# Nicole M. (Armstrong) Cattano

313 Sturzebecker HSC West Chester University West Chester, PA 19383 (610) 436-2250 ncattano@wcupa.edu

## Academic Experience

## Enrolled in Ph.D. Kinesiology (Spring 2006-current)

- Temple University, Philadelphia, PA
- 72 credits completed towards doctoral degree, awarded doctoral candidacy October 20, 2011
- Dissertation Topic: "Intraarticular Corticosteroid Injection Effects on the Biochemical Environment of Osteoarthritic Knees with Effusion"

### M.P.H. Master's in Public Health

West Chester University, West Chester, PA May 2004

### **B.S.** Exercise and Sport Science

• University of North Carolina at Greensboro May 2001

## Teaching Experience

## Instructor-Department of Sports Medicine

West Chester University, West Chester, PA

Tenure track beginning August 2007

August 2007-current (Courses taught)

- Sports Injury Management I (SMD 315)
- Pathology and Evaluation of Athletic Injuries III (SMD 313)
- Therapeutic Modalities Lab (SML 310)
- First Aid for Health Professionals (SMD 204)
- Foundations of Sports Medicine (SMD 100)

August 2004-2007(Courses taught as Temporary faculty member)

- Pathology and Evaluation of Athletic Injuries III (SMD 313)
- Therapeutic Exercise (SMD 311)
- Athletic Training Techniques (SMD 272)
- First Aid and Athletic Training (SMD 271)
- First Aid for Health Professionals (SMD 204)
- Foundations of Sports Medicine (SMD 100)

## August 2004-present

- Approved Clinical Instructor (ACI) for athletic training education program
- American Safety & Health Institute (ASHI) Basic Life Support & First Aid Instructor

# Clinical (Non-Teaching) Responsibilities

### **Certified Athletic Trainer**

West Chester University, West Chester PA

August 2004-present (Sport Responsibilities)

• Men's and Women's Basketball

## Scholarly Activity

### **Peer Reviewed Publications**

- Cattano NM, Driban JB, Balasubramanian E, Barbe MF, Amin M, Sitler MR. Biochemical comparison of osteoarthritic knees with and without effusion. *BMC Musculoskeletal Disorders*, 2011; 12: 273.
- Hootman JM, Driban JB, Sitler MR, Harris KP, Cattano NM. Reliability and validity of three quality rating
  instruments for systematic review of observational studies. Research Synthesis Methods. ACCEPTED August
  18, 2011 IN PRESS.
- Cattano NM, Driban JB, Sitler MR, Balasubramanian E, Barbe MF, Amin M. Analysis of the biochemical environment of effused and non-effused osteoarthritic knees. [abstract] *Journal of Athletic Training*, 2011; 46(3): S104.
- Driban JB, Cattano NM, Balasubramanian E, Sitler MR, Amin M, Glutting J, Barbe MF. A method to analyze synovial fluid biomarker concentrations in non-effused knees. [abstract] *Journal of Athletic Training*, 2011; 46(3): S108.
- Karris KP, Driban JB, Sitler MR, Cattano NM, Balasubramanian E, Hootman J. Tibiofemoral
  osteoarthritis after surgical and non-surgical treatment of the anterior cruciate ligament rupture: a systematic
  review. [abstract] *Journal of Athletic Training*, 2011; 46(3): S106.
- Kopec J, Heinerichs S, **Armstrong N**, Bertini T, Fowkes Godek S. Racial differences in sweat sodium concentration and gross sodium losses in professional and collegiate football players during practices in a hot and humid environment. [abstract] *J Athl Train*, 2008; 43(3): S38.
- Bertini T, **Armstrong N**, Kopec J, McCrossin J, Fowkes Godek S. Differences in sweat sodium concentration in professional ice hockey players when exercising in two different environmental conditions. [abstract] *J Athl Train*, 2008; 43(3): S72.

