

## KRISTEN L. KUCERA, PhD, MSPH, ATC, LAT

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### EDUCATION

- 2006                   **PhD**, Department of Epidemiology, School of Public Health, the University of North Carolina at Chapel Hill. Dissertation: *Ergonomic Assessment and Low Back Outcomes among North Carolina Commercial Fishermen*.
- 2002                   **MSPH**, Department of Epidemiology, School of Public Health, the University of North Carolina at Chapel Hill. Master's paper: *The North Carolina Youth Soccer Association Classic Injury Study: Injury History of the Traveling Youth Soccer Player*.
- 1994                   **BS**, *magna cum laude*, Athletic Training, minor in Chemistry, Linfield College, McMinnville,

### PROFESSIONAL EXPERIENCE

- 8/2013 to present   Assistant Professor, Department of Exercise and Sport Science, The University of North Carolina at Chapel Hill
- 8/2013 to present   Incoming Director, National Center for Catastrophic Sport Injury Research, The University of North Carolina at Chapel Hill
- 12/2011 to 7/2013   Assistant Professor – Tenure Track, Division of Occupational and Environmental Medicine, Department of Community and Family Medicine, Duke University Medical Center, Durham, NC
- 10/2006 to 11/2011   Assistant Professor – Research Track, Division of Occupational and Environmental Medicine, Department of Community and Family Medicine, Duke University Medical Center, Durham, NC
- 6/2006 to 10/2006   Instructor Temporary, Division of Occupational and Environmental Medicine, Department of Community and Family Medicine, Duke University Medical Center, Durham, NC
- 5/2001 to 6/2006    Graduate Research Assistant, Department of Epidemiology, UNC-CH School of Public Health and UNC Injury Prevention Research Center
- 10/2003 to 9/2005   Doctoral Trainee, NIEHS Environmental Training Grant, Department of Epidemiology, UNC-CH School of Public Health
- 8/2000 to 5/2001    Graduate Research Assistant, Core Unit, UNC-CH Injury Prevention Research Center
- 8/1996 to 6/2000    Assistant Athletic Trainer, Health, Human Performance, and Athletic Department, Linfield College, McMinnville, OR
- 1/1996 to 8/1996    Athletic Trainer, West Portland Physical Therapy Clinic, Portland, OR
- 11/1995 to 1/1996   Personal Trainer, Body Balance Fitness Consulting, Griffith Park Athletic Club, Beaverton, OR

9/1994 to 1/1996 Fitness Consultant, Griffith Park Athletic Club, Beaverton, OR

## HONORS AND AWARDS

- 2011 Journal of Athletic Training 2011 **Kenneth L. Knight Award for Outstanding Research Manuscript:** Kucera KL, Marshall SW, Bell DR, DiStefano MJ, Goerger CP, Oyamas S. Validity of Soccer Injury Data From The National Collegiate Athletic Association's Injury Surveillance System
- 2007 EPICOH 19th International Conference on Epidemiology in Occupational Health **Women's Research Award** for manuscript: Lipscomb HJ, Kucera KL, Epling CA, Dement JM. Upper extremity musculoskeletal symptoms and disorders among a cohort of women employed in poultry processing
- 2004 **Impact Award**, for research with an impact on the State of North Carolina. Graduate Education Advancement Board, UNC Graduate School, April 7, 2004
- 2002 **Honorable Mention**, Young Scientist Award for Best Study, 16th EPICOH Congress on Epidemiology in Occupational Health. Barcelona, Spain, September 13, 2002

## BIBLIOGRAPHY

### Book and Chapters

1. Runyan CW, Dal Santo JA, **Kucera KL**. Childhood Injury Chapter in Encyclopedia of Childhood Development, Macmillan Psychology Reference Series, Vol. 1: Child Development, edited by Neil J. Salkind. New York: Macmillan Reference USA, 2002, pp 210-217.

