

December 5, 2005

Memorandum

TO: David Watt, Associate Provost for Academic Affairs

FR: Sharon R. Stewart, Associate Dean for Academic Affairs

RE: Master of Science in Athletic Training: Request for a New Program

Attached please find a proposal from the College of Health Sciences for a new Master of Science in Athletic Training program. This program was reviewed and recommended for approval by the CHS Academic Affairs Committee, and I support the proposal. Based on my conversations with the Program Director, Department Chair, and the CHS Dean, we are confident that sufficient resources are available to offer the proposed program.

While the need for this program has been recognized for some time, it has only been within the past few years that a number of factors have come together to allow this proposal to move forward. To date, students interested in pursuing athletic training at the University of Kentucky pursued a *concentration in athletic training* through the Department of Kinesiology and Health promotion. There, the aims of the proposed program are not new, but the formalization of a distinct degree offering in athletic training is new and serves as the basis of this proposal.

The proposed Master of Science degree in Athletic Training is a post-baccalaureate program designed to accommodate both NATA certified athletic trainers and NATA 'certification eligible' athletic trainers. Coursework and clinical experiences are designed to develop skills necessary to conduct research and increase proficiency in injury prevention, treatment, and rehabilitation. The goal of the program is to develop critical consumers of research and accepted clinical practices, advanced health care providers, and leaders in the clinical, educational, and research endeavors of the profession.

The attached proposal provides detail about the planned program. For additional information, please contact: Carl Mattacola at 323-1100, ext. 80860.

**Lindsay, Jim D.**

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**From:** Mattacola, Carl  
**Sent:** Tuesday, February 14, 2006 8:35 PM  
**To:** Lindsay, Jim D.  
**Cc:** Gonzalez, Lori S; Stewart, Sharon R; Dembo, Jeffrey  
**Subject:** RE: HCCC Status - MS Athletic Training  
**Attachments:** ATREQUEST FOR A NEW PROGRAM\_2\_13\_06.pdf

Jim:

I have attached a revised version of the AT proposal.

We have made all the changes based on the previous review and discussion of the HCCC at the December meeting.

- We have fixed several typos
- We have correctly identified Dr. Watt as the Associate Provost of Academic Affairs
- We have changed the credit hours from 33 to 37 based on the suggestion to keep the hours consistent with 9+ hours per semester for two years
- We have removed the request for additional financial resources, i.e., faculty and administrative financial requests
- In addition, we have honored our agreement with Dr.'s Watt and Dembo based on Dr. Dembo's suggestion. Today, at the College of Education Faculty meeting, Dean. Cibulka placed on the agenda a request for the College of Education to vote to endorse the AT Proposal. It began by Dr. Robert Shapiro describing the process, history, and rationale of our proposal, and concluded with The College of Education Faculty voting unanimously to support the proposal.

Please let me know if you should need anything else.

Sincerely yours,

Carl G. Mattacola, PhD, ATC  
Acting Associate Dean of Research  
Associate Professor - Director  
Division of Athletic Training  
University of Kentucky  
College of Health Sciences  
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Lexington, KY 40536-0200

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**From:** Lindsay, Jim D.  
**Sent:** Monday, February 13, 2006 12:46 PM  
**To:** Mattacola, Carl  
**Subject:** HCCC Status - MS Athletic Training

2/16/2006

**College of Education  
Faculty Meeting Agenda  
February 14, 2006 2:30pm  
Taylor Auditorium**

**Welcome** ..... James Cibulka

**Approval of Minutes** ..... James Cibulka

**General Education Reform and Assessment (GERA)**..... Steve Parker

**Conceptual Framework** .....Deborah Slaton

**Courses and Curricula** .....Kim Miller

- **Application for New Course: EDC 701 History of Mathematics Education**
- **Application for New Course: EDC 702 Theoretical Foundations of Mathematics Education**
- **Application for New Course: EDC 703 Advanced Research in Mathematics Education**

**New Athletic Training Program** .....Melody Noland

- Motion to endorse new Athletic Training Program in Health Sciences in collaboration with the College of Education Kinesiology and Health Promotion Department

**Announcements** ..... James Cibulka/Open Forum

**Dates to Remember:**

**Dr. Etta Hollins will be visiting the College of Education on March 6<sup>th</sup> and 7<sup>th</sup>.**

**Council of Chairs, 109 Dickey Hall 8:30 am,  
March 8, 2006**

**Faculty Meeting, Taylor Auditorium 2:30pm,  
March 7, 2006**

**Monday, March 6, 2006**

9:00 – 10:00      Meet with NCATE Steering Committee  
(109 Dickey Hall)

10:15 – 12:00      Meet with Whole Faculty (Taylor Ed.  
Auditorium)

1:00 – 4:00      Meet with Curriculum and Instruction  
Department and Educational Leadership  
Studies Department (325 Dickey Hall)

**Tuesday, March 7, 2006**

9:00 – 11:00      Meet with Educational Psychology,  
Educational Policy Studies and Special  
Education (109 Dickey Hall)

11:30 – 1:30      Meet with Kinesiology and Health  
Promotion at the Seaton Center (100/103  
Seaton Building)

2:30 – 4:00      Faculty Meeting for Overview (Taylor Ed.  
Auditorium)



*Master of Science in Athletic Training  
Proposal  
University of Kentucky*

## REQUEST FOR A NEW PROGRAM

Degree Title: Master of Science in Athletic Training

Major Title: \_\_\_\_\_ Option: \_\_\_\_\_ Major code in SIS:  
AT

Primary College: College of Health Sciences

CIP Code (contact Registrar's Office if unknown): CP 1990 32.0503 & CP 2000 51.0913

Accrediting Agency (if applicable) National Athletic Trainers Association

Departmental Contact:

Name: Carl G. Mattacola E-mail: [carlmat@uky.edu](mailto:carlmat@uky.edu) Phone: 859-323-1100 Ext. 80860

**I. Submit a 1-2 page abstract narrative of the program proposal summarizing how this program will prepare Kentuckians for life and work, plans for collaboration with other institutions, and participation in the Kentucky Virtual University.**

An athletic trainer is a qualified health care professional educated and experienced in the management of health care problems associated with physical activity. In cooperation with physicians and other health care personnel, the athletic trainer functions as an integral member of the health care team in secondary schools, colleges and universities, professional sports programs, sports medicine clinics, and other health care settings. A primary love of Kentuckians is athletic competition. In order to provide the utmost care for individuals participating in athletic endeavors medical practitioners need to be trained to care for those individuals and promote the benefits of physical activity to all Kentuckians. An athletic trainer can provide these services at a local community level and interact with individuals to meet their individualized and specific needs.

The University of Kentucky is widely recognized across the country and around the world as a well-respected academic and research institute and for the success of its athletic teams. Students have sought advanced athletic training education at the University of Kentucky because of the excellent facilities, resources, faculty expertise, and the opportunity to advance the profession through research pursuits.

While the need for this program has been recognized for some time, it has only been within the past few years that a number of factors have come together to allow this proposal to move forward. To date, students interested in pursuing athletic training at the University of Kentucky pursued a *concentration in athletic training* through the Department of Kinesiology and Health Promotion. Therefore, the aims of the program are not new but the formalization of a distinct degree offering in athletic training is new and serves as the basis of this proposal.

In 1999, (two regular title) assistant professor faculty lines and a staff position were created in the College of Health Sciences (CHS) for the development of an Athletic Training Curriculum for students pursuing a master's degree. A Division of Athletic Training (DAT) was created which is consistent with the administrative structure of the College of Health Sciences. At the time of the new faculty hires, there was a state moratorium on proposals for initiation of new degree programs. The decision was made to matriculate students into the Department of Kinesiology's master's of science program while maintaining the program and faculty resources in the College of Health Sciences.

There are several factors that have evolved to allow the Department of Rehabilitation Sciences- Division of Athletic Training to develop this proposal. The moratorium on new degree programs is no longer active. Similarly, the DAT has participated in two external reviews to assess national trends and verify the need and consistency of an athletic training degree with the mission and strategic plan of the University of Kentucky. The Division of Athletic Training was externally reviewed in the Spring of 2003 by two experts in the field as requested by the Dean of the College of Health Sciences. The external review provided insights to further promote the University of Kentucky graduate athletic training program (see Appendices A & B). Recommendations provided by the external review included the following:

*The graduate athletic training education program, and its faculty and students are administratively housed in the College of Health Sciences at the University of Kentucky. Additional faculty resources are needed. It is recommended that a senior faculty member be added to the Division of Athletic Training, and that consideration be given to recruiting a faculty member credentialed as a certified athletic trainer for the next faculty position in the Rehabilitation Sciences Doctoral Program. It is recommended that the graduate program be housed in the College of Health Sciences and that the University of Kentucky seek accreditation by the NATA.*

The aforementioned recommendations (of the external review of 2003) were shared with faculty in the College of Education-Department of Kinesiology and Health Promotion. At the time of the review, the faculty in the Department of Kinesiology did not support the recommendation to move the Athletic Training Program into the College of Health Sciences. Following considerable discussion between the faculty in Kinesiology and Athletic Training as well as the Deans of the Colleges of Education and Health Sciences, a second review was initiated in 2004 with the express purpose of determining the best administrative "fit" for Athletic Training. The external reviewers were leaders in the

profession of Athletic Training and were mutually agreed upon by both colleges. The recommendations were consistent with the 2003 review and both Colleges have mutually agreed to support development of a free-standing master's of science degree in athletic training at the University of Kentucky to be housed in the Department of Rehabilitation Sciences in the College of Health Sciences (See Appendix C).

Therefore, this proposal will put the University of Kentucky in a leadership role by providing a mechanism to obtain a master's of science degree in athletic training while meeting national trends and standards. This program is consistent with the University's goal to exert a leadership role in addressing the issues and challenges facing the Commonwealth, the nation, and the world. The CHS at the University of Kentucky has unique faculty resources and potential to offer this program. In 2003, the CHS moved into a new building which has provided state of the art instruction, research, and clinical facilities for the faculty and students in athletic training. The proposed program is a master's in Athletic Training within the Department of Rehabilitation Sciences. Many of the key instructional components of the MS in Athletic Training are currently in place. More specifically, four classes of students have successfully completed requirements through the previous mechanism in the Department of Kinesiology, and are gainfully employed. The coursework for the proposed degree program in athletic training has been modified over the last 5 years.

Students that have obtained a specialization in athletic training versus having the opportunity for a degree in athletic training have commented that the lack of a specialized degree in athletic training is a limitation of our program. The proposed program would respond to the needs of these students and make us competitive across benchmark institutions, which currently offer similar programs. To date, there are no master's degrees in athletic training offered at any Kentucky university. Eastern Kentucky University offers the only accredited undergraduate program in athletic training. This relationship places the University of Kentucky in a position to offer graduate education to complement Eastern Kentucky and similar programs in surrounding states. Faculty at Eastern Kentucky University support this proposal (see Appendix C). In fact, interest in our program is distributed nationally and has drawn students from many benchmark universities including: University of Florida, University of Michigan, Pennsylvania State University, University of Minnesota, and Purdue University, thus demonstrating the diversity and quality of the preparation of the students wishing to come to UK. (Table 1).

The proposed master's degree in Athletic Training will prepare students for life and work through clinical experiences designed to foster analytical thinking skills, time management, and professionalism. Clinical experiences or graduate assistantships allow students to refine skills and knowledge acquired from accredited undergraduate programs. Graduate Assistantships will provide experiences in research laboratories and in athletic training clinics in high schools, surrounding colleges, sports medicine clinics or at the University of Kentucky. The proposed degree will not be in collaboration with other universities and will not be part of the Kentucky virtual library.

## **II. Provide a comprehensive program description [complete curriculum. Include how program will be evaluated and how student success will be measured**

### **2.01. Program Description**

The proposed master's degree in Athletic Training (AT) is a *post baccalaureate program* and is designed to accommodate both NATA certified athletic trainers and NATA "certification eligible" athletic trainers. Course work and clinical experiences are designed to develop skills necessary to conduct research and increase proficiency in injury prevention, treatment, and rehabilitation. It is our goal that graduates become: critical consumers of research and accepted clinical practices, advanced health care providers, and leaders in the clinical, educational, and research endeavors of the profession.