## Manuscripts Under Review

- Driban JB, **Cattano NM**, Balasubramanian E, Sitler MR, Amin M, Glutting J, Barbe MF. Associations between normalized synovial fluid biomarker concentrations and raw biomarker concentrations. Rheumatology International. Submitted June 30, 2011, IN REVIEW
- Driban JB, Boehret SA, Balasubramanian E, Cattano NM, Glutting J, Sitler MR. Medication and supplement use for managing joint pain among patients with knee and hip osteoarthritis. BMC Musculoskeletal Disorders. Revision submitted October 12, 2011, IN REVIEW
- Harris KP, Driban JB, Sitler MR, Cattano NM, Balasubramanian E, Hootman J. Tibiofemoral
  osteoarthritis after surgical and non-surgical treatment of the anterior cruciate ligament rupture: a systematic
  review. Journal of Athletic Training. Submitted October 7, 2011, IN REVIEW

### **Manuscripts In Preparation**

• Driban JB, Hootman JM, Sitler MR, Harris KP, **Cattano NM**. Association between sports participation and the risk of knee osteoarthritis: a systematic review.

## Research in Progress

- Analysis of Biochemical Environment of Effused and Non-Effused Osteoarthritic Knees (Preliminary Study) -IRB approved-May 20, 2009, re-approved May 20, 2010, re-approved May 20 2011- Submission for publication
- Effects of Intraarticular Corticosteroid Injections on Biochemical Environment of Osteoarthritic Knees with Effusion-IRB preparation

#### Grants

 WCU Special Provost Stimulus Funds-Effects of Intraarticular Corticosteroid Injections on Biochemical Markers of Clinically Effused Osteoarthritic Knees. Funded for \$5,000- April 2010

- PASSHE Faculty Professional Development Council (FPDC)-Effects of Intraarticular Corticosteroid Injections on Biochemical Markers of Clinically Effused Osteoarthritic Knees. Funded for \$8,000. March 2010
- WCU Faculty Development Grant-Analysis of Biochemical Environment of Osteoarthritic Knees. Funded for \$3,581-December 2008
- WCU College of Health Sciences Student-Faculty Research Grant-Do Ice Hockey Players Show Evidence of Heat Acclimatization? Funded for \$1,000.00-March 2007

#### **Presentations**

#### National:

• "Biochemical Comparison of Osteoarthritic Knees with and without Effusion." Thematic Poster presentation (peer-reviewed). National Athletic Trainers' Association Annual Meeting and Clinical Symposium, New Orleans, LA, June 2011.

## Regional:

- "Biochemical Comparison of Osteoarthritic Knees with and without Effusion" Poster presentation at WCU Research Day-April 2011.
- "Not just a disease of older age: Osteoarthritis in Athletes" Oral Presentation at Pennsylvania Athletic Trainer's Society Annual Meeting (PATS)- Harrisburg, PA- June 2010.
- "Analysis of the Biochemical Environment of Effused and Non-Effused Osteoarthritic Knees" Invited oral presenter at WCU Research Day-CHS representative-April 2010.
- "On the Move-Exercise with Ease" Oral Presentation at the Arthritis Foundation: Women's Health Summit-West Chester, PA-September 2009.
- "Exercise Prescription for the Obese Child" Oral Presentation at the WCU Integrative Health Conference-West Chester, PA-March 2009.

### Thesis/Project Mentoring

- Boehret, SA. Pharmacological Use Among Osteoarthritis Knee Patients in an Outpatient Orthopedic Practice-Temple Graduate Student (2009-2011)
- Schieler, N. Self Reported Patient Outcomes After Anterior Cruciate Ligament Reconstructions: Assessment of Impending Osteoarthritis-WCU Graduate Student (2008-2010)
- Harris, KP. Systematic Review of The Incidence of Osteoarthritis after Anterior Cruciate Ligament Injury (Surgical vs. Conservative Treatment)-Temple Graduate Student (2008-2010)
- Bertini, T. Do Ice Hockey Players Show Evidence of Heat Acclimatization- WCU Graduate Student-2006-2008
  - o Thesis Committee 2008

## **Additional Scholarly Activities**

• Bi-weekly summary posts on new research in sports medicine on website: Sports Medicine Research: In the Lab & In the Field (<a href="https://www.sportsmedres.org">www.sportsmedres.org</a>) (2011-current)

## Additional Graduate Work

- Courses in Progress Spring 2012
  - Dissertation Research (3.0 credits)

## **Additional Training**

- Shipping of Dangerous Goods Certification (relative to doctoral research-2009, 2011)
- SAP Training (2009)
- Sim Man Training (2007, 2008)
- Contribute Web Design Software Training (2007)
- Bod Pod Body Fat Analysis User Training (2007)

## Service

#### **Professional Service**

- "Optimal Use of NSAIDs" Invited Evidence Based Forum Moderator. National Athletic Trainers Association Annual Meeting and Clinical Symposium, New Orleans, LA, June 2011.
- Co-chair WCU Continuing Education Conference—Evaluation and Treatment of the Overhead Throwing Athlete, February 2011.
- Co-chair WCU Continuing Education Conference-Introduction to Strain/Counterstrain (Positional Release)
   Evaluation and Treatment of Musculoskeletal Injuries, April 2009.
- Co-chair Pennsylvania Athletic Trainer's Society (PATS) Student Symposium Planning Committee, February 2008.
  - Hosted 120 students from 11 of the 19 accredited undergraduate athletic training programs
- "Research in Athletic Training" Oral Presentation at PATS Student Symposium-West Chester, PA, February 2008.

## **University Committee Service**

- University Office of Sponsored Research Advisory Council-Invited member (2010-current)
- University Campus Climate Advisory Committee Member-Student Success & Retention Representative (recommended by Chair of Student Success and Retention Committee) (2009-2011)
- University Student Success and Retention Committee Member-College of Health Sciences Representative (2007-2010)
- Pre-Major and Out-of-State Students Subcommittee Member of University of Student Success and Retention Committee (2007)

### College of Health Sciences Committee Service

- CHS Web Site & Technology Committee Member (2010-current)
- Sturzebecker Scholarship Committee Member (2006-current)
- Integrative Health Conference Planning Committee Member- Department of Sports Medicine Representative (2007-current)
- Long Range Planning Committee Member (2008-current)
- Sim Man Acquisition Ad Hoc Committee Member (2006-2007)
  - \$65,000.00 proposal **funded** by Technology monies
- Ad Hoc Simulation Committee Member (2008-current)

## **Department Committee Service**

- Graduate Assistant Search Committee Chair (2010-2011)
- Graduate Assistant Search Committee Member (2007-2010)
- Temporary Faculty Search Committee Member (2008)
- Projector and Physician's Exam Room Technology Upgrades
  - \$12,000 proposal funded by Technology Fee monies (Spring 2010)
- Humac NORM Upgrade
  - \$10,500 proposal **funded** by Technology Fee monies (Fall 2009)
- SportsWare Adhoc (2004-current)
  - Instructed faculty in the use of an injury tracking/record keeping software on Palm Pilots, iTouches, and computer/internet.

- · Successful transition of sports medicine department to digital medical record keeping (Fall 2010)
- Scholarship Committee Chair (2008-current)
  - 2009 Charge: Identify WCU undergraduate AT students who will potentially represent WCU-ATEP on the university, state, regional and national levels.
  - Improved WCU representation at the regional and local levels.
- WCU Student Athletic Training Club Faculty Co-Advisor (2007-current)
- Curriculum Committee Member (2007-current)
- Alternative Workload Analysis Ad Hoc Committee Member (2007)
- Conference Planning Committee for Continuing Education Conference Member (02-current)
- Alumni Newsletter Committee Member (2007)

## **Community Service**

- "Evidence Based Medicine" Invited Lecturer in Research Methods I course. Temple University, Philadelphia, PA, September 2011.
- WCU Ski Team Club Faculty Advisor (2006-current)
- CPR & First Aid Certification for Student Recreation and Leisure Staff (2011)
- CPR & First Aid Re-certification for Athletic Training Majors (2008-current)
- CPR & First Aid Certification for Head and Assistant Coaches, West Chester University Athletics (2008-2010)
- CPR & First Aid Certification for Rising Juniors, West Chester University (2007, 2008)
- Volunteer for Special Olympics-Fall Festival, Villanova, PA (2006, 2007, 2009)
- USA Women's and Girl's Ice Hockey tournaments, West Chester PA (March-April 2008)
- Great Valley Basketball League Community Center -Basketball Shooting Lessons (2007, 2008)

## **Professional Organizations**

- National Athletic Trainer's Association (member)
- Eastern Athletic Trainer's Association (member)
- Pennsylvania Athletic Trainer's Society (member)

## **Professional Honors and Awards**

- Eastern Athletic Trainers' Association Frank George Doctoral Student Scholarship Award, January 2012.
- National Athletic Trainers' Association Research and Education Foundation Doctoral Student Scholarship Award, May 2011.