### Refereed papers/articles

1. McDonald MA, Loomis D, **Kucera KL**, Lipscomb HJ. Use of qualitative methods to map job tasks and exposure to occupational hazards for commercial fishermen. *American Journal of Industrial Medicine*, 2004; 46(1): 23-31.
2. Marshall SW, **Kucera K**, Loomis D, McDonald MA, Lipscomb HJ. Work related injuries in small scale commercial fishing. *Injury Prevention*, 2004; 10: 217-221.
3. Lipscomb HJ, Loomis D, McDonald MA, **Kucera K**, Marshall SW, Li L. Musculoskeletal symptoms among commercial fishers in North Carolina. *Applied Ergonomics*, 2004; 35: 417-426.
4. Mirka GA, Shin G, **Kucera K**, Loomis, D. Use of the CABS methodology to assess biomechanical stress in commercial crab fishermen. *Applied Ergonomics*, 2005; 36: 61-70.
5. **Kucera KL**, Marshall SW, Kirkendall DT, Marchak PM, Garrett, WE, Jr. Injury history as a risk factor for incident injury in youth soccer. *British Journal of Sports Medicine*, 2005; 39(7): 462-466.
6. McDonald MA & **Kucera KL**. Understanding non-industrialized workers' approaches to safety: How do fishermen "stay safe"? *Journal of Safety Research*, 2007; 38: 289-297.
7. Lipscomb HJ, **Kucera KL**, Epling CA, Dement JM. Upper extremity musculoskeletal symptoms and disorders among a cohort of women employed in poultry processing. *American Journal of Industrial Medicine*, 2008; 51(1): 24-36. Recipient of the Women's Research Award for manuscript at EPICOH 19th International Conference on Epidemiology in Occupational Health, Banff, Alberta, Canada, October 9-12, 2007.

8. **Kucera KL**, Loomis D, Marshall SW. A case crossover study of triggers for hand injuries in commercial fishing. *Occupational and Environmental Medicine*, 2008; 65(5): 336-341.
9. **Kucera KL**, Mirka GA, Loomis D, Marshall SW, Lipscomb HJ, Daniels J. Evaluating ergonomic stresses in North Carolina commercial crab pot and gill net fishermen. *Journal of Occupational and Environmental Hygiene*, 2008; 5(3): 182-196.
10. Lipscomb HJ, Nolan J, Patterson D, Makrozahopoulos D, **Kucera KL**, Dement JM. How much time is safety worth? A comparison of trigger configurations on pneumatic nail guns in residential framing. *Public Health Reports*, 2008; 123: 481-486.
11. **Kucera KL**, Loomis DP, Lipscomb HJ, Marshall SW, Mirka GA, Daniels J. Ergonomic risk factors for low back pain in North Carolina crab pot and gill net commercial fishermen. *American Journal of Industrial Medicine*, 2009; 52(4): 311-321.
12. Lipscomb HJ, Dement, JM, Silverstein B, **Kucera KL**, Cameron W. Health care utilization for musculoskeletal back disorders, Washington State union carpenters, 1989-2003. *Journal of Occupational and Environmental Medicine*, 2009; 51(5): 604-611.
13. **Kucera KL**, Lipscomb HJ, Silverstein B, Cameron W. Predictors of delayed return to work after back injury: a case control analysis of union carpenters in Washington State. *American Journal of Industrial Medicine*, 2009; 52(11): 821-830.
14. **Kucera KL**, McDonald MA. Occupational Stressors Identified by Small-scale, Independent Commercial Crab Pot Fishermen. *Safety Science*, 2010; 48: 672-679.
15. Knowles SB, **Kucera KL**, Marshall SW. Commentary: The Injury Proportion Ratio: What's It All About? *Journal of Athletic Training*, 2010; 45(5): 475-477.
16. **Kucera KL** & Lipscomb HJ. Assessment of Physical Risk Factors for the Shoulder Using the Posture, Activity, Tools, and Handling (PATH) Method in Small-Scale Commercial Crab Pot Fishing. *Journal of Agromedicine: Special Issue on Commercial Fishing and Aquaculture*, 2010; 15(4): 394-404.
17. **Kucera KL**, Loomis DP, Lipscomb HJ, Marshall SW. Prospective study of incident injuries among Southeastern United States commercial fishermen. *Occupational and Environmental Medicine*, 2010; 67(12): 829-836.
18. **Kucera KL**, Lipscomb HJ, Silverstein B. Medical Care Surrounding Work-Related Back Injury Claims among Washington State Union Carpenters, 1998-2003. *Work*, 2011; 39(3): 321-30.
19. Mirka GA, Ning X, Jin S, Haddad O, **Kucera KL**. Ergonomic Interventions for Commercial Crab Fishermen. *International Journal of Industrial Ergonomics*, 2011; 41(5): 481-487.
20. **Kucera KL**, Marshall SW, Bell DR, DiStefano MJ, Goerger CP, Oyamas S. Validity of Soccer Injury Data From The National Collegiate Athletic Association's Injury Surveillance System. *Journal of Athletic Training*, 2011; 46(5): 489-499. Recipient of the *Journal of Athletic Training* 2011 Kenneth L. Knight Award for Outstanding Research Manuscript.
21. McCoy AJ, **Kucera KL**, Schoenfisch AL, Silverstein BA, Lipscomb HJ. 20 Years of Work-Related Injury and Illness among Union Carpenters in Washington State. *American Journal of Industrial Medicine*, 2012; 56(4): 381-388.

22. Quandt SA, **Kucera KL**, Haynes C, Klein BG, Langley R, Agnew M, Levin JL, Howard T, Nussbaum MA. Occupational Health Outcomes for Workers in the Agriculture, Forestry and Fishing Sector: Implications for Immigrant Workers in the Southeastern US. *American Journal of Industrial Medicine*, Feb 28, 2013 ePub ahead of print: doi: 10.1002/ajim.22170.
23. Lipscomb HJ, Schoenfisch A, Cameron W, Kucera KL, Adams D, Silverstein B. How well are we controlling falls from height in construction? Experiences of union carpenters in Washington State, 1989-2008. In press *American Journal of Industrial Medicine*.

### Selected refereed published abstracts and proceedings

1. **Kucera KL**, Marshall SW, Wolf SH, Padua DA, Beutler AI. Factors associated with history of lower extremity injury among military cadets: the JUMP-ACL study [abstract]. *Journal of Athletic Training* 2010; 45(3 suppl):S-51.
2. **Kucera KL** and Marshall SW. Developing and Evaluating Interventions Using Surveillance Data (pp: 63-72). In Vann RD and Lang MA, eds. *Recreational Diving Fatalities*. Proceedings of the Dan Divers Alert Network 2010 April 8-10 Workshop, Durham, NC.: Divers Alert Network, 2011. ISBN #978-0-615-54812-8.
3. **Kucera KL**, Marshall SW, Wolf SH, Padua DA, Beutler AI. Baseline factors associated with incident lower extremity injury during Cadet Basic Training among military academy cadets: the JUMP-ACL study [abstract]. *Journal of Athletic Training* 2012; 47(3 suppl):S-180.

### Refereed unpublished oral presentations /abstracts (\*presenter)

#### International

1. \***Kucera KL** & Mirka GA. Biomechanical Assessment of North Carolina Commercial Crab Fishermen. Poster presented at EPICOH 16th International Congress in Epidemiology and Occupational Health, Barcelona, Spain, on September 11, 2002. Awarded Honorable Mention for Best Study by Young Scientist.
2. McDonald MA, Loomis D, **Kucera KL**, Lipscomb H. The natural world as the context for work: use of anthropology's seasonal round method to estimate annual exposure to occupational hazards for commercial fishermen. Presented at the 16th International Symposium on Epidemiology in Occupational Health, Barcelona, Spain, on September 12, 2002.
3. McDonald MA, Loomis D, **Kucera KL**, Lipscomb H. Stage of life as a determinant of exposure to occupational hazards and risk of injury among commercial fishermen: a contextual study. Presented at the 16th International Symposium on Epidemiology in Occupational Health, Barcelona, Spain, on September 12, 2002.
4. Lipscomb H, Loomis D, McDonald MA, **Kucera KL**. Understanding musculoskeletal disorders among a cohort of commercial fishers. Presented at the 16th International Symposium on Epidemiology in Occupational Health, Barcelona, Spain, on September 12, 2002.
5. \***Kucera KL**, Loomis DP, Marshall SW. Case crossover study of Triggers for Hand Injuries in Commercial Fishing. Presented at EPICOH 17th International Symposium on Epidemiology in Occupational Health, Melbourne, Australia, on October 15, 2004.
6. Loomis D, Marshall SW, **Kucera KL**, McDonald MA, Lipscomb H. Incidence of non-fatal injuries in a cohort of coastal fishermen. Presented at EPICOH 17th International Symposium on Epidemiology in Occupational Health, Melbourne, Australia, on October 15, 2004.
7. McDonald MA, **Kucera KL**, Loomis D. Understanding non-industrialized workers' approaches to safety: How do fishermen "stay safe"? Presented at the conference for Research on Workplace Health and Safety: From the Core to the Margins, Memorial University of Newfoundland, St. John's, Newfoundland & Labrador, on June 7-10, 2006.

8. \***Kucera KL**, Loomis D, Lipscomb HJ, Marshall SW, Mirka GA, Daniels J. Biomechanical risk factors for low back pain in North Carolina crab pot and gill net commercial fishermen. Presented at the Sixth International Scientific Conference on Prevention of Work-Related Musculoskeletal Disorders (PREMUS) in Boston, MA, on August 28, 2007.
9. \***Kucera KL**, Lipscomb HJ, Cameron W. Predictors of delayed return to work for Washington State Union Carpenters: a case control analysis. Poster presented at EPICOH 19th International Conference on Epidemiology in Occupational Health, Banff, Alberta, Canada, on October 11, 2007.
10. Lipscomb HJ, **Kucera KL**, Epling CA, Dement JM. Upper extremity musculoskeletal symptoms and disorders among a cohort of women employed in poultry processing. Presented at EPICOH 19th International Conference on Epidemiology in Occupational Health, Banff, Alberta, Canada, on October 10, 2007. Awarded Women's Research Award.
11. Lipscomb HJ, Nolan J, Patterson D, **Kucera KL**, Makrozhopoulos D, Dement JM. How much time is safety worth? Presented at EPICOH 20th International Conference on Epidemiology in Occupational Health, Costa Rica, on June 2008.
12. \***Kucera KL**, McDonald MA, Mirka GA. Occupational Stressors Identified by North Carolina Commercial Crab Pot Fishermen. Presented at the Fishing Industry Safety and Health conference (IFISH4), Reykjavik, Iceland, on May 13, 2009.
13. \***Kucera KL**, Lipscomb HJ, Dement JM, Hootman JM, Roos KG. Variability of Work-Related Musculoskeletal Symptoms, Work Exposures, and Conditions by Employment Setting Among United States Certified Athletic Trainers. Poster presented at the 23rd International Conference on Epidemiology in Occupational Health (EPICOH), Utrecht, The Netherlands, June 18-21, 2013.

#### National

14. \***Kucera KL**, Kirkendall DT, Marshall SM, Marchak PM, Garrett, Jr. WM. NCYSA Classic Injury Study: Injury history of the traveling youth soccer player. Presented to the American College of Sports Medicine (ACSM) Clinical Symposium, St. Louis, MS on May 29, 2002.
15. Mirka GA, Shin GS, **Kucera KL**, Loomis, D. Use of CABS methodology to assess biomechanical stress in commercial crab fishermen [proceedings]. Presented at Human Factors and Ergonomics Society 46th Annual Meeting, Baltimore, MD on October 3, 2002.
16. \***Kucera KL**, Marshall SW, Loomis, DP. Traumatic injuries in a cohort of North Carolina Commercial Fishermen. Presented at the Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health (CDC NIOSH) National Occupational Injury Research Symposium (NOIRS), Pittsburg, PA, on October 30, 2003.
17. \***Kucera KL**, Lipscomb HJ, Silverstein B. Relationships between medical care and paid lost time from work after work-related back injury among Washington State Union Carpenters. Presented at the Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health (CDC NIOSH) National Occupational Injury Research Symposium (NOIRS), Pittsburg, PA on October 22, 2008.
18. Lipscomb HJ, Dement, JM, Silverstein B, \***Kucera KL**, Cameron W. Health care utilization for musculoskeletal back disorders, Washington State union carpenters, 1989-2003. Presented at the Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health (CDC NIOSH) National Occupational Injury Research Symposium (NOIRS), Pittsburg, PA on October 22, 2008.

19. \***Kucera KL**, Marshall SW, Bell DR, DiStefano M, Goerger CP, Oyama, S. Validity and Reliability of the NCAA's Web-based Injury Surveillance System. Presented at the National Athletic Trainers' Association (NATA) Annual Meeting and Clinical Symposium, San Antonio, TX on June 19, 2009.
20. \***Kucera KL**, Marshall SW, Wolf SH, Padua DA, Beutler AI. Factors associated with history of lower extremity injury among military cadets: the JUMP-ACL study. Presented at the National Athletic Trainers' Association (NATA) Annual Meeting and Clinical Symposium, Philadelphia, PA on June 23, 2010.
21. **Kucera KL** and Ballerino-Regan D (presenter). Work Restrictions During Pregnancy: Review of Reproductive Consultations for Employees at a University Health System, 2001 to 2009. Poster presented at the 2011 American Occupational Health Conference (AOHC), Washington D.C. on March 26, 2011.
22. \***Kucera KL**, Marshall SW, Wolf SH, Padua DA, Beutler AI. Baseline factors associated with incident lower extremity injury during Cadet Basic Training among military academy cadets: the JUMP-ACL study. Poster presented at the National Athletic Trainers' Association (NATA) Annual Meeting and Clinical Symposium, St Louis, MO on June 27, 2012.
23. \***Kucera KL**, Roos KG, Hootman JM, Lipscomb HJ, Dement JM, Silverstein B. Work-related illness and injury claims among certified athletic trainers reported to workers' compensation in Washington and California. Presented at 140th American Public Health Association (APHA) Annual Meeting, San Francisco, CA on October 29, 2012.

#### **Invited non-refereed presentations (\*presenter)**

##### International

1. \***Kucera KL**, Loomis DL, Marshall SW. Examples of Alternative Study Designs for Occupational Epidemiology: A Case Crossover Study of Triggers for Hand Injuries in Commercial Fishing. Oral presentation at post conference course "Epidemiology Research Principles and Methods" given by Harvey Checkoway, Neil Pearce, David Kriebel, and Manolis Kogevinas at the Alfred Medical Research and Education Precinct, Alfred Hospital, Melbourne, Australia, October 16, 2004.

##### National

2. \***Kucera KL**. Ergonomic assessment and low back outcomes among North Carolina commercial fishermen. Poster of dissertation research presented for Impact Award. Graduate Education Advancement Board, Graduate School, University of North Carolina at Chapel Hill. April 7, 2004.
3. \***Kucera KL**. Multidisciplinary Research in Occupational Health: Experiences with North Carolina Commercial Fishermen. Presented to the Department of Kinesiology at the University of Wisconsin – Madison on April 24, 2008.
4. \***Kucera KL** and Marshall SW (co-presenters). Developing and Evaluating Interventions Using Surveillance Data. Presented at the DAN Recreational Diver Fatality Workshop in Durham, North Carolina on April 9, 2010.
5. \***Kucera KL** and Dement JM. Benchmarking and Evaluating the Impact of Interventions: Health Claims Data Analyses from Three Funds, Presented to the UAD-CVD Pension Advisory Committee, Hollywood, FL on March 8, 2011.
6. \***Kucera KL** and Dement JM. Benchmarking and Evaluating the Impact of Interventions: Health Claims Data Analyses from Four Funds. Presented to the UAD-CVD Scientific Advisory Committee Washington, D.C. on October 4, 2011.
7. \***Kucera KL** and Dement JM. UAD/CVD Pilot Programs: Claims Data Analyses. Presented at the 2011 NCCMP Annual Conference for Pension Plan Administrators, Hollywood, FL on September 26, 2011.

8. \***Kucera KL** and Dement JM. UAD/CVD Pilot Programs: Benchmarking and Evaluating the Impact of Interventions using Claims Data – Impacts of Disease Management for Basic Trade Fund. Presented at the 2012 NCCMP Annual Conference for Pension Plan Administrators, Hollywood, Florida on October 9, 2012.
9. \***Kucera KL**, McGuine T, and Thigpen CT (co-presenters). “Researcher’s Forum Session: Methodological Foundations for Conducting Single and Multi-Site Observational and Intervention Research Studies”, National Athletic Trainers’ Association (NATA) Annual Meeting and Clinical Symposium, Las Vegas, NV, June 27, 2013.

## TEACHING AND LECTURING ACTIVITIES

- 8/2013 to present      **Instructor**, EXSS 273: “Research Methods in Exercise and Sport Science”, Department of Exercise and Sport Science, The University of North Carolina at Chapel Hill.
- 11/8/2012              **Guest Lecturer**, Injury as a Public Health Problem EPI 695, *Unintentional Injury Module: Occupational Injury Surveillance in the US and Trends in Work-Related Injuries Among Union Carpenters*, Department of Epidemiology, The University of North Carolina at Chapel Hill
- 12/21/2010            **Lecturer**, Journal Club for Occupational Medicine Residents, *Work Restrictions During Pregnancy Study: Preliminary Findings from a Review of Reproductive Consultations at the Duke Employee Health Clinic - 2001-2009*, Occupational and Environmental Medicine Division, Duke University Medical Center
- 11/3/2010              **Guest Lecturer**, Intervention Evaluation EPI 690, *Applications of the Case Crossover Study Design*, Department of Epidemiology, The University of North Carolina at Chapel Hill
- 12/3/2008              **Lecturer**, Journal Club for Occupational Medicine Residents, *Health care utilization and paid lost days from work after work-related musculoskeletal back injury among Washington State union carpenters*, Occupational and Environmental Medicine Division, Duke University Medical Center
- 5/2008                  **Examiner**, Injury Epidemiology Qualifying Exam for Doctoral students, Department of Epidemiology, School of Public Health, The University of North Carolina at Chapel Hill
- 4/24//2008            **Guest Lecturer**, Department of Kinesiology at the University of Wisconsin – Madison: *Sports Injury Epidemiology and Evaluating the NCAA Injury Surveillance System*
- 4/5/2005                **Guest Lecturer**, Occupational Epidemiology EPI 276, *Ergonomic Assessment of Low Back Stress in Commercial Fishing*, Department of Epidemiology, The University of North Carolina at Chapel Hill
- 8/2004 to 5/2005      **Instructor**, EXSS 073: “Research Methods in Exercise and Sport Science”, UNC Department of Exercise and Sport Science.  
 Advisor: Kevin Guskiewicz, PhD, ATC  
 Lectured on research design and methods for sports research to junior and senior undergraduate exercise science majors. Introduced basic statistics including normal curve, measures of central tendency, z-scores, hypothesis testing, and confidence intervals. Advanced techniques included non-parametric statistics, correlation, and regression. Assigned and graded homework, quizzes, papers, and exams.
- 1/2004 to 5/2004      **Teaching Assistant**, EPID 271: “Longitudinal Data Analysis”, Department of Epidemiology, UNC School of Public Health.  
 Professors: Stephen W Marshall, PhD, and Dana Loomis, PhD

Lectured on calculation of incidence rates and rate ratios by hand and using Poisson regression analysis to second year epidemiology graduate students. Prepared teaching materials and graded students' projects and homework. Assisted professors in course organization and maintained student project IRB certifications.

8/1996 to 6/2000

**Instructor**, HHP 221, 321, 421: "Athletic Training Practicum I, II, and III", Health, Human Performance, and Athletic Department, Linfield College, McMinnville, OR.

Department Chair: Dawn Graff-Haight, PhD

Instructed student athletic trainers enrolled in athletic training program in prevention, management, evaluation, treatment, and rehabilitation of sports injuries. Determined clinical proficiency and competency in athletic training skills.

1/1997 to 6/1999

**Adjunct Instructor**, HHP 283: "Responding to Emergencies", Health, Human Performance, and Athletic Department, Linfield College, McMinnville, Oregon

Department Chair: Dawn Graff-Haight, PhD

Taught enrolled students how to respond to an emergency, summon help, provide first aid for injuries, and perform CPR. Certified students in above skills through the American Red Cross, Oregon Trail Chapter.

1/1999

**Assistant Instructor**, BIO 398: "Marine Biology of Hawaii", January Term Excursion Course at Camp Pecusa, Maui, Hawaii. Biology Department, Linfield College, McMinnville, Oregon

2/1998 to 6/1998

**Lab Instructor and Assistant**, BIO 213: "Human Physiology", Health, Human Performance, and Athletic Department, Linfield College, McMinnville, Oregon

## Mentoring Experience

Doctoral Committee Member, Department of Epidemiology, School of Public Health, UNC-CH: Shabbar Ranapurwala, 2012 to present (Dissertation title: "Scuba Diving Intervention in Recreational Divers: A Pre-dive Checklist")

Mentor and Doctoral Committee Member for Graduate Research Trainee and 4rd year Doctoral student in Department of Epidemiology, School of Public Health, UNC-CH: Karen Roos, 2011 to present

Co-mentored a 3rd year Duke University medical student and MPH student at UNC-CH: Amanda McCoy, 2010-2011 (primary mentor Hester Lipscomb)

## GRANTS/RESEARCH

\*Dollar figure provided for projects for which I was (or am currently) a co-investigator or principal investigator.

### Funded Research Proposals (Current)

\*Work-Related Risks of Certified Athletic Trainers, NIOSH K01 OH009713-01A1. (\$323,973), Duke University. Funded by the National Institute for Occupational Safety and Health (NIOSH), 2010-2013.

**Role: Principal Investigator.** K01 Career Development Award – conduct the proposed research and will provide epidemiological, substantive, and statistical expertise. Work with mentors to acquire, coordinate, and link secondary data sources, sample and recruit participants into the cohort study, create, pilot test, and administer surveys, conduct the qualitative study including focus groups and in-person interviews, design and conduct statistical analysis of the data, write and research papers and reports, and present findings.

Co-Is: John Dement PhD CIH; Hester Lipscomb PhD, Jennifer Hootman PhD ATC, Barbara Silverstein PhD

*Goals: To describe the incidence of work-related injury and musculoskeletal symptoms, identify occupational exposures, and explore risk factors for these outcomes among certified athletic trainers employed in a variety of industries. A 20-year retrospective cohort of ATs will be assembled to describe the characteristics and calculate rates*

*of work-related injury and illness reported to two state workers' compensation over an 8-15 year period. A prospective cohort study will be conducted to determine prevalence and incidence of work-related injury, illness, and musculoskeletal symptoms and to document individual management strategies (e.g. self-treatment). Work-related exposures and working conditions in different employment settings will be described by constructing a job exposure matrix.*

### **Funded Research Proposals (Completed)**

UAD-CVD Pilot Projects: Claims Data Analysis for Fund Members of National Coordinating Committee for Multiemployer Plans (NCCMP). Duke University (\$95,238).

Contract Funded through UAD-CVD (UAD/CVD Research Agreement No. 2600-1 for 11/1/2011 – 3/31/2013)

**Role: Investigator.** Conduct analyses; prepare project reports and manuscripts; present findings to advisory committees and annual NCCMP conferences.

PI: John Dement, PhD, Occupational & Environmental Medicine, Duke University

*Goals: To extend the current research agreement between NCCMP and Duke University to cover additional research and analyses of claims data for the Carpenter's Trust of Western Washington (CTWW) and two other funds examining the impacts of Disease Management programs implemented by the funds.*

Twenty Year Trends in Occupational Injury among Carpenters, NIOSH 1U60 OH009761-01. Hester Lipscomb, PI. Duke University.

Funded through the National Institute for Occupational Safety and Health (NIOSH) Cooperative Agreement, 2009-2014.

**Role: Epidemiologist.** Conduct analyses of work-related upper and lower extremity injuries.

*Goals: Examine and describe work-related injury and musculoskeletal disorder among a cohort of union carpenters over a 20-year period. Long-term trends in incidence rates, lost work time, medical care, and costs will be determined for all types of injuries and musculoskeletal disorders. Additional focus will be placed on evaluation of interventions and other safety measures (e.g. Washington State's Vertical Fall Arrest Standard and sequential triggers for pneumatic nail guns) that were put into place to eliminate and decrease work place hazards and risks.*

\*Validity and Reliability of the NCAA Web-based Injury Surveillance System. Duke University (\$163,556).

Contract Funded through the National Collegiate Athletic Association, 2007-2010.

**Role: Principal Investigator.** Oversaw all study aspects; conducted data collection and analyses, prepared project reports, manuscripts and communications.

Co-investigator Stephen W. Marshall, PhD from the Department of Epidemiology at UNC-CH.

*Goals: Determined the validity and reliability of women's and men's soccer injury surveillance data in the National Collegiate Athletic Association's Injury Surveillance System (NCAA ISS). Researchers traveled to 15 colleges and universities and abstracted sports injury data from the athlete's medical records maintained by the certified athletic trainers at the schools. Capture-recapture methodology calculated the proportion of lost-time medical-attention injuries captured by the NCAA ISS compared to the other sources. Agreement between the two data sources for a variety of data fields, such as mechanism of injury and time loss, were also determined.*

\*Work Restrictions among Duke University Employees during Pregnancy (\$6,000).

Funded as Pilot Project through North Carolina Occupational Safety and Health Education and Research Center (NC OSHERC), 2010

**Role: Principal Investigator.** Project oversight; provided epidemiological, substantive, and statistical expertise to design and test abstraction forms and telephone surveys, conduct telephone interviews, guide statistical analysis, and participate in writing up and presenting results.

Co-PI Diane Ballerino-Regan, MD, MPH.

*Goals: A retrospective chart review and short telephone survey was conducted with pregnant Duke employees who were seen at the employee health clinic for reproductive health consultations from 2001 to 2009. Work exposures and recommended restrictions were described as well as compliance and barriers to implementation from both personal and institutional perspectives.*

\*Ergonomic Interventions for Commercial Crab Fishermen, NIOSH R01 OH008249-02. Gary Mirka, PI. North Carolina State University Department of Industrial Engineering (\$120,489 Duke Sub-contract). Funded through the National Institute for Occupational Safety and Health (NIOSH), 2006-2009.

**Role: Co-PI and PI on Duke sub-contract.** Conducted field and telephone surveys with fishermen to inform the development of interventions; conducted data analyses, prepared manuscripts and participant reports.

*Goals: Developed cost efficient tools and interventions to decrease ergonomic and physical stress among small-scale commercial crab fishermen working in North Carolina. This research built from previous cohort studies which identified hazardous and high risk tasks for these fishermen. A brief field survey was conducted with 93 crab fishermen to identify tasks, equipment, or situations that they felt put them at risk. Prototypes of potential interventions were developed and tested.*

Back Disorders in Union Carpenters, NIOSH 5R01 OH008007. Hester Lipscomb, PI. Duke University. Funded through the National Institute for Occupational Safety and Health (NIOSH), 2006-2008.

**Role: Epidemiologist.** Conducted analyses of predictors of return to work after work-related back injury.

*Goals: Described the characteristics and rates of work-related back disorders among a defined cohort of 20,000 union carpenters working in Washington State. Additionally receipt, patterns, and cost of medical care, through both workers' compensation and private insurance, were examined. In depth analyses included identifying predictors of delayed return to work after back injury as well as recurrent back injury.*

## COMMITTEE AND PROFESSIONAL SERVICE

### Professional Committees

Committee Member, Research Committee Study Section, National Athletic Trainers' Association Research and Education Foundation (NATAREF), June 2008 to present

Vice Chair of General Grants, Research Committee Study Section, National Athletic Trainers' Association Research and Education Foundation (NATAREF), May 2012 to present

Member of the Injury Surveillance Oversight Group (ISOG), National Collegiate Athletic Association (NCAA), June 2006 to November 2008

Legislative Committee member, Oregon Athletic Trainers' Society (OATS), 1997 to 2000 [*Sponsorship of House Bill #2704: Creating Board of Athletic Trainers through the Health Licensing Office, requiring registration of athletic trainers by the board and providing certain exception to registration*]

Vice President, Coordinator Annual Summer Symposium, and Ethics Committee Chair, Oregon Athletic Trainers' Society (OATS), 1997 to 2000

NATABOC Examiner, Certification Exam for Athletic Trainers, National Athletic Trainers' Association Board of Certification, 1996 to 1998

### Journal Service

Ad Hoc Reviewer for *American Journal of Sports Medicine*, *American Journal of Industrial Medicine*, *Applied Ergonomics*, *British Journal of Sports Medicine*, *Human Factors*, *Journal of Athletic Training*, *North Carolina Medical Journal*, *Occupational and Environmental Medicine*, *Safety Science*, *Sports Health: A Multidisciplinary Approach*

### Grant Review Panels

*SRA International, Inc. Center for Peer Review and Science Management, Health and Civil Services Sector:* Grant Reviewer and Panel Participant, National Institute of Occupational Safety and Health (NIOSH) peer review panel of the

National Occupational Research Agenda (NORA) FY12 Intramural Project Funding Opportunities, June 8-9, 2011 in Washington, D.C.

*National Athletic Trainers' Association (NATA)*: Committee Member, Secondary School Injury Surveillance Outcomes System Project, Review of research proposals for 3-year contract award to develop sports injury and outcomes surveillance in the high school setting, February-June 2010

### **University Service**

Member, Occupational & Environmental Medicine Residency Advisory Committee (RAC), Duke University Division of Occupational & Environmental Medicine, January 2010 to 2013

Grant Reviewer, Pilot Project Program funded through North Carolina Occupational Safety and Health Education and Research Center (NC OSHERC), Duke University Division of Occupational & Environmental Medicine, October 2010

Chair, Emergency Plan for Linfield College Athletics Committee, Linfield College, 1999 to 2000

Member, Athletic Training Accreditation Committee, Linfield College, 1997 to 2000

Member, National Girls and Women in Sport Day Planning Committee, Linfield College, 1997 to 2000

Portfolio Evaluator, Division of Continuing Education (DCE), Linfield College, 1998 to 2000

### **Other Service**

Conference participant and outcomes group member, Agricultural, Forestry and Fisheries in the Southeast: Immigrant Worker Health Conference, Wake Forest University, October 4-6, 2010

Volunteer Instructor, Community CPR and First Aid, American Red Cross, Orange County Chapter, Chapel Hill, NC, 2001 to 2005

Volunteer Instructor, Community CPR and First Aid, Sports Safety Training, American Red Cross, Oregon Trail Chapter, Portland, OR, 1996 to 2000

### **Professional Association Memberships**

Member of the National Athletic Trainers' Association, 1990 to present

Member of the American Public Health Association, 2012 to present

### **CERTIFICATIONS AND LICENSES**

11/1995 to present      **Certified Athletic Trainer (ATC)**, the National Athletic Trainers' Association, Dallas, TX. Certification #242701195

12/2000 to present      **Licensed Certified Athletic Trainer (LAT)**, North Carolina Board of Athletic Trainer Examiners, Raleigh, NC. License #0606

10/1996 to 6/2006      **Certified Instructor**, Responding to Emergencies, Community First Aid and CPR, the American Red Cross