<br>Oral Exam/Dissertation |
| 2009-Present | Jennifer Johnson, (PhD<br>School Psychology)                    | Faculty Rep/Statistician<br>Oral Exam/Dissertation |
| 2009-Present | Elyse Manteris, (PhD,<br>School Psychology)                     | Faculty Rep/Statistician<br>Dissertation           |
| 2009-Present | Dennis Armstrong, (PhD,<br>Educational Technology)              | Faculty Rep/Statistician<br>Oral Exam/Dissertation |
| 2009-Present | Chen-Yueh Chen, (PhD, Applied<br>Statistics & Research Methods) | Committee Member<br>Oral Exam/Dissertation         |
| 2009-Present | Grace Combs, (PhD, School<br>Psychology)                        | Faculty Rep/Statistician<br>Oral Exam/Dissertation |
| 2009-Present | Linda Osterlund, (PhD, Counselor<br>Education)                  | Faculty Rep/Statistician<br>Oral Exam/Dissertation |
| 2009-Present | Lindsay Heath, (PhD, Counselor<br>Education)                    | Faculty Rep/Statistician<br>Oral Exam/Dissertation |
| 2009-Present | Lori Romont, (PhD, Counselor<br>Education)                      | Faculty Rep/Statistician<br>Oral Exam/Dissertation |
| 2009-Present | Eric Kinder, (PhD, Applied<br>Statistics & Research Methods)    | Chair/Co-Chair<br>Oral Exam/Dissertation           |
| 2009-2010    | Yen-Kuang Lin, (PhD, Applied<br>Statistics & Research Methods)  | Chair/Member<br>Oral Exam/Dissertation             |
| 2009-2010    | Amy Williams, (PhD, Counselor<br>Education)                     | Faculty Rep/Statistician<br>Oral Exam/Dissertation |
| 2009-2010    | Dan Maas, (PhD, Educational<br>Leadership)                      | Faculty Rep/Statistician<br>Oral Exam/Dissertation |
| 2009-2009    | Karen Raymond, (PhD, Applied<br>Statistics & Research Methods)  | Committee Member<br>Dissertation                   |

\* awarded the Dean's Citation  
for Outstanding Dissertation

|              |                                                                 |                                                     |
|--------------|-----------------------------------------------------------------|-----------------------------------------------------|
| 2008-2010    | Saad Alkahtani, (PhD, Applied Statistics & Research Methods)    | Chair<br>Oral Exam/Dissertation                     |
|              | * awarded the Dean's Citation for Outstanding Dissertation      |                                                     |
| 2008-Present | CJ McKinney, (PhD, Applied Statistics & Research Methods)       | Co-Chair<br>Oral Exam/Dissertation                  |
| 2007-2010    | Emily Pollock, (PhD, Applied Statistics & Research Methods)     | Chair<br>Oral Exam/Dissertation                     |
| 2006-2009    | Chad Eshelman, (PhD, Applied Statistics & Research Methods)     | Chair<br>Oral Exam/Dissertation                     |
| 2006-2009    | Shannon Williams, (PhD, Applied Statistics & Research Methods)  | Chair/Co-Chair<br>Oral Exam/Dissertation            |
| 2006-2007    | Michelle Rozeboom, (PhD, Applied Statistics & Research Methods) | Committee Member<br>Oral Exam/Dissertation          |
|              | * awarded Dean's Citation of Excellence                         |                                                     |
| 2006-2007    | Dwayne Scmitz, (PhD, Applied Statistics & Research Methods)     | Committee Member<br>Dissertation                    |
| 2005-2008    | Bob Pearson, (PhD, Applied Statistics & Research Methods)       | Committee Member<br>Oral Exam/Dissertation          |
| 2005-2009    | Adam Piccone, (PhD, Applied Statistics & Research Methods)      | Chair/Committee Member<br>Oral Exam/Dissertation    |
| 2005-2006    | Erik Heiny, (PhD, Applied Statistics & Research Methods)        | Chair/Committee Member<br>Oral Exam/Dissertation    |
| 2005-2006    | Ling Lee, (PhD, Applied Statistics & Research Methods)          | Committee Member<br>Oral Exam/Dissertation          |
| 2004-2006    | Al DeGraff, (PhD, Human Services-Rehabilitation)                | Faculty Rep./Statistician<br>Oral Exam/Dissertation |
| 2004-2005    | Myoung-Jin Kim, (PhD, Applied Statistics & Research Methods)    | Chair<br>Oral Exam/Dissertation                     |

|              |                                                                       |                                                     |
|--------------|-----------------------------------------------------------------------|-----------------------------------------------------|
| 2004-2010    | Ryan Jordan, (PhD, Physical Education: Kinesiology)                   | Faculty Rep./Statistician<br>Oral Exam/Dissertation |
| 2003-2008    | Walter Schamber, (PhD, Professional Psychology)                       | Faculty Rep./Statistician<br>Oral Exam/Dissertation |
| 2003-Present | Lyndsay Noble, (PhD, Applied Statistics & Research Methods)           | Committee Member<br>Oral Exam/Dissertation          |
| 2003         | Ampai Ussawarujikulchai, (PhD, Applied Statistics & Research Methods) | Committee Member<br>Oral Exam                       |
| 2003         | Chana Preecha, (PhD, Applied Statistics & Research Methods)           | Chair<br>Oral Exam                                  |
| 2003         | Pornsini Kow, (PhD, Applied Statistics & Research Methods)            | Chair<br>Oral Exam                                  |
| 2003-2006    | John Young, (PhD, Applied Statistics & Research Methods)              | Chair/Committee Member<br>Oral Exam/Dissertation    |
| 2002-2003    | Chris Pretz, (PhD, Applied Statistics & Research Methods)             | Chair/Committee Member<br>Oral Exam/Dissertation    |
| 2002-2004    | Claudio Battaglini, (EdD, Physical Education: Kinesiology)            | Faculty Rep./Statistician<br>Oral Exam/Dissertation |
| 2002-2004    | Greg Knofczynski, (PhD, Applied Statistics & Research Methods)        | Chair/Member<br>Oral Exam/Dissertation              |
|              | * awarded Dean's Citation of Excellence                               |                                                     |
| 2002         | Ling Lee, (PhD, Applied Statistics & Research Methods)                | Committee Member<br>Oral Exam                       |
| 2000-2001    | Tian-Lu Ke, (PhD, Applied Statistics & Research Methods)              | Committee Member<br>Oral Exam/Dissertation          |
|              | * awarded the Dean's Citation for Outstanding Dissertation            |                                                     |
| 2000-2002    | Shawn VandenHul, (PhD, Applied Statistics & Research Methods)         | Chair<br>Oral Exam/Dissertation                     |

|           |                                                               |                                                     |
|-----------|---------------------------------------------------------------|-----------------------------------------------------|
| 2000-2003 | Amy Dahlstrom, (PhD, Professional Psychology)                 | Faculty Rep./Statistician<br>Oral Exam/Dissertation |
|           | * awarded the Dean's Citation for Outstanding Dissertation    |                                                     |
| 2000-2001 | Wen-Guu Lei, (EdD, Physical Education: Pedagogy)              | Faculty Rep./Statistician<br>Oral Exam/Dissertation |
| 2000-2001 | Rock Braithwaite, (EdD, Physical Education: Pedagogy)         | Faculty Rep./Statistician<br>Dissertation           |
| 2000-2001 | Fahad Al-Tukife, (PhD, Applied Statistics & Research Methods) | Chair<br>Oral Exam/Dissertation                     |
| 1999-2002 | Anne-Marie Caffrey, (PhD, Professional Psychology)            | Faculty Rep./Statistician<br>Oral Exam/Dissertation |
| 1999-2002 | Fahad Alkhezzi, (PhD, Educational Technology)                 | Faculty Rep./Statistician<br>Oral Exam/Dissertation |
| 1999-2000 | Karen Bender, (PhD, Counseling Psychology)                    | Faculty Rep./Statistician<br>Oral Exam              |
| 1998-2000 | Andy Sheston, (PhD, College Student Personnel Administration) | Faculty Rep./Statistician<br>Oral Exam/Dissertation |

**COURSES TAUGHT:**

|         |                                    |                                                            |
|---------|------------------------------------|------------------------------------------------------------|
| SRM 742 | <i>Seminar – Quality Control</i>   | Spring, 1999                                               |
| SRM 731 | <i>Multivariate Analysis</i>       | Spring, 2004<br>Spring, 2006<br>Spring, 2008               |
| SRM 645 | <i>Statistical Process Control</i> | Spring, 2003<br>Spring, 2005<br>Fall, 2006<br>Spring, 2009 |
| SRM 611 | <i>Advanced Data Analysis</i>      | Spring 2010                                                |
| SRM 610 | <i>Statistical Methods III</i>     | Summer 2006<br>Summer 2007<br>Summer 2008                  |

|         |                                   |                                                                                                                                                                                                                                                                                                                                    |
|---------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SRM 609 | <i>Sampling Methods</i>           | Spring, 2000<br>Fall, 2002<br>Fall, 2004<br>Fall, 2008<br>Fall, 2010                                                                                                                                                                                                                                                               |
| SRM 607 | <i>Nonparametric Statistics</i>   | Fall, 1999<br>Summer, 2001<br>Fall, 2001<br>Fall, 2003<br>Fall, 2005<br>Fall, 2007<br>Fall, 2009                                                                                                                                                                                                                                   |
| SRM 606 | <i>Multiple Linear Regression</i> | Spring, 1999                                                                                                                                                                                                                                                                                                                       |
| SRM 603 | <i>Statistical Methods II</i>     | Summer, 1999<br>Fall, 1999<br>Summer, 2000<br>Fall, 2000<br>Spring, 2001<br>Summer, 2001<br>Fall, 2001<br>Spring, 2002<br>Summer, 2002<br>Spring, 2003<br>Summer, 2003<br>Summer, 2004<br>Spring, 2005<br>Summer, 2005<br>Spring, 2006<br>Summer, 2006<br>Fall, 2006<br>Summer, 2007<br>Spring, 2008<br>Summer, 2008<br>Fall, 2008 |
| SRM 602 | <i>Statistical Methods I</i>      | Fall, 1998<br>Spring, 1999<br>Summer, 1999<br>Fall, 1999<br>Spring, 2000<br>Summer, 2000<br>Summer, 2001                                                                                                                                                                                                                           |

|         |                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|         |                                                     | Summer, 2002<br>Summer, 2003<br>Summer, 2004<br>Summer, 2005                                                                                                                                                                                                                                                                                                                                                                                        |
| SRM 600 | <i>Introduction to Graduate Research</i>            | Fall, 1998<br>(2 sections)<br>Summer, 1999<br>Fall, 1999 (Denver)<br>Summer, 2000<br>Fall, 2000<br>Spring, 2001 (Denver)<br>Summer, 2001<br>Fall, 2001 (Denver)<br>Summer, 2002<br>Summer, 2002 (Denver)<br>Fall, 2002 (Denver)<br>Spring, 2003 (Denver)<br>Fall, 2003 (Denver)<br>Spring, 2004<br>Summer, 2004 (Denver)<br>Spring, 2005 (Denver)<br>Summer, 2005 (Denver)<br>Fall, 2005 (Denver)<br>Spring, 2007 (Denver)<br>Summer, 2007 (Denver) |
| SRM 552 | <i>Mathematical Statistics with Applications II</i> | Spring, 2001<br>Spring, 2002<br>Spring, 2003<br>Spring, 2004<br>Spring 2005<br>Spring 2006<br>Spring 2008<br>Spring 2009<br>Spring 2010                                                                                                                                                                                                                                                                                                             |
| SRM 551 | <i>Mathematical Statistics with Applications I</i>  | Fall, 2000<br>Fall, 2001<br>Fall, 2002<br>Fall, 2003<br>Fall, 2004<br>Fall, 2005<br>Fall, 2006<br>Fall, 2007<br>Fall, 2008<br>Fall, 2009                                                                                                                                                                                                                                                                                                            |

|          |                                                                          |                                                                                                         |
|----------|--------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
|          |                                                                          | Fall, 2010                                                                                              |
| SRM 520  | <i>Introduction to Statistical Computing</i>                             | Fall, 1998<br>Fall, 1999                                                                                |
| STAT 406 | <i>Multiple Linear Regression</i>                                        | Fall, 1996                                                                                              |
| STAT 351 | <i>Elementary Statistics Theory</i>                                      | Spring, 1997                                                                                            |
| STAT 350 | <i>Elementary Probability Theory</i>                                     | Fall, 1996                                                                                              |
| STBD 303 | <i>Statistics for the Engineering Sciences</i>                           | Fall, 1997                                                                                              |
| STAT 150 | <i>Introduction to Statistical Analysis</i>                              | Spring, 1997<br>Fall, 1996<br>Spring, 1996<br>(2 sections)<br>Fall, 1995<br>(2 sections)<br>Summer 1994 |
| MTBD 450 | <i>Operations Research</i>                                               | Spring, 1998                                                                                            |
| MATH 190 | <i>Mathematics and Liberal Arts</i>                                      | Spring, 1995                                                                                            |
| MATH 141 | <i>Calculus II</i>                                                       | Spring, 1998                                                                                            |
| MATH 140 | <i>Calculus I</i>                                                        | Fall, 1997<br>(2 sections)                                                                              |
| MATH 127 | <i>Elementary Functions</i>                                              | Fall, 1994                                                                                              |
| MATH 120 | <i>Trigonometry</i>                                                      | Spring, 1993<br>(2 sections)<br>Fall, 1992<br>(2 sections)<br>Spring, 1992<br>(2 sections)              |
| MATH 112 | <i>College Algebra</i>                                                   | Fall 1991<br>(2 sections)                                                                               |
| QEM III  | <i>Quality Engineer Methods III</i><br>(Continuing & Distance Education) | Summer 1998                                                                                             |