### **2.02. Curriculum**

The curriculum of the proposed master's in Athletic Training will be composed of: (1) a required core in scientific methodology in athletic training; (2) advanced coursework in musculoskeletal evaluation and rehabilitation in athletic training; (3) advanced areas of specialization in biomechanics consistent with the student's related discipline and clinical expertise; and (4) a research project or thesis. The curriculum is designed to be completed in two years. There are no cooperative or practicum experiences designed in the program. Students will participate in laboratory and lecture experiences on the University of Kentucky campus. There are no plans to deliver this program via the Kentucky Virtual University or other distance learning technologies. At this time there are no plans to offer a collaborative program with other institutions within the state; however, Eastern Kentucky has provided letters of support for this program (see Appendix C). It is anticipated that 8 to 10 students will graduate per year.

The proposed master's degree in Athletic Training will prepare students for life and work through clinical experiences designed to foster analytical thinking skills, time management and professionalism. Clinical experiences or graduate assistantships allow students to refine skills and knowledge acquired from accredited undergraduate programs. Graduate Assistantships will provide experiences in research laboratory's and in athletic training clinics in the settings of high schools, surrounding colleges, sports medicine clinics or at the University of Kentucky. The addition of a master's degree in AT will increase the availability of athletic trainers in the Commonwealth providing a needed resource for the state.



The Athletic Training Curriculum is outlined below. Students will complete a curriculum that will prepare them as clinical leaders, researchers, and academicians. It provides the student with advanced instruction in musculoskeletal anatomy, evaluation and rehabilitation; research methodology and the scientific process; and a concentration in the biomechanical basis of movement. Likewise, students are provided a broad understanding of the various disciplines involved in this field. Each student is also required to take a minimum of 3 hours in research/statistic coursework. The structure and content of the academic program are set by an advisor in consultation with each student.

- (1) Scientific Methodology (6 hours). The program will require a thorough knowledge of the scientific process and in depth understanding of the research process. Students will be provided instruction in all aspects of the scientific process. The goal is that students will be critical consumers of the research in the discipline and accepted clinical practice.
- (2) Orthopedic Evaluation in Athletic Training, Rehabilitation in Athletic Training, and Musculoskeletal Anatomy (a minimum of 9 credit hours). Students will participate in two courses that provide advanced instruction and laboratory experience related to musculoskeletal evaluation and rehabilitation of injuries (Appendix E). Students will participate in a musculoskeletal anatomy course focusing on dissection and study of the neuromuscular system and musculoskeletal systems.
- (3) Research Methodologies (a minimum of 3 credit hours). It is anticipated that most students entering the program will have completed an introductory statistics course at the undergraduate level. Nonetheless, in order to assure that students have the necessary background to pursue scientific discovery at the master's level, they will be required to take Statistics 570 or its equivalent
- (4) Students will be encouraged to develop an area of specialization in musculoskeletal dysfunction with supporting coursework. The University of Kentucky Department of Kinesiology has developed a series of courses in biomechanics. A specialization in this area draws upon the strength of faculty and the available resources and laboratories. Likewise, it increases collaborative efforts between our departments.
- (5) Students will be required to participate actively in the research process by completing a research project or thesis and encouraged to share scientific knowledge in local, regional or national venues through presentations or journal manuscripts.

General Requirements

**PLAN A**  
(Thesis Option)

Course	Title	Credits	Faculty
AT 670	Scientific Inquiry in AT I	2	Mattacola
At 671	Scientific Inquiry in AT II	2	Mattacola
AT 672	Scientific Inquiry in AT III	2	Mattacola
AT 673	Scientific Inquiry in AT IV	2	Mattacola
AT 660	Peripheral Anatomical Dissection	3	Mattacola
AT 690	Orthopedic Evaluation in AT	3	Uhl
AT 695	Rehabilitation Concepts in AT	4	Uhl
Supporting Electives			
Stat 570 or equivalent	Basic Statistical Analysis	4	Staff
AT 768	Residence Credit for Masters Degree	6	
	Supporting Electives	9	
	<b>Total</b>	<b>37</b>	

**PLAN B**  
(Non-Thesis Option)

Course	Title	Credits	Faculty
AT 670	Scientific Inquiry in AT I	2	Mattacola
At 671	Scientific Inquiry in AT II	2	Mattacola
AT 672	Scientific Inquiry in AT III	2	Mattacola
AT 673	Scientific Inquiry in AT IV	2	Mattacola
AT 660	Peripheral Anatomical Dissection	3	Mattacola
AT 690	Orthopedic Evaluation in AT	3	Uhl
AT 695	Rehabilitation Concepts in AT	4	Uhl
Supporting Electives			
Stat 570 or equivalent	Basic Statistical Analysis	4	Staff
AT 680	Special Topics in Athletic Training	6	Mattacola or Uhl
	Supporting Electives	9	
	<b>Total</b>	<b>37</b>	

The following are representative courses which could be chosen for a minimum of 6 additional credits.

Related Courses:

Athletic Training

- AT 685 Principles and Application of Kinesiological EMG (3 cr)
- AT 660 Directed Study in Athletic Training (3 cr)
- KHP 720 Sports Medicine (3 cr)

Biomechanics

- KHP 615 Biomechanics (3 cr)
- KHP 616 Sport Biomechanics (3 cr)
- KHP 617 Gait Analysis (3 cr)
- KHP 618 Ergonomics and Work Hardening (3 cr)

Motor Control

- KHP 650 Theories of Motor Control (3 cr)

Exercise Physiology:

- KHP 600 Exercise Stress Testing and Prescription (3 cr)
- KHP 621 Exercise and Coronary Heart Disease (3 cr)
- KHP 630 Exercise in Health and Disease (3 cr)

Nutrition

- CNU 605 Wellness and Sports Nutrition (3 cr)
- CNU 602 Current Topics in Clinical Nutrition (1 cr)

Motor Development and Aging

- RHB 744 Advanced Topics in Motor Development (3 cr)
- GRN 612 Biology of Aging (3 cr)
- GRN 643 Biomedical Aspects of Aging (3 cr)

Research/Statistics

- STA 671 Regression and Correlation (2 cr)
- STA 672 Design and Analysis of Experiments (2 cr)
- STA 677 Applied Multivariate Methods (3 cr)
- STA 679 Design and Analysis of Experiments II (3 cr)

## **Alignment of the Proposed Master's in Athletic Training Degree with the Strategic Plan of the University of Kentucky and the Needs of the Commonwealth of Kentucky**

In response to House Bill 1, President Lee T. Todd, Jr. appointed a task force to recommend criteria and measures by which the University will regularly assess progress toward becoming a nationally preeminent public research university. There are several strategic plan indicators that highlight the need for pursuing a master's of athletic training and support the idea that Kentuckians are ready for postsecondary education. Goal II of the strategic plan is to: *Attract and Graduate Outstanding Students*. Educating students is a core mission of the University and the following objectives as outlined in the strategic plan further support initiating an AT Master's degree:

- Objective 1. The University will admit and enroll an increasingly higher caliber of student.*
- Objective 2. The University will collaborate with Kentucky's other postsecondary education institutions to facilitate success for transfer students.*
- Objective 3. The University will engage students in rigorous educational programs and provide an environment conducive to success.*

The development of a master's degree in athletic training will increase the opportunity to recruit and enroll a high caliber student and provide a much needed avenue for students in accredited undergraduate programs in the state of Kentucky to pursue a master's degree in their chosen profession. Likewise, the curriculum is rigorous and emphasizes a combination of strong clinical coursework, independent research, and world class facilities. The proposed program increases the post secondary opportunities for Kentuckians.

The proposed master's degree in Athletic Training is an example of an academic plan that freely collaborates with many units on campus. While we view collaboration as one of our strengths, we are firmly confident that an independent program in the College of Health Sciences allows the opportunities for academic growth related to the evaluation, rehabilitation, and prevention of injuries to the physically active of the University, the community; and the stature to support and meet our national and professional requirements.

Graduates from the University of Kentucky via the athletic training tract in KHP have been successful in securing employment. It is anticipated that the proposed degree will provide better opportunities for graduates because the improved recognition of a master's degree in athletic training will provide our graduates an advantage when they are compared to other individuals graduating from a program without a specialized degree. It is evident by our employment history and the diverse job settings of our graduates that they provide health care and contribute to the workforce of the Commonwealth of Kentucky and beyond. 100% of Graduates to date have secured employment in diverse settings, (Table 1).

It is important to note that several of our former students have elected to pursue doctoral degrees or advanced training demonstrating alignment with one the program’s goals to educate students to become *life long learners*.

Table 1. Documentation of the employment opportunities and settings of recent graduates.

<b>Year of Graduation</b>	<b>Employment Setting</b>	<b>Job Description</b>
2000	College (University of Hartford)	Assistant Athletic Trainer
2001	College, (Moorhead State University)	Assistant Athletic Trainer
2001	College (Canisius College)	Assistant Athletic Trainer/Instructor
2001	College (Erskine College)	Assistant Athletic Trainer/Instructor
2001	High School (Spain Park High School)	Head Athletic Trainer
2001	Industry (DJ Ortho)	Clinical Sales Representative
2002	College (University of Richmond)	Assistant Athletic Trainer
2002	College (St. Bonaventure University)	Assistant Athletic Trainer
2002	College (Villanova University)	Assistant Athletic Trainer
2002	High School (Lowndes High School)	Assistant Athletic Trainer
2002	High School (Bourbon County High School)	Head Athletic Trainer
2002	High School (Union High School)	Head Athletic Trainer
2002	Clinic (Lexington Clinic)	Research Assistant
2003	College (Barton College)	Instructor/Assistant Athletic Trainer
2003	College (University of Florida)	Assistant Athletic Trainer
2003	College (Canisius College)	Assistant Athletic Trainer
2003	College (Florida Atlantic)	Assistant Athletic Trainer
2003	Clinic (Steadman Hawkins)	Post-Graduate Fellowship
2004	College (UNC-Chapel Hill)	PhD Program
2004	High School (Ohio)	Head Athletic Trainer
2004	College (UNC-Wilmington)	Assistant Athletic Trainer
2004	College (Carson Newman)	Assistant Athletic Trainer
2004	College (Marshall University)	Assistant Athletic Trainer
2004	Private Practice (Berlin Germany)	Physical Therapist
2004	College (Univ. of Wisconsin)	Instructor/Assistant Athletic Trainer
2004	College (Eastern Illinois)	Assistant Athletic Trainer

### **2.03. Didactic/Clinical Relationship**

A clinical component is not required in this field, but students have the opportunity to provide clinical services to obtain graduate assistantships. Funding for the assistantships is provided through the UK Department of Athletics and local Colleges, Sports Medicine Clinics, and High Schools. Currently, 10 master's graduate assistantships are available through UK Department of Athletics, and 1 each at Lexington Christian Academy, Transylvania University, Centre College, and Asbury College.

### **2.04. Accreditation/Certification**

Standards and Guidelines for Post-Certification Graduate Athletic Training Education Programs are overseen by the National Athletic Trainers Association Education Council. Development of a masters' degree in athletic training at the University of Kentucky would be consistent with the requirements of the National Athletic Trainers' Association who have recommended that athletic training education programs be housed in schools and colleges of allied health.

The University of Kentucky College of Health Sciences, Department of Rehabilitation Sciences and Division of Athletic Training have collaborated on the planning and development of a unique graduate program which addresses the rapidly changing health care environment. The Master's degree core curriculum provides a foundation in advanced coursework related to athletic training and sports medicine.

The program will be established under the auspices of the Dean of the Graduate School and the Associate Provost of Academic Affairs and coordinated through the Department of Rehabilitation Sciences. Program leadership will be provided by the Director of Graduate Studies. Graduate program faculty appointments will be made by the Dean of the Graduate School upon recommendation of the Director of Graduate Studies. The program faculty will consist of faculty with Full Graduate Status and Associate Graduate Faculty Status. Currently, the two faculty in the Division of Athletic Training have Full Graduate Status and have joint appointments in the College of Education-Department of Kinesiology and College of Health Sciences-Rehabilitation Sciences Doctoral Program.

Students who are not NATA certified and/or have not met all NATA course and clinical prerequisites for eligibility to sit for the NATA/BOC certification examination must complete these requirements prior to admission to the graduate program of study. Students graduating from an accredited undergraduate program in athletic training meet these requirements.

### **2.05. Admission Criteria/Standards/Procedures**

Inquiries to the proposed master's degree in Athletic Training will be directed to the Director of Graduate Studies who will forward them to the Program Coordination Committee for consideration. Recommendations for admission will be provided by this committee. All candidates must meet general admission requirements as stipulated by the Graduate School including: a) baccalaureate degree from a fully accredited institution of higher learning; b) an overall undergraduate grade point average of 2.75; and, c) submission of official scores on the verbal, quantitative, and analytical portions of the Graduate Records Examination. Because of accreditation requirements as outlined by the National Athletic Trainers Association, students will need to be certified by the National Athletic Trainers Association Board of Certification (NATABOC) or eligible to be NATABOC certified as stipulated. Students that are certified must also be eligible for licensure to practice in Kentucky. Admission to the Athletic Training Program will be competitive and will be based on availability of space and adequate faculty support.

International student applicants must demonstrate English proficiency through the TOEFL exam with a minimum score of 550. Further, they must submit their professional credentials for evaluation to the appropriate committee of the professional association responsible for certifying applicants for the licensing examination. In the event that an international student is practice-qualified within his country of origin, but does not meet U.S. criteria, the student may be admitted to the program; however, no clinical experiences will be sanctioned which involve national certification or state licensure.

Student interest in graduate education in athletic training has been high since faculty were hired in 1999 to deliver the current curriculum (see Figure 1). Funded graduate assistantships are competitive and have insured that applicants are highly qualified. To date, admission has been competitive as we have approximately 10-12 applicants per available position. In addition, there has been a recent increase in the number of undergraduate athletic training educational programs in the United States. Currently there are 320 accredited undergraduate educational programs graduating an average of 10 students. There are only 12 accredited graduate athletic training programs, therefore, supply of students is high! Likewise, job opportunities as reflected by the number of postings on the Employment Vacancy List of the National Athletic Trainers Association have continually risen demonstrating viable employment opportunities in the profession (see Figure 2). There are no graduate athletic training programs in the state of Kentucky. This program would provide a much needed opportunity for students in the Commonwealth to pursue graduate education. There are no similar graduate programs in the Commonwealth. Eastern Kentucky is the only accredited undergraduate athletic training program and the proposed master's degree in athletic training will provide a resource for their students to pursue a graduate degree in the athletic training.

Students will be recruited via several mechanisms. Description of our graduate program is available by the National Athletic Trainers Association Web site ([www.nata.org](http://www.nata.org)). Similarly, brochures describing our program will be e-mailed to all accredited undergraduate athletic training programs. Information describing the program is also available via our web site ([http://www2.mc.uky.edu/Athletic\\_training/](http://www2.mc.uky.edu/Athletic_training/)). Minority

recruitment will occur by announcing our program to the Minority Committee of the National Athletic Trainers Association. Likewise, students in the only accredited undergraduate athletic training program in Kentucky at Eastern Kentucky University will be recruited.

Recruitment of minority students has been successful. On average 1 in 10 students enrolled in the graduate athletic training program are minorities. This is above the national average and is the result of promoting our program to minority committees and members of our profession to increase awareness of the opportunities at the University of Kentucky.

Figure 1.

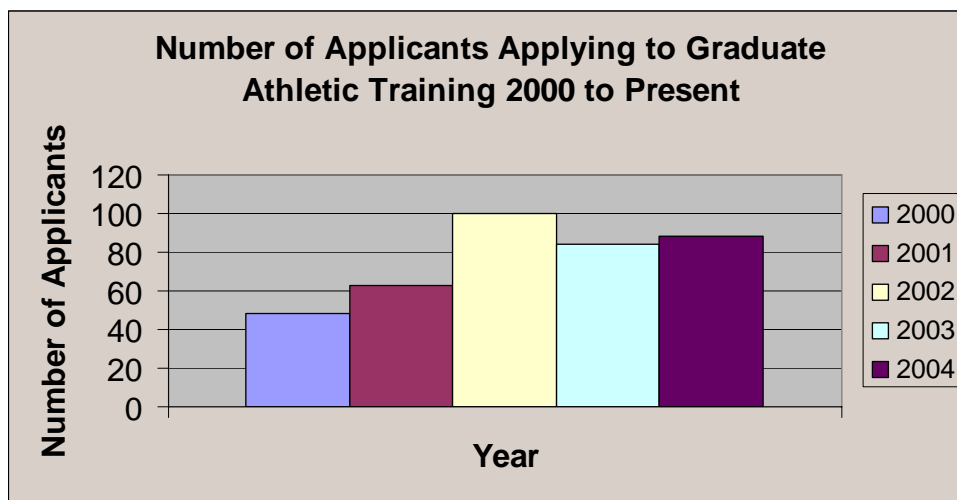
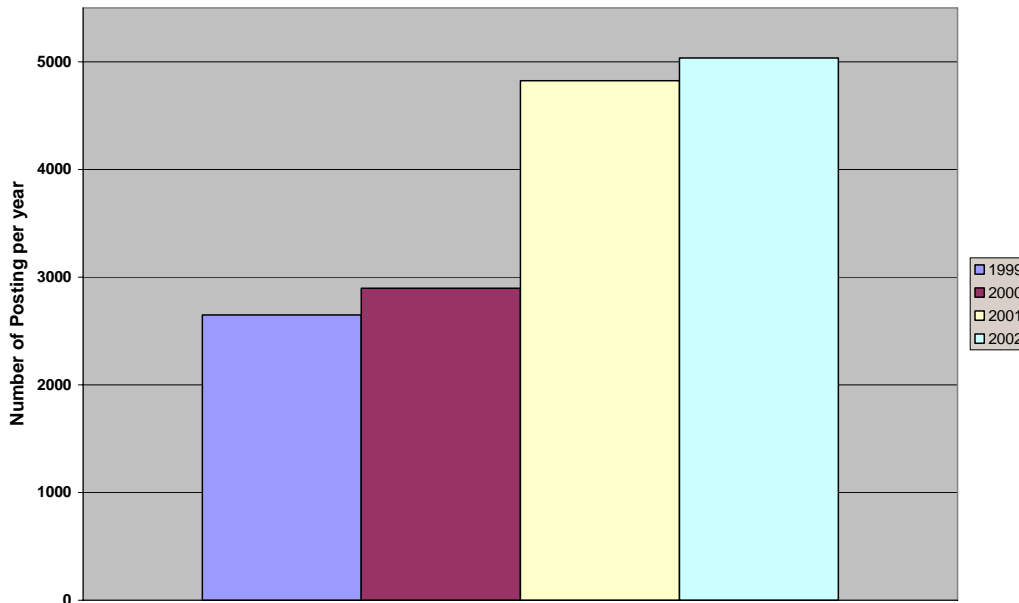


Figure 2.



Number of Job Postings to the NATA Job Vacancy Listing by Year



## 2.06 Objectives/Evaluation Scheme

The major goal of the graduate athletic training program is to provide course work and clinical experiences that are designed to develop skills necessary to conduct research and increase proficiency in injury prevention, education, and rehabilitation. While there is no formal clinical practicum, emphasis is placed on integrating the didactic information taught in the classroom with the student's clinical practice. It is our goal that graduates become: critical consumers of research and accepted clinical practices, advanced health care providers, and leaders in the clinical, educational, and research endeavors of the profession, and collaborate with other professionals on various issues pertaining to rehabilitation and health. We seek to provide education to qualified students so that they will have a better understanding of the full spectrum of advanced education in the area of prevention, evaluation and rehabilitation process for individuals engaged in physical activity.

Objectives of the proposed program are to: (1) provide a multidisciplinary program in athletic training with coordinated and expanded course offerings to meet the varied needs and interests of students wishing to pursue a research, clinical, and/or academic career in the profession of athletic training. Areas of concentration include advanced study in musculoskeletal evaluation and rehabilitation, anatomy, biomechanics and clinical education; (2) develop scientific expertise and knowledge of resources which will allow students to conduct independent research; (3) foster cooperative interdisciplinary research; (4) participate in guided research projects of sufficiently complex scope and design to prepare the student to conduct their own research; and (6) prepare leaders to

educate others to help meet the demands of rehabilitation services for Kentuckians and the nation's citizenry.

Students in the program will be evaluated through traditional course assessment techniques, as well as annually by their Program Director. Students will be expected to maintain consistent progress in their course work and independent research activities as approved by their Advisory Committee. Previous graduates have obtained a 100% job placement into the workforce or have elected to pursue additional education, typically enrolling in doctoral programs. Ninety-eight percent of the students to date have completed the program within the allotted two years. Likewise, one barometer used to evaluate students success with our mission of preparing students to be independent and critical thinkers has been the documentation of the quality and number of publications and presentations in peer reviewed forums. To date, all students enrolled in the program have had the opportunity to present or share their research findings at regional or national meetings and several have been successful in securing grants and scholarships. A selected, representative listing of recent abstracts/presentations and publications demonstrating the success of our students in the scholarly arena is described in Table 2. In Table 2 master's student contributions are designated in bold font.

Table 2

<b>Publications of Students (in Bold) and Faculty: Division of Athletic Training (2004 – 2005)</b>
<b>Journal Publications 2005</b> <b>DiMattia MA</b> , Livengood AL, Uhl TL, Mattacola CG, Malone TR. <a href="#">What are the validity of the Single-Leg Squat Test and its Relationship to Hip Abduction Strength</a> . Journal of Sport Rehabilitation, 14:2; 108 - 123, 2005.
<b>Stiller, J</b> , Uhl, TL. <a href="#">Outcomes Measurement of Upper Extremity Function</a> . Athletic Therapy Today, 10(3), 34-36, 2005.
<b>Journal Publications 2004</b> <b>Wise MB</b> , Uhl TL, Mattacola CG, Nitz AJ, Kibler WB. <a href="#">Shoulder Musculature Activation during supported and unsupported active range of motion upper extremity exercises</a> . Journal of Shoulder and Elbow Surgeons. 13: 614-620, 2004.
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### **III. Explain resources (finances, facilities, faculty, etc.) needed and available for program implementation and support.**

#### **3.01 Facilities:**

The CHS at the University of Kentucky has unique faculty resources and potential to offer this program. In 2003, the CHS moved into the new 30 million dollar Charles T. Wethington Building which has provided state of the art instruction, research, and clinical facilities for the faculty and students in athletic training. Existing facilities will meet the requirements for initiating the proposed program. The Musculoskeletal Laboratory serves as the primary resource for research activity. In keeping with the University of Kentucky's mission of becoming an outstanding research institution; the Division of Athletic Training has focused a large portion of its efforts into the area of research. One aspect of the University of Kentucky's mission is to improve the lives of people in the Commonwealth, the nation, and the world through teaching, research, and service. One major component of improving the quality of life of people in the Commonwealth and society at-large is to enhance their health. An important focus is to improve the health of all people interested in having a physically active lifestyle. We are very fortunate to have the resources of a comprehensive public university with a major medical center that is available to our graduate athletic training students. Services ranging from biomechanical evaluation, physiological testing, body composition, radiological assessment, nutritional sciences, and basic science are available for our students as they pursue their respective research interests. The graduate athletic training students have the opportunity to work with some of the leading experts in the fields of Orthopedics, Biomechanics, Physiology,

Radiology and Nutrition. The primary focus of our research interests are in the areas of evaluation, treatment and prevention of sports medicine injuries. Many of the key instructional components of the master's in Athletic Training are currently in place. More specifically, four classes of students have successfully completed requirements through the previous mechanism in the Department of Kinesiology, and are gainfully employed. The coursework for the proposed degree program is established and specific athletic training prefixes (AT) for course delineation have been approved by the Academic Council of the University. Similarly, existing courses have been refined and modified to meet the needs of the profession.

This proposal seeks to establish an interdisciplinary approach in the education and scholarship of students and faculty. The collaboration both within and outside of the college serves as an example of a methodology to advance the mission of the University of Kentucky which include: instruction of graduate students by scholarship and research, which is guided by a spirit of integrity and mutual respect; research, which promotes advancement of human pain free activity through the expansion of knowledge and its applications in the sciences; and by providing athletic training services for outreach and public service to support the citizens of the Commonwealth. Students and faculty in the Division of Athletic Training have ongoing research collaborations with the Department of Kinesiology and Health Promotion, the Department of Orthopaedics-Sports Medicine, the Rehabilitation Science Doctoral Program, and the Division of Physical Therapy.

The extensive library facilities on campus with their continuing acquisitions will fully support the proposed program. The holdings of the W. T Young Library and the Medical Center Library are relevant to this program. In addition, individual programs maintain collections of print and audio-visual materials appropriate for instructional use within the program.

### **3.02 Faculty**

To be admitted as a member of the Graduate Faculty in the Athletic Training Program, individuals must meet the following criteria: 1) have a strong interest, clinical expertise and involvement in scholarly research in an area related to the athletic training profession, 2) have a record of research publications in related refereed journals, and 3) be appointed by the Dean of the Graduate School. Currently, the following individuals will compose the potential pool for the Graduate Faculty in Athletic Training.

### GRADUATE FACULTY IN ATHLETIC TRAINING

<b>Name/Institution Granting Degree</b>	<b>Rank</b>	<b>Area(s) of Expertise</b>
Carl Mattacola, Ph.D. University of Virginia	Associate Professor Primary Appt. – Athletic Training Joint Appt. – KHP Dept.	Neuromuscular control of postural stability following injury. Effectiveness of lower extremity interventions on postural stability.
Tim Uhl, Ph.D. University of Virginia	Associate Professor Primary Appt. – Athletic Training Joint Appt. – KHP Dept.	EMG related to neuromuscular control and activation patterns of the upper extremity. Orthopedic injuries and return to participation.

### SUPPORTING FACULTY

Cale Jacobs, PhD University of Kentucky	Adjunct Professor-Department of Rehabilitation Sciences	Athletic Training Biomechanics Orthopedic Research
James Madaleno, MS	Adjunct Professor/Clinical Supervisor Primary Appt – Dept. Athletics	Athletic Training Clinical Education
Keith Webster, MA	Adjunct Professor/Clinical Supervisor Primary Appt – Dept. Athletics	Athletic Training Clinical Education
Jody Clasey, Ph.D. University of Illinois	Assistant Professor Primary Appt. – KHP Dept Joint Appt. – Clinical Nutrition	Exercise Physiology: Metabolism, endocrine and body composition alterations in response to physical training.
Anne Harrision, Ph.D. University of Kentucky	Associate Professor	Aging, Geriatrics, Orthopedic evaluation and rehabilitation
Tony English, MS University of Kentucky	Associate Professor	Orthopedic evaluation and rehabilitation
Patrick Kitzman, Ph.D. The Ohio State University	Assistant Professor	Spinal cord Injury, Neurology
Gilson Capilouto, Ph.D.	Assistant Professor	Aphasia, Assistive Technology; Motor Control and Development
Terry Malone, Ed.D., P.T. Duke University	Professor Primary Appt. – Physical Therapy	Sports Medicine: Orthopaedic rehabilitation outcomes, Soft Tissue Injury & Repair, Strength Assessment and its correlation to function

Art Nitz, PhD, PT University of Kentucky	Professor Primary Appt. – Physical Therapy Joint Appt. – KHP Dept.	Sports Medicine: Muscle-nerve pathologies related to orthopedic, sports injury; clinical efficacy, outcome studies; orofacial pain; needle electrodiagnostic (EMG) procedures.
Rob Shapiro, Ph.D. University of Illinois	Professor Primary Appt. – KHP Dept Joint Appt. – Biomed. Engineering	Biomechanics/Sports Medicine: Whole body biomechanics, 3-D analysis, injury mechanisms, sport biomechanics
Brian Umberger, Ph.D. University of Arizona	Assistant Professor Primary Appt – KHP Dept	Biomechanics
J.W. Yates, Ph.D. The Pennsylvania State University	Associate Professor Primary Appt. – KHP Dept Joint Appt. – Clinical Nutrition	Exercise Physiology: Muscular training and fatigue mechanisms. Ergogenic aids. Work physiology and ergonomics.

Faculty listed above have expertise closely related to the field of athletic training and many have served on thesis and dissertation committees of students in the programs of the College of Health Sciences and in the College of Education- Department of Kinesiology and Health Promotion.

### 3.03 Funding

The DAT has proven that it is fiscally responsible. The DAT has averaged more than \$225,000.00 per year in funding from external contracts and research grants thus demonstrating the ability to generate funds adequate to maintain 2 faculty lines and 1 staff position. Funding for much of the research comes from faculty and student written grant awards. Over the last three years, the program has submitted 14 external grant proposals, 3 internal grant proposals and received funding from 10 external and 2 internal sources.

Additionally, the DAT has been fortunate to be able to fund all the graduate assistantships through external grants. At the inception of the program in 1999 we had 6 assistantships. We now have 10 assistantships that are funded through the Department of Athletics and 6 assistantships funded through various colleges, high schools, and sports medicine clinics in the greater Lexington area. All graduate students are board certified by the National Athletic Trainers Association Board of Certification and provide health care to the University, the city of Lexington, and to regional high schools, colleges and sports medicine clinics. By providing care to the community and Lexington region at-large, our program is consistent with the mission to provide health care and improve the lives of Kentuckians, often in underrepresented areas of the state.

### **3.04 BUDGET JUSTIFICATION**

There is no request for additional funds to support the program. Two faculty lines were approved in 1999. There are two tenured associate professors in the Division of Athletic Training. Important to note, one faculty position has already been allocated as part of the start-up package of Dean Lori Gonzalez. A faculty search is ongoing for the third tenured track faculty position.

**Executive/Administrative:** A Director of Graduate Studies will be named to assume overall direction of the academic program. The Director will assist the Chair of Rehabilitation Sciences with hiring personnel, establishing the Program Coordination Committee, refining curriculum delivery planning activities with program faculty, initiating recruitment activities and establishing procedures for the program. The salary of the individual in this position will be enhanced through an administrative increment which will be assumed by the College of Health Sciences.

**Secretarial/Clerical:** *No new clerical positions are requested.* The current staff associate position is adequate to support three faculty of the Division of Athletic Training.

**Operating Costs-Library (Departmental):** NA

**Operating Costs-Student Support: Assistantship:** NA

**Operating Costs: Off-Campus Facilities:** NA

**Capital Costs:** NA



### III. Summary Information Regarding the CPE 65 Questions

#### Academic Program Approval Checklist

#### 4.01 Are more Kentuckians ready for postsecondary education?

- A. Entrance requirements:
  - 1. Completion of a baccalaureate degree from an accredited undergraduate athletic training program.
  - 2. Undergraduate GPA's, GRE scores, written recommendations and a sample of writing will be used to assess students for admission purposes.
  - 3. Eligibility or completion of Board of Certification as an athletic trainer.
- B. Transfer requirements:
  - 1. Students will be evaluated on a per case basis regarding transfer. The Director of Graduate studies will determine if previous master level courses could be used for transfer. Determination will be based on comparison with the current curriculum.
- C. Recruitment plans
  - 1. Students will be recruited via national list-servs and web sites, and by targeting all eligible undergraduate institutions offering a baccalaureate in athletic training.
  - 2. A diverse student population will be recruited with assistance from the Office of Minority Affairs at the University of Kentucky and the Minority Committee of the National Athletic Trainers Association. The current program has a history of attracting minority students and gender equity has never been a problem. In fact, women make up a larger percentage of the demographics of eligible students.

- 4.02 Are more students enrolling?
- A. Explain the demand for the program by providing the following information:
    - 1. Student interest is high. There has been a recent increase in the number of undergraduate athletic training educational programs in the United States. Currently there are 320 accredited undergraduate educational programs graduating an average of 10 students; there are only 12 accredited graduate athletic training programs.
  - B. Detail recruitment plans (include specific plans to attract non-traditional students, including minorities, and to address gender related issues).
    - 1. Students will be recruited via national employment and job post listing and via targeted exposure to all accredited undergraduate athletic training educational programs.
- 4.03 Are more students advancing through the system?
- A. What is the anticipated time-to-graduation for full-time students entering the program?
    - 1. Two years
  - B. Explain any cooperative or practicum experience required to complete the program.
    - 1. No cooperative or practicum experience is required to complete the program
  - C. Why do you desire to offer the program? (See Section 1) Why is UK the right place to offer this program?
    - 1. There are several strategic plan indicators that highlight the need for pursuing a master's degree in athletic training and support that Kentuckians are ready for postsecondary education. Goal II of the strategic plan is to: *Attract and Graduate Outstanding Students*. Educating students is a core mission of the University and the following objectives as outlined in the strategic plan further support initiating an AT Masters degree:

*Objective: 1. The University will admit and enroll an increasingly higher caliber of student.*

*Objective 2. The University will collaborate with Kentucky's other postsecondary education institutions to facilitate success for transfer students.*

*Objective 3. The University will engage students in rigorous educational programs and provide an environment conducive to success.*

There are no other institutions in Kentucky that offer such a program. The initiation of a master's degree in athletic training is in alignment with the mission of a comprehensive Doctoral/Research Extensive University.

1. Include a list of other Kentucky institutions offering similar or related programs at this and other levels.
  - a. There are no other Kentucky institutions offering a similar program.
2. List courses from in-state institutions that will transfer into the program.
  - a. There are no courses at Eastern Kentucky that will transfer. Since we are proposing a graduate degree no courses at the undergraduate level will readily transfer.
3. List courses offered that will transfer into similar programs at other state institutions
  - a. There are no similar programs at other state institutions in the state of Kentucky.
4. Provide information about completed, signed articulation agreements.
  - a. There are no signed articulation agreements.

D. Delivery

1. What plans are in place for delivering this program through the Kentucky Virtual University or other distance learning technologies? (Council on Postsecondary Education wants special attention given to KVU courses)
  - a. At this time there are no plans for delivering this program through the Kentucky Virtual University.
2. What courses can be offered in a non-traditional mode?
  - a. At this time all courses are listed as traditional courses.

E. Collaborative Efforts

1. Future proposals must provide evidence of consultation with other programs in the state and either documentation of collaborative agreements or strong arguments for why they are not feasible.
  - a. The Dean of the College of Health Sciences and faculty in athletic training at Eastern Kentucky University have demonstrated they are in agreement with the proposed program with letters of support (See Appendix C).
2. Collaborative agreements should define shared use of resources to improve program quality, efficiency, and student placement.
  - a. Not applicable

4.04 Are we preparing Kentuckian's for life and work?

- A. 1. How does the program prepare Kentuckians for life and work?
- a. The proposed master's degree in Athletic Training will prepare students for life and work through clinical experiences designed to foster analytical thinking skills, time management, and professionalism. Clinical experiences or graduate assistantships allow students to

refine skills and knowledge acquired from accredited undergraduate programs. Students will receive graduate coursework that will prepare them to practice as allied health professionals within the Commonwealth and beyond.

- B. 1. What are the accreditation expectations for this program?
    - a. Accreditation is overseen by the National Athletic Trainers Association. Standards and Guidelines for Post-Certification Graduate Athletic Training Education Programs are overseen by the National Athletic Trainers Association Education Council. The University of Kentucky will seek accreditation after seeking approval for a master's in science degree in athletic training from the Commonwealth of Kentucky Council on Higher Education.
  - C. 1. Are there licensure, certification or accreditation requirements for graduates of this program?
    - a. Students will have been eligible or certified prior to entry into the program. Students will be required to pursue licensure in the Commonwealth of Kentucky. The practice of medicine is a privilege granted by the state. The Kentucky Board of Medical Licensure is responsible for safeguarding and promoting the public welfare by ensuring that licensure qualifications and standards of medical and osteopathic physicians are met and that appropriate disciplinary action is taken when violations of the Medical Practice Act occur. The Board is also responsible for the regulating and certifying qualified physician assistants, athletic trainers and surgical assistants practicing in the Commonwealth.
  - D. 1. What are the projected degree completions? (CPE Productivity triggers are: 12 Associate and Baccalaureate, 7 Master and Specialist, 5 Doctoral per year)
    - a. The projected degree completion is 8-10 students per year.
- 4.05 Are Kentucky's communities and economy benefiting?
- A. 1. Describe external advisory groups involved in the development of this program (e.g. disciplinary groups, community, government, business, labor interests).
    - a. The College of Health Sciences sought the advice of two separate external review consultations. Both consultation groups provided valuable feedback regarding the trends of the profession while considering the goals and mission of the University of Kentucky. The consultants from both external reviews unanimously concluded the pursuit of a master' degree in athletic training was in the best interest of

the University of Kentucky, the CHS, and the Commonwealth of Kentucky (Appendices A & B)

- B. 1. What are the employment expectations for graduates? Document the contributions of the program to current workforce needs in the state.
- a. Graduates will pursue employment in University, clinic and high school settings. The addition of a master's degree in AT will increase the availability of athletic trainers in the Commonwealth providing a needed resource for the state. To date, graduates in athletic training have a 100% success rate in securing employment following commencement. In fact, all students secured employment in the summer following graduation or if they choose not to seek employment, they were enrolled in or attended graduate school the following semester.
- C. 1. What other benefits to the Kentucky's community and economy will the program provide?
- a. Demographic changes within the population have influenced the need to increase the capacity for preparing qualified allied health personnel in the rehabilitation sciences. This growing need can be succinctly summarized across the three traditional dimensions of research, teaching, and service.

1. Research. Master's prepared personnel are needed to provide the research background that supports diagnostic and treatment protocols for those engaged in physical activity. The production of much needed discipline specific and clinical outcomes research supports the need for additional specially trained allied health professionals.

Teaching. Master's prepared personnel are needed as faculty members for undergraduate and graduate programs within and outside of the Commonwealth. The entry level degree programs in athletic training offer a baccalaureate and not a master's degree. The creation of this program will provide a necessary outlet for students requiring such a program while producing individuals that have specialized research and educational training to seek entry level teaching positions.

Service. The delivery of rehabilitation services under Managed Care has significantly altered the organization of services, with an increased emphasis on cost effectiveness and outcomes measurement. This has created new clinical opportunities for master's prepared professionals. In addition to the traditional university setting, health care institutions are increasingly seeking individuals with advanced clinical expertise, broad understandings of the clinical enterprise and the ability to participate in

quantitative evidenced-based management of the physically active. The need for advanced clinicians is also growing and will remain an unmet need for the foreseeable future. Similar trends are evident for the other rehabilitation disciplines. The demand for master's prepared graduates in athletic training continues to exceed the available supply regardless of the career path and chosen setting.

D. Explain specific benefits of the program

The proposed program is positioned to serve the Commonwealth and beyond. The mission of the proposed program is aligned with several of the strategic indicators of the University and the Commonwealth. The addition of a graduate athletic training master's degree increases opportunities for potential students interested in pursuing an advanced degree in the profession of athletic training. In addition, the students that attend the University of Kentucky will have various opportunities that are present in a vibrant medical center, such as state of the art facilities and the expertise of health care professions including, Health Sciences, Medicine, Pharmacy, Dentistry, Nursing, and Public Health. More importantly, the facilities and infrastructure for the program have been built and refined over the last five years. The faculty are established and considered national experts in their field and are committed to the educational mission of the University of Kentucky and the Commonwealth. There is a demonstrated interest in our program as verified by enrollment data and demonstrated need since no other programs exist in the state.

The program is cost effective and will require very few new resources. The AT program has annually generated greater than \$225,000.00 in grants and contracts demonstrating income that justifies the cost of personnel (faculty and staff) for the existing program.

The proposed degree provides increased services for the Commonwealth. Students enrolled in the graduate athletic training program provide health care services to the immediate University community and to local counties surrounding Lexington and Fayette County. In addition, graduates will be poised to provide advanced healthcare and contribute to the public health and wellness issues facing Kentuckians. Each year graduates of our program elect to remain in the Commonwealth thus demonstrating a commitment to improving health care in Kentucky.

**APPENDIX A**

**Division of Athletic Training External Review  
April 2003**

University of Kentucky  
Division of Athletic Training Program Review  
Conducted April 17 & 18, 2003

The external review was a College of Health Sciences initiated review. Academic programs at the University of Kentucky are reviewed every six years according to institutional regulation. Accredited programs undergo additional periodic reviews with their respective accrediting bodies. Because the College of Health Sciences is a composite of several undergraduate and graduate programs, the College seems to be engaged in yearly evaluation of one form or another. It has been observed by faculty and administrators that these reviews often focus on the adequacy of resources, organizational structure, and a host of other important, but peripheral issues, to the exclusion of the academic program itself and the adequacy of faculty productivity within the program. For this reason, Dean Thomas Robinson has initiated a separate review process involving knowledgeable external reviewers who can provide a perspective on a particular program's strengths and weaknesses.

**Reviewers:**

Peter Koehneke  
David Perrin

**Individuals Interviewed:**

Thomas Robinson, PhD, Dean, College of Health Sciences  
Douglas Kalika, PhD, Dean, Graduate School  
Sharon Stewart, EdD, Associate Dean, College of Health Sciences  
Robert Shapiro, PhD, Associate Dean, College of Education  
Carl Mattacola, PhD, ATC, Assistant Professor & Director, Division of Athletic Training  
Timothy Uhl, PhD, ATC, PT, Assistant Professor, Division of Athletic Training  
Susan Effgen, PhD, Program Director, Rehabilitation Sciences Doctoral Program  
Terry Malone, EdD, PT, Director of Physical Therapy  
James Madaleno, ATC, Head Football Athletic Trainer  
Keith Webster, ATC, Head Athletic Trainer  
Brady Tripp, First Year Doctoral Student  
Patricia McGinn, Second Year Doctoral Student  
Ann Livengood, Third Year Doctoral Student  
Nina Kuschinsky, First Year Master's Student  
Crystal Pearson, First Year Master's Student  
Eugene Dupas, Jr., First Year Master's Student  
Courtney Mulvihill, Second Year Master's Student  
Paul Silvestri, Second Year Master's Student  
Stacey Roller, Second Year Master's Student  
David Brajuha, Second Year Master's Student  
Ben Gecewich, Second Year Master's Student



## Purpose

The purpose of the Division of Athletic Training Program Review was to assess the program in light of national trends through review of selected documentation and interviews of administration, faculty, staff, and students. The Reviewers were asked to assess the program's strengths and weaknesses as related to the University of Kentucky's goal of becoming ranked as a Top 20 Research University and the following six characteristics of the 2003-06 Strategic Plan:

1. Reach for National Prominence
2. Attract and Graduate Outstanding Students
3. Attract and Retain Distinguished Faculty and Superior Staff
4. Discover, Share, and Apply New Knowledge
5. Nurture Diversity of Thought, Culture, Gender, and Ethnicity
6. Tackle the "Kentucky Uglies"

In addition, the following questions grouped under four major themes were offered as a starting point for the Reviewer's inquiry:

### A. National Trends & Program Fit

1. In your judgment where is the discipline heading nationally? What component of the program at UK can be revised to meet or lead national trends?
2. What are the strengths of the Division of Athletic Training relative to national trends?
3. What are the weaknesses of the Division of Athletic Training relative to national trends?
4. What qualities should characterize a student graduating from the Athletic Training Program of Study based on projected employment patterns?

### B. Curriculum & Instruction

1. In light of the University of Kentucky's vision of being ranked as a 20 Best Public University, what recommendation can be made regarding current resources?
2. Is the number of Regular title series faculty adequate to meet the current scholarly, teaching and administrative expectations/load?
3. Does the academic course structure appear to meet the needs of the discipline? Are there recommendations/suggestions for additional supporting coursework?
4. Is the current curriculum consistent with institutional, national and professional trends?

5. What are the strengths of the Graduate Athletic Training Curriculum?
6. Is the current degree offering consistent with national standards?
7. With the expectations for increased research productivity and increased grant production, are faculty resources adequate to meet anticipated demands?
8. Should the emphasis of faculty resources focus on the masters or doctoral level?
9. Should the athletic training faculty establish a more prominent role in the newly developed Rehabilitation Sciences program?
10. What role do the reviewers perceive for specialty certification in graduate athletic training program and are there any suggestions of certifications that complement the current program?

#### C. Research & Scholarly Activities

1. Are the athletic training faculty members reaching their research potential?
2. What recommendations might be instituted to help achieve greater research efficiency for faculty and students?
3. Are research space and other resources adequate to successfully support the research agenda for faculty and students?
4. Is the research quantity and quality comparable to that which can be found in similar programs in an academic health center?
5. There has been discussion to develop “pay for service” component of the Musculoskeletal Laboratory. Please provide suggestions for such an option versus the pursuit of traditional grant funding?

#### D. General

1. Are the physical facilities adequate to deliver the current curriculum? Please offer suggestions for improvement.
2. Are the physical resources adequate to deliver the current curriculum and compete nationally?
3. How can we improve funding opportunities for current students?
4. What recommendations do you have for pursuing and meeting accreditation standards of the National Athletic Trainers’ Association?

## Overview of the Report

To set some context for this report, recent trends within the athletic training profession will first be addressed. An overview of the history and evolution of the Graduate Athletic Training Education Program at UK will follow. Next, the Reviewer's observations and responses to the four themes will be summarized. Finally, the Reviewers will offer specific recommendations related to program location, program resources, accreditation, and doctoral level education.

## Overview and Professional Trends in Athletic Training

The profession of athletic training (and associated educational standards) has evolved significantly over the past two decades. Athletic training education programs were born within departments of physical education in schools of Health, Physical Education, and Recreation. This model was intended to produce "teacher-trainers" for employment in secondary schools. While this was an admirable attempt to provide individuals to fill two roles, in essence these persons were being asked to assume two full-time positions, and over time the model has collapsed.

In 1980 the Professional Education Committee and the Board of Directors of the National Athletic Trainers' Association (NATA) adopted the resolution that baccalaureate level programs would be academic majors or their equivalent by 1990. These groups in conjunction with the NATA Board of Certification also eliminated the approved graduate curriculum route to eligibility for the certification examination. This created the need for advanced, rather than entry-level, NATA accredited graduate programs in athletic training.

In 1990 the American Medical Association recognized the profession of Athletic Training as an allied health profession. The Commission on Accreditation of Allied Health Education Programs and its Joint Review Committee for Athletic Training now oversees the accreditation process for entry-level athletic training programs.

The NATA established a comprehensive educational task force in 1994. One recommendation made by the task force was that educational programs be housed in schools of allied health or medicine as the discipline evolved to a higher level. Many institutions have followed this recommendation, and this is clearly the national trend. Another recommendation was the elimination of the internship route for certification examination eligibility. Effective January 1, 2004, completion of an accredited entry-level curriculum will be the only route for eligibility. The impact of this action on graduate athletic training education is significant, and has created a demand for doctoral and master's level prepared graduates throughout the country.

## Overview of the University of Kentucky Athletic Training Program

The graduate program was developed through the vision of Mr. Keith Webster and Mr. James Madaleno as a means to provide more comprehensive athletic training service to the UK Athletic Department. To facilitate program formulation and state registration, it was housed in the department of Kinesiology. The two junior faculty positions (Mattacola and Uhl) were established in the division of Health Sciences in 1999. Currently there is a cooperative arrangement between the College of Education and the College of Health Sciences that allows for student and faculty collaboration on classroom instruction and research projects. It is anticipated that this relationship will remain cooperative and be enhanced if the program was housed in Health Sciences. The program has continued to be refined to promote alignment with NATA accreditation Standards. The competency area of athletic training administration appears to be an area that could be strengthened for the accreditation process should an additional course becomes available. Students currently receive their degree in Kinesiology while the two faculty are housed in Health Sciences. There is availability of PhD programs within both academic units.

The applicant pool for the program has been diverse and growing in number annually. With the attainment of NATA accreditation of the program, the number and quality of applicants should continue to increase. Accreditation and the potential implementation of a PhD track in Rehabilitation Sciences would further the national prominence of the program and aid in student recruitment.

The current faculty has done an admirable job in setting the foundation for an outstanding graduate athletic training education and research program. The scholarly productivity of the faculty has been admirable in a short period of time. The reviewers have a significant concern over their current teaching, advising, and research loads relative to potential individual and productivity burnout. The successful pursuit of accreditation and improved quality of life of the faculty would be enhanced with additional faculty resources for the program.

The faculty should consider a plan to focus on a theme of research conducted in the musculoskeletal laboratory. This theme would allow the institution to be known as a leader in a specific realm of athletic training research or best clinical practice. Prospective students would be made aware of the research theme and this theme would serve to advance the research agendas of the faculty.

## National Trends & Program Fit

The University of Kentucky graduate athletic training education program is positioned to be a national leader in the profession. The College of Health Sciences is a natural and preferred match for the health related profession of athletic training, as the faculty appointments demonstrate. The matriculation of students within the PhD and MS programs will allow future generations of educators to be prepared as clinicians, faculty, and eventual athletic training education program directors. The program has the potential

to produce leaders who can significantly impact both educational and clinical aspects of athletic training.

### Curriculum & Instruction

The Master of Science Degree in Athletic Training is designed as a 43-semester hour post-certification advanced master's level program. The coursework and clinical experiences are designed to develop skills in sports injury prevention, treatment, and rehabilitation. The curriculum emphasizes clinical orthopaedics and musculoskeletal biomechanics. A four-semester sequence of courses in Scientific Inquiry in Athletic Training is designed to develop the master's degree students as critical consumers of research and accepted clinical practices, and to lead them through the process of conducting a research project. This model has led to presentations at the Free Communications session of the National Athletic Trainers' Association's annual meeting and publications in refereed journals. The students are also required to take KHP 644 Research Techniques Applied to Kinesiology, and it was the opinion of several students that the material presented in this course was somewhat redundant to what was taught in Scientific Inquiry in Athletic Training.

The strength of the curriculum is consistent with the faculty's expertise in orthopaedic and musculoskeletal assessment and rehabilitation. While additional subject matter could be included in the curriculum, it is acceptable and perhaps desirable for advanced master's degree programs to specialize in certain areas of athletic training. It is the opinion of the reviewers that the curriculum and clinical experiences are close to meeting the requirements of an NATA accredited graduate athletic training program.

Doctoral students are assuming a greater role in the mentoring of master's degree research projects, and this was viewed as a positive development by the students interviewed during the visit. The current faculty is adequate to provide classroom instruction for the master's degree program, although they appear to be overloaded with doctoral and master's degree student advising. Additional faculty resources are needed to expand the curriculum should greater emphasis be placed on a doctoral program tailored for certified athletic trainers.

### Research & Scholarly Activities

The athletic training faculty has been reasonably productive in conducting, presenting, and publishing their research, especially in light of their heavy teaching and advising loads. They have had early success in obtaining primarily internal sources of funding to support their research. The reviewers recommend that the faculty conceptualize and document a clear research agenda for which the graduate program at UK will become known, and one that will attract graduate students interested in contributing to the advancement of that research program. The faculty is also exploring the potential of a "pay for service" component of the Musculoskeletal Laboratory. This concept would seem to have potential so long as it is tied to the training of graduate students and designed to advance the research agenda of the laboratory. The space allocated for the

Musculoskeletal Laboratory is a strength of the program, although additional instrumentation is needed to support the research program of the athletic training faculty.

### General

The physical facilities provided by the College of Health Science are state of the art and a definite strength of the graduate athletic training program. The availability of research facilities in the Department of Kinesiology and Health Promotion in the College of Education also represent a strength of the program. The financial packages provided to the master's degree students are very competitive on a national level, although it is recommended they be equal across all of the graduate athletic training settings used by the program. The financial package provided to the athletic training doctoral students are less competitive and inadequate to compete for the best students on a national level.

The master's degree program in athletic training represents the cooperative actions of the UK College of Health Sciences, College of Education, Department of Athletics, and Sports Medicine Center in the UK Chandler Medical Center. The faculty is housed in the College of Health Sciences, and the program and students in the College of Education. This was viewed as an unusual administrative structure by the reviewers, and would likely be a deterrent to successfully obtaining accreditation by the National Athletic Trainers' Association. In most other respects, the graduate program seems poised to seek accreditation by the NATA.

### Recommendations

**Program Location.** At this time the athletic training faculty are housed in the College of Health Sciences, and the graduate athletic training program and students in the College of Education. The National Athletic Trainers' Association has recommended that athletic training education programs be housed in schools and colleges of allied health, which is consistent with the American Medical Association's recognition of athletic training as an allied health profession. It is recommended that the graduate athletic training education program, and its faculty and students be administratively housed in the College of Health Sciences at the University of Kentucky. Continued collaboration with the Department of Kinesiology and Health Promotion in the College of Education would be highly desirable.

**Program Resources.** The two faculty athletic trainers are presently stretched very thin, and in the opinion of the reviewers are prime candidates for professional burnout. The graduate athletic training program has excellent potential to become a nationally prominent program and to make a meaningful contribution to the goals of the UK strategic plan. However, to accomplish this additional faculty resources are needed. It is recommended that a senior faculty member be added to the Division of Athletic Training, and that consideration be given to recruiting a faculty member credentialed as a certified athletic trainer for the next faculty position in the Rehabilitation Sciences Doctoral Program.

**Accreditation.** Accreditation as a post-certification graduate athletic training education program by the National Athletic Trainers' Association would bring added exposure and prominence to the UK program on both local and national levels. It is recommended that the graduate program be housed in the College of Health Sciences and that the University of Kentucky seek accreditation by the NATA.

**Doctoral Level Education.** The increased emphasis on athletic training scholarship within the NATA and the proliferation of entry-level accredited athletic training education programs has created a significant market for terminal degree certified athletic training faculty. The University of Kentucky has begun to attract doctoral students, and is in a position to create a clearly defined doctoral program for athletic trainers. The most prominent athletic training education and research programs in the country reside at institutions with both doctoral and master's degree level programs for athletic trainers. The Rehabilitation Sciences PhD Program would be an ideal setting for a doctoral specialization for certified athletic trainers. It is recommended that additional athletic training faculty resources be added to the Division of Athletic Training and the Rehabilitation Sciences Doctoral Program, and that Athletic Training be added to the professions of Communication Disorders, Occupational Therapy, and Physical Therapy within this doctoral program.

## **Appendix B**

**External Review of the Division of Athletic Training  
Joint Collaboration between the Colleges of Education and Health Sciences  
April 2004**



Consultation Report to the University of  
Kentucky's Athletic Training Educational  
Program

Consultative Visit

April 5-7, 2004

Kenneth L. Knight: PhD, ATC, FACSM  
Brigham Young University

Gerald W. Bell: EdD, ATC/L, PT  
University of Illinois at Urbana-Champaign

## Table of Contents

I.	Individuals Interviewed, Facilities, Sites Visited	Page 2
II.	Charge	Page 3
III.	Background	Page 3
IV.	Program Evolution	Page 4
V.	Observations	Page 4
III.	Recommandations	Page 5
IV.	Signature	Page 6

### **Individuals Interviewed**

#### **College of Health Sciences**

- Lori Gonzalez, Ph.D., Associate Dean for Academic Affairs, College of Health Sciences
- Carl Mattacola, Ph.D., Associate Professor & Director, Division of Athletic Training (2 times)
- Timothy Uhl, Ph.D., Assistant Professor, Division of Athletic Training
- Judy Page, Ph.D., Chair-Department of Rehabilitation Sciences
- Terry Malone, PhD, Professor, Physical Therapy (informally)

#### **Department of Athletics**

- Jim Madaleno, MS, AT, Head Athletic Trainer-Football, Adjunct Faculty Member
- Keith Webster, MA, AT, Head Athletic Trainer-Administration, Adjunct Faculty Member

#### **College of Education**

- James Cibulka, Ph.D., Dean-College of Education
- Robert Shapiro, Ph.D., Associate Dean of Research, College of Education (3 times)
- John Hall, Ed.D., Chair-Department of Kinesiology and Health Promotion (2 times)
- Jody Clasey, Ph.D., Faculty, Department Kinesiology and Health Promotion
- J.W. Yates, Ph.D., Graduate Director, Department Kinesiology and Health Promotion
- Brian Umberger, Ph.D., Faculty, Department of Kinesiology and Health Promotion

#### **Graduate School**

- Jeannine Blackwell, Ph.D., Dean-The Graduate School

## **Facilities and Sites Visited**

### **College of Health Sciences**

- Division of Athletic Training Office Suite
- Conference Room
- Musculoskeletal - Athletic Training Research Lab

### **College of Education**

- Taylor Hall
- Dickey Hall
- Wenner Gren Biomedical Research Lab
- Seaton Center
  - Conference Room
  - Biodynamics Laboratory
  - Body Composition Core Laboratory
  - Exercise Physiology Research Lab

## **Charge**

The University of Kentucky's Division of Athletic Training of the College of Health Sciences and Department of Kinesiology and Health Promotion of the College of Education sought external review concerning their master's degree program in Athletic Training. They are anticipating seeking national accreditation of the program. This is the second review of the status of the proposed graduate program in athletic training for the purpose of seeking accreditation by the NATA based on 2002 Standards and Guidelines for Post-Certification Programs in Athletic Training.

The March 17, 2004 letter's charge from Dean's Cibulka and Robinson to the site review members was:

“to collect information about the structure, characteristics, and resources of the University of Kentucky that can contribute to insuring that Athletic Training education at UK is located in the best place and position to contribute to the University's mission, goals and vision to be a top twenty university by 2020. Where should this program be located in the UK structure? What resources does the program need to achieve excellence and what does the program need to possess?”

## **Background**

The current program exists as part of the degree offering within the Department of Kinesiology and Health Promotion as a Masters in Kinesiology within the Exercise Science Concentration. The primary faculty for the program, Dr's Carl Mattacola and Tim Uhl are housed in the Division of Athletic Training of the College of Health Sciences.

The University of Kentucky is the flagship institution of higher education for the Commonwealth of Kentucky. The athletic training education program indicates that UK is one of the nation's largest research universities, and that it's 11 colleges, five

Professional schools and the Graduate School support more than 30,900 students on the Lexington Campus, the UK Chandler Medical Center and Lexington Community College. UK is a designated a research I University by the Carnegie Foundation.

The master's degree program in Athletic Training (AT) is designed to accommodate both NATA certified athletic trainers and NATA "certification eligible" athletic trainers. The AT program represents cooperative efforts of the:

- Department of Kinesiology and Health Promotion in the College of Education,
- Department of Rehabilitation Sciences in the College of Health Sciences
- Department of Athletics, and
- Department of Orthopedics, Division of Sports Medicine

Course work and clinical experiences are designed to develop skills necessary to conduct research and increase proficiency in sports injury prevention, treatment and rehabilitation. A goal is to produce critical consumers of research and acceptable clinical practices, advanced health care providers, and leaders in the clinical, educational and research endeavors of the athletic training profession.

Clinical experiences are an integral part of the program. Clinical sites include UK athletics, UK sports medicine, local colleges and high schools and UK research labs. At present all programs of study lead to the capstone thesis research. Tuition assistant and stipends are available. The Department of Athletics currently funds 10 positions.

### **Program Evolution**

The idea for a graduate program in Athletic Training was initiated by the Athletics Association in 1998 in response to:

- A charge to newly hired Athletic Trainers Jim Madaleno (Head Athletic Trainer-Football) and Keith Webster (Head Athletic Trainer – Administration) to revamp athletic health care so as to use the services of the UK medical school rather than services outside the university for medical services beyond those provided by the Department of Athletics Athletic Training Staff, and
- A 1996 change in requirements to sit for the athletic training certification exam. The Athletic Training Board of Certification announced that as of January 2004 it would only accept candidates who had completed an accredited athletic training curriculum. Prior to that time, students could sit for the certification exam through an internship with certified athletic trainers and completing 13 core courses. Many of the core courses were taught in the Department of Kinesiology and Health Promotion by Department of Athletics personnel. The implication of this initiative was that the Department of Athletics would lose the majority of their student workforce.

Mr.'s Madaleno and Webster, both seasoned educators (Mr. Madaleno had directed an accredited undergraduate program for 7 years prior to accepting the UK position) determined that their workforce needs could best be met by funding positions for graduate students, certified as athletic trainers through undergraduate training in accredited AT programs. Based on national trends, their previous educational experiences, and their charge to work more cooperatively with the Medical Center, they proposed that UK develop a graduate program for athletic training, and that it be located in the College of Allied Health Professions, now the College of Health Sciences. The Medical Center funded two faculty lines to begin the program. Because of a university wide moratorium on new degree programs, the program was initially piggy-backed on the MS in the Department of Kinesiology and Health Promotion.

## **Observations**

1. There is strong respect between faculty of KHP and Athletic Training.
2. There is a desire by faculty of KHP and Athletic training to collaborate.
3. Providing students with the strongest possible program was mentioned often by people interviewed.
4. The mission of the Graduate Athletic Training program is much more closely aligned with the mission of the College of Health Sciences than the mission of the College of Education. The argument that many athletic training graduates are employed by educational institutions would be similar to arguing that a nursing student who desired to be a school health nurse should study nursing in the College of Education.
5. Funding for the program has come almost exclusively from the Athletics Association and the College of Health Sciences, although faculty of KHP have mentored Athletic Training students in thesis and have made their laboratories available for thesis research.
6. The most often repeated argument by the KHP faculty and leaders was that if the program moves to the College of Health Sciences, KHP's number of graduates would fall below a standard established by the state and therefore require KHP to periodically justify the quality of their graduate program.
7. There were conflicting arguments that:
  - If the program left KHP there may be less of an opportunity for athletic training students to conduct research in KHP laboratories, and that
  - Faculty of KHP have ongoing collaboration with faculty and students of Physical Therapy, which is also housed in the College of Health Sciences. (This last point was given in the context of demonstrating that KHP faculty understand the needs of allied health students and scholars)
  - It seems if they collaborate with one group in Health Sciences, why would they not collaborate with another.

8. Faculty of KHP expressed concern that if athletic training left KHP its research productivity would drop off as occurred when the Physical Therapy Masters degree program left KHP. We feel this is unfounded for two reasons:

- The decline of research amongst Physical Therapy Masters Students occurred as a result of a nation-wide shift of physical therapy education from entry level bachelors degrees to entry-level Masters Degrees. The entry-level master's degree was clinically based rather than research based. Students with a clinical master's degree had no interest in obtaining a post-certification masters degree. Thus the decrease in research occurred because students quit enrolling in research based masters degree programs.
- Drs. Mattacola and Uhl are dedicated allied health scientists who feel the growth of their profession and improvement of health care depend on research. They are both well trained scientists with ongoing research agenda's.

9. Athletic Training students would continue to take courses in KHP. The proposed move of the program to the Department of Rehabilitation Sciences will not change the degree requirements of the program.

10. The proposed move will have no effect on athletic training doctoral students. They will continue to receive degrees from KHP or the Department of Rehabilitation Sciences as is the current policy.

## **RECOMMENDATIONS**

1. The graduate AT program and the faculty of that program should be combined into a single department. We agree with Dean Cibulka that the present structure is "bizarre".
2. The program be housed in the Department of Rehabilitative Sciences in the College of Health Sciences, as recommended by the 2003 program review team, Provision 12 of the 1996 NATA Education Task Force (see NATA News, Feb 1997), and the 2002 NATA Standards & Guidelines for Accreditation of Post-Certification Graduate Athletic Training Educations Programs.
3. The master's degree be designated as an MS degree in athletic training, as recommended in the 2002 NATA Standards & Guidelines.  
- We note that the previous two recommendations are not requirements for program accreditation by the NATA; they are the trends of the future and are what students are beginning to look for. These will help the program to attract the best students.
4. The College of Health Sciences follow through with their proposal to add an additional faculty line to the Athletic Training Division

5. Continue to develop the graduate athletic training education program to meet the expectations of the University of Kentucky, the community, the state of Kentucky and the Graduate Review Committee of the National Athletic Trainers' Association.
6. Fully implement the recommendations on page 6 and 7 of the Review of the Division of Athletic Training completed on April 17 and 18<sup>th</sup>, 2003 including program location, program resources, accreditation and doctoral level education.

## **Signature**

**Kenneth L. Knight PhD, AT, ACSM   Gerald W. Bell: EdD, AT/L, PT, CIE,  
ACI**

**DATE:** \_\_\_\_\_

**Appendix C**  
**Letters of Support**



October 10, 2005

MEMORANDUM

TO: Scott Smith, Interim Provost

FR: Lori Gonzalez, Dean  
College of Health Sciences

RE: Athletic Training Proposal

The Division of Athletic Training in the College of Health Sciences came into the College at a time when the Council on Postsecondary Education had a moratorium on new degree programs. The logical academic home was the College of Health Sciences but because of the moratorium, the degree program became part of the Department of Kinesiology and Health Promotion in the College of Education.

The AT program has performed well with this split assignment, but the time has come for it to move fully into the College of Health Sciences. Two separate review teams have recommended that a new degree be formed and the program be placed in Health Sciences. Faculty and administrators in the College of Education support this transition.

I strongly support the proposal and the program. As part of the negotiations for the position of dean, I secured an additional faculty line for this growing program. The development of this new degree program is an important move forward for autonomy of AT and will follow national models which place AT programs in colleges of allied health. Please contact me directly if you have any questions. I would be happy to discuss this program with you.



UNIVERSITY OF KENTUCKY

October 11, 2005

Lori S. Gonzalez, Ph.D., Dean  
College of Health Sciences  
University of Kentucky  
Lexington, KY 40536-0200

**Department of  
Rehabilitation Sciences**

*College of Health Sciences  
CTW Building, Room 120  
900 South Limestone  
Lexington, KY 40536-0200  
(859) 323-1100 Ext. 80477  
Fax: (859) 323-8957  
www.uky.edu*

Dear Dr. Gonzalez:

I am writing in support of the proposal for creation of a Master of Science in Athletic Training degree at the University of Kentucky. This proposal can trace its roots to 1999 when the University of Kentucky hired two faculty members and a staff position into the College of Allied Health Professions (now Health Sciences) with the intention of developing a free standing master's degree in Athletic Training. Because of an existing moratorium on new programs, the decision was made at that time to offer a concentration in Athletic Training through the master's degree program in the Department of Kinesiology and Health (KHP) promotions in the College of Education. This has resulted in a rather awkward arrangement where the students and the degree belong to one college, but the faculty and other resources allocated to the program belong to another college. Despite this awkward arrangement, there has been no shortage of students seeking advanced athletic training preparation in the program due to high quality faculty, excellent facilities, and a programmatic emphasis on research. However, national trends in athletic training education and accreditation guidelines recommend that Athletic Training programs be housed in health sciences settings. Consequently, since 1999, two independent external review teams have recommended that our program come in line with these trends by moving all the components of the program (faculty, resources, students, and degree) to the Department of Rehabilitation Sciences in College of Health Sciences.

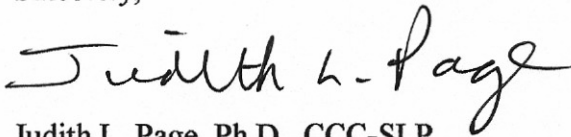
The current proposal seeks to create a free standing master's degree in athletic training. The proposal would create a new degree, but it would not require new courses. The required courses for the program already exist and are currently being taught to athletic training students completing the master's concentration in KHP. A listing of those courses; syllabi for the AT courses; and support letters from KHP faculty, the dean of the College of Education, and other collaborators can be found in the proposal.

The Division of Athletic Training is a productive, highly valued component of the Department of Rehabilitation Sciences and the College of Health Sciences. This is evident in the support the Division has received in space and equipment for the Musculoskeletal Laboratory. In further recognition of this value and in response to additional recommendations by the review teams, the College recently allocated a new faculty line to the Division of Athletic Training, effective for the 2005-06 academic year. A search committee is currently at work seeking candidates to fill

that position. The individual hired into this line will further strengthen the Division's ability to meet its instructional, research and service objectives.

In summary, this proposal has my full support. Because the program is already being offered by the AT faculty in an alternate degree format, there should be a relatively seamless transition to the proposed new degree. If approved, this proposal will put the University of Kentucky in a leadership role by allowing students to pursue advanced training in athletic training in a manner that is consistent with national trends and standards.

Sincerely,

A handwritten signature in cursive script that reads "Judith L. Page". The signature is written in black ink and is positioned above the typed name.

Judith L. Page, Ph.D., CCC-SLP  
Associate Professor and Chair  
Department of Rehabilitation Sciences



UNIVERSITY OF KENTUCKY

**College of Education**  
*Office of the Dean*  
103 Dickey Hall  
Lexington, KY 40506-0017  
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Fax: (859) 323-1046  
[www.uky.edu/Education](http://www.uky.edu/Education)

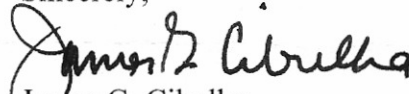
July 19, 2005

Carl G. Mattacola, PhD, ATC  
Acting Associate Dean of Research  
Associate Professor - Director  
Division of Athletic Training  
University of Kentucky  
College of Health Sciences  
UK Wethington Building, Room 210E  
900 South Limestone  
Lexington, KY 40536-0200

Dear Dr. Mattacola:

I am writing to express support for the proposal of a Master of Science degree in Athletic Training at the University of Kentucky. As Professor Melody Noland, Chair of the Department of Kinesiology and Health Promotion, has indicated in her letter of support to you, we believe your proposed new master's program in athletic training would complement the degrees offered in the Department of Kinesiology and Health Promotion. There is a long history of cooperation between our faculty members and students and those in the College of Health Sciences that I hope will continue.

Sincerely,

  
James G. Cibulka  
Dean

cc. Lori Gonzales, Dean, College of Health Sciences  
Melody Noland, Chair, Department of Kinesiology and Health Promotion



UNIVERSITY OF KENTUCKY

**Department of Kinesiology  
and Health Promotion**

*College of Education  
Seaton Building  
Lexington, KY 40506-0219  
(859) 257-5826  
Fax: (859) 323-1090  
www.uky.edu*

July 12, 2005

Carl G. Mattacola, PhD, ATC  
Acting Associate Dean of Research  
Associate Professor - Director  
Division of Athletic Training  
University of Kentucky  
College of Health Sciences  
UK Wethington Building, Room 210E  
900 South Limestone  
Lexington, KY 40536-0200

Dear Dr. Mattacola:

As Chair of the Department of Kinesiology and Health Promotion, I am writing to express support for the proposal of a Master of Science degree in Athletic Training at the University of Kentucky. Our Department has had interaction with the Athletic Training faculty for a number of years and I can attest to the quality of these faculty and the students they recruit. The educational curriculum for the proposed program is rigorous and emphasizes a combination of strong clinical coursework and independent research. They have excellent facilities to support their program. The development of a master's degree in athletic training will increase the opportunity to recruit even higher quality students and will also provide an opportunity for students in accredited undergraduate programs in the Commonwealth of Kentucky to pursue a master's degree in their chosen profession.

We view the master's degree in athletic training as a complimentary program to degrees offered in our Department. In addition, it will increase opportunities for allied health professionals in the Commonwealth and beyond. Again, I offer my support as the Chair of the Department of Kinesiology and Health Promotion, for the University of Kentucky's proposal of the master of science degree in athletic training.

Sincerely,

A handwritten signature in black ink that reads "Melody Noland". The signature is written in a cursive, flowing style.

Melody Noland, Ph.D.  
George and Betty Blanda Endowed Professor in Education  
Chairperson, Department of Kinesiology and Health Promotion  
Professor of Health Promotion



## **EASTERN KENTUCKY UNIVERSITY**

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Athletic Training Education  
Program

Building Address Here  
521 Lancaster Avenue  
Richmond, Kentucky 40475-3102  
(859) 622-2134  
gretchen.oliver@eku.edu • www.eku.edu

Friday, January 14, 2005

To Whom It May Concern:

I am writing this letter to provide the support of Eastern Kentucky University Athletic Training Education Program for the proposal of a master's of science degree in athletic training at the University of Kentucky.

The development of a master's degree in athletic training will increase the opportunity to entice and enroll a high caliber of student and provide a much needed avenue for students in accredited undergraduate programs in the state of Kentucky to pursue a master's degree in their chosen profession. Likewise, the educational curriculum is rigorous and emphasizes a combination of strong clinical coursework, independent research, and adequate facilities. We fully support and approve the pursuit of a master's degree in athletic training at the University of Kentucky and view it as a complimentary program for improving access for our student athletic trainers to graduate education. Likewise, it will increase opportunities for allied health professionals in the state of Kentucky and beyond.

Again I offer my support as the Director of the Athletic Training Education Program here at Eastern Kentucky University, for the University of Kentucky's proposal of their master's of science degree in athletic training.

Sincerely,

A handwritten signature in black ink, appearing to read "Gretchen D. Oliver".

Dr. Gretchen D. Oliver, ATC  
Director, Athletic Training Education





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College of Health Sciences  
Department of Exercise & Sport Science

521 Lancaster Avenue-231 Moberly  
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[Lonnie.Davis@eku.edu](mailto:Lonnie.Davis@eku.edu)

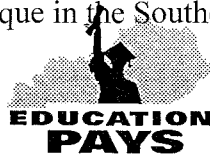
January 20, 2005

To Whom It May Concern:

The purpose of this letter is to strongly support the University of Kentucky's masters' of science degree in athlete training. It has been my opportunity to observe the development of this program since its' initial conception. Everything is now in place to have one of the elite masters' level program in the nation.

The master of science program at the University of Kentucky is an excellent neighbor for our undergraduate program at Eastern Kentucky University. Being approximately thirty miles apart, the two programs have long supported each other in a wide variety of areas. The Commonwealth of Kentucky has needed an outstanding graduate program in athletic training. This will increase our potential of recruiting and keeping high caliber students in our service area. The curriculum is challenging and certainly meets the criteria of being a truly advanced educational opportunity. There is evidence of an ideal combination of strong clinical coursework supported by advanced curriculum coursework. An emphasis on independent research fills an obvious need for both our profession and area of the country. The facilities available for the program are more than adequate, and continue to be both expanded and improved on a regular basis.

Personally, I know the quality of every new program is more dependent upon the quality of instructional personnel than any other one entity. This is the area where the University of Kentucky truly excels. It has been my pleasure to know each of the individuals involved in teaching athletic training at the University of Kentucky for several years. They are absolutely equal to, or superior to any graduate faculty in the southeast, and quite possibly, the country. I have had the opportunity to observe their work at the state, regional, and national levels for many years. Their head athletic trainer is also a respected friend and colleague of mine. Having shared many graduate assistants and staff members with him, I know for certain that he is extremely interested in education, and the expansion of educational opportunities in sports medicine. The cooperative spirit between the departments is truly unique in the Southeastern Conference. We have

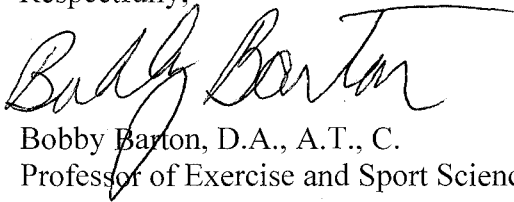


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always enjoyed a positive relationship with the UK faculty and staff. This program can only enhance our future relationships, as well as with other regional universities.

In summary, we strongly support and approve the pursuit of a masters' degree program in athletic training at the University of Kentucky. I have been aware of the need for a graduate program in this state for approximately 37 years. As a UK alumnus, and original program director at ECU, I certainly see the value of this program for everyone interested in sports medicine in Kentucky. I certainly view this proposal as a complimentary program for our undergraduate program. It will certainly improve our student's access to graduate education opportunities, and will be an asset for allied health professional throughout the southeast. I highly suggest your serious consideration of this outstanding program.

Respectfully,

A handwritten signature in cursive script that reads "Bobby Barton". The signature is written in black ink and is positioned above the printed name and title.

Bobby Barton, D.A., A.T., C.  
Professor of Exercise and Sport Science



July 12, 2005

Carl Mattacola, Ph.D.  
Director – Division of Athletic Training  
College of Health Sciences  
University of Kentucky  
Lexington, KY 40506

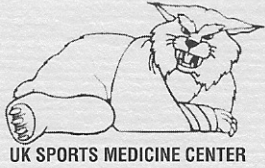
Dear Dr. Mattacola:

This letter comes to you in expression of our support for the College of Health Sciences venture to seek a master's of science in athletic training for the Graduate Athletic Training Program. The Department of Athletics, of which our athletic training staff is under, has enjoyed a healthy relationship with the academic graduate program for the past 6 years. During that time, the graduate assistants employed and assigned by your program, have done an outstanding job. Each student was prepared to handle the day-to-day care our student athletes require while performing in their respective sport. Their knowledge base, accountability, and work ethic portray a future professional that we can all be proud of. Their holding of national certification ensures our athletic department's goal of offering a quality standard of care for the student athlete.

It is with pleasure that we support the efforts of your College in attaining an even higher level of respect and credential. Best of luck in your efforts and allow us to help should you be in need.

Sincerely,

James A. Madaleno, ATC  
Director of Sports Medicine



Offices: (859) 323-5533  
Patient Appts:  
For Kentucky Clinic and Kentucky Clinic South  
(859) 257-4577  
Fax: (859) 257-8696 or (859) 323-5759  
[www.mc.uky.edu/surgery/sportsmedicine](http://www.mc.uky.edu/surgery/sportsmedicine)

UK Sports Medicine Center  
740 South Limestone Street  
Kentucky Clinic, K401  
Lexington, KY 40536-0284

**July 18, 2005**

**Darren L. Johnson, M.D.**  
Professor & Interim Chair  
Medical Director - Sports Medicine  
Team Physician: University of Kentucky

**Scott D. Mair, M.D.**  
Associate Professor  
Team Physician: University of Kentucky  
Kentucky State University

**Timothy C. Wilson, M.D.**  
Assistant Professor  
Team Physician: University of Kentucky  
Georgetown College  
Lexington Horsemen

**Robert G. Hosey, M.D.**  
Associate Professor, Family Practice  
Primary Care Sports Medicine  
Team Physician: University of Kentucky  
Kentucky State University  
Lexington Horsemen

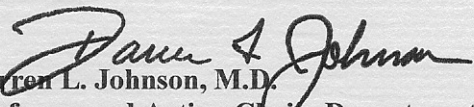
**Richard E. Rodenberg, M.D.**  
Assistant Professor, Family Practice  
Primary Care Sports Medicine  
Team Physician: University of Kentucky  
Georgetown College  
Lexington Horsemen

**To Whom It May Concern:**

**I am writing this letter to provide support as Chair of the Department of Orthopaedic Surgery and Sports Medicine, University of Kentucky Medical Center for the proposal of a master's of science degree in athletic training at the University of Kentucky in the College of Health Sciences. The Commonwealth of Kentucky recognizes the need for education of health professionals and supports a broad range of health disciplines. The proposal from the University of Kentucky for a master's degree in athletic training compliments the mission of the Department of Sports Medicine and provides a resource to our students and advances the educational opportunities of the Commonwealth of Kentucky.**

**The development of a master's degree in athletic training at the University of Kentucky will increase the opportunity to entice and enroll a high caliber of student and provide a much needed avenue for students in accredited undergraduate programs in the state of Kentucky to pursue a master's degree in their chosen profession. The educational curriculum is rigorous and emphasizes a combination of strong clinical coursework, independent research, and adequate facilities. We fully support and approve the pursuit of a master's degree in athletic training at the University of Kentucky and view it as an avenue of collaboration and shared expertise. Likewise, housing it in a College of Health Sciences within an academic medical center is the most logical fit for an allied health profession and its position and stature will increase opportunities for allied health professionals in the state of Kentucky and beyond. I offer my support for the University of Kentucky's proposal of their master's of science degree in athletic training.**

Sincerely,

  
**Darren L. Johnson, M.D.**  
Professor and Acting Chair: Department of Orthopaedic Surgery  
Medical Director of Sports Medicine  
University of Kentucky School of Medicine

**Appendix D**  
**Laboratory Facilities**

### **Musculoskeletal Laboratory (MSL)**

The Musculoskeletal Laboratory is a new 1200 sq-ft research facility located in room 222 of the Charles T. Wethington Health Sciences Building, on the corner of Rose Street and Limestone Avenue, adjacent to the Kentucky Clinic and the Chandler Medical Center. This 5 story building houses the College of Health Sciences, the office of the senior vice president of the University of Kentucky Medical Center, Centers for Nutritional Sciences and Aging. Tim L. Uhl PhD ATC PT serves as the Director of the Musculoskeletal Laboratory. This facility provides state of the art equipment to evaluate muscle performance, balance, and orthopaedic assessments. This laboratory is also used to study rehabilitation approaches and techniques to evaluate their effectiveness. It is a shared use facility and draws on the expertise of the faculty in the Division's of Athletic Training and Physical Therapy, along with the faculty and students of the Rehabilitation Sciences Doctoral Program and Kinesiology Exercise Sciences Doctoral Program.

Through the resourcefulness of the faculty in the Divisions of Athletic Training and Physical Therapy the Musculoskeletal Laboratory now houses approximately \$250,000.00 worth of research equipment to support the Division of Athletic Training, the Department of Rehabilitation and as a shared use facility with faculty and students in the College of Education. Acquisition of the equipment was the result of start-up funding, grants, external contracts and negotiations with companies for use of the equipment in exchange for our expertise and capability for producing research.

This laboratory provides a spacious workplace for scholarly research and hands-on instructional education. The lab houses numerous pieces of equipment, such as a Bertec Force plate, a Novel Pressure Plate, a NeuroCom Smart Balance Master system equipped with a long force platform and a dual movable force plates with surround, a portable 16 channel Myopac EMG system with Datapac software, Baltimore Therapeutic Equipment's Primus Isotonic and a Cybex Norm Isokinetic dynamometer. The laboratory houses a state of the art three-dimensional electromagnetic motion analysis system. This motion analysis system allows researchers to instrument and track up to 6 individual segments via Ascension Technologies Flock of Birds sensors. The Motion Monitor software by Innovative Sports drives the system and allows for integration between EMG and Kinematic systems.

The MSL was created as an additional resource for students to pursue sports medicine and biomechanical related research. The primary research focus includes the following areas: 1) Assessment of the sensorimotor system as it relates to musculoskeletal injuries, 2) Evaluating the validity of orthopedic clinical methods, 3) Evaluating the outcomes of rehabilitation programs specifically related to clinical and biomechanical methodologies.

**Nutter Athletic Training Facility:**

Additional teaching and laboratory space is available in the Nutter Athletic Training Laboratory (300 sq ft) located adjacent to the Nutter Athletic Training Facility and the Shively Training Facility. Space is available for laboratory and research activities including but not limited to musculoskeletal evaluation, rehabilitation, balance testing and isokinetic assessment. A new Biodex isokinetic dynamometer was recently acquired. Specialized acquisition software was purchased through the Department of Athletics to aid in data collection procedures for current and future research endeavors. Three computerized Hand-held dynamometers are available for isometric strength testing.

**BioDynamics Laboratory**

The BioDynamics Lab laboratory (1850 sq ft) is located in the Wenner Gren Biomedical Engineering building on the campus of the University of Kentucky. The laboratory contains two Kistler piezoelectric force plates imbedded in a 10 m runway. Numerous camera mounts are located in the facility. The lab has a new 128 sq ft subject changing area and private data collection room. Subject parking is available at the facility.

One Pentium III Dual Processor, 3 Pentium II computers, each with an excess of 30 MB RAM and 2 GB memory, and a zip drive for data storage are located in the lab, as well as 2 Sun Workstations. The lab also houses 2 486 microcomputers and 3 laser printers. The computers are networked together to allow for ease of data transfer.

Two full time clerical individuals are employed in the Wenner Gren Research lab. The Wenner-Gren lab contains the usual office supplies, including a photocopier and facsimile machine. A machine shop, staffed by two full-time machinists, and an electronics workshop, staffed by a full-time technician, are maintained by the Center for Biomedical Engineering, in which the BioDynamics Lab is housed. Their services are available at a reduced cost.

The BioDynamics Laboratory is equipped with state of the art biomechanics equipment. Electromyographic data will be collected using an 8 channel Therapeutics Unlimited Electromyography system interfaced with a 64 channel National Instruments DAQ board. Balance data will be collected with a Neurocom balance measurement device. In addition, the laboratory contains a complete gait analysis system, including a 6-camera Motion Analysis Inc. system interfaced with 2 Kistler strain-gauge force plates in a 10 meter runway. Data will be processed using the Motion Analysis Inc. Orthotrak software as well as using Matlab programs. Isokinetic strength data can be collected using a Biodex dynamometer interfaced with a 486 microcomputer. The BioDynamics Laboratory also contains a Chattecx balance measurement system.

## **Appendix E– Course Syllabi**

The University of Kentucky  
Division of Athletic Training

**AT 695**  
**Evaluation & Rehabilitation of Athletic**  
**Injuries**  
**Lower Extremity**



*Know the anatomy, understand the mechanics, and don't let your intervention contribute to the problem"*

Tim Uhl PhD ATC PT  
Division of Athletic Training  
University of Kentucky

# Syllabus for Evaluation & Rehabilitation of Athletic Injuries: Lower Extremity

## COURSE DESCRIPTION

This is an advanced athletic training course encompassing a regional study of orthopedic evaluation, assessment, management, and rehabilitation of the spine and lower extremity peripheral joints. A combination of discussion, lecture, and critical review of literature, laboratory, and student presentations will be employed.

Laboratory experiences will focus on performance of evaluations of regional areas and specific manual techniques of rehabilitation. The course goals and objectives are to improve the student's assessment skills and problem solving abilities, and to deepen the student's knowledge of rehabilitation techniques for common athletic injuries by incorporating therapeutic exercise and specific therapeutic exercise equipment, manual therapy techniques, and modalities.

## COURSE GOALS & OBJECTIVES

### **Explain:**

1. The role of the athletic trainer in performing a biomechanical assessment of lower extremity musculoskeletal disorders.
2. The concepts of valid clinical test in assessing musculoskeletal disorder and planning appropriate intervention.
3. The thought process necessary to determine the correct clinical assessment
4. Factors that predispose an athlete to potential injuries.

### **Describe:**

5. The physiology of musculoskeletal injury and healing.
6. The etiology and clinical profile of common pathologies encountered within the spine and lower extremity
7. The rationale and available evidence for use of various rehabilitation approaches for these common pathologies.

### **Demonstrate:**

8. Ability to perform systematic clarifying examinations for all lower extremity peripheral joints and the lumbar spine.
9. Proficiency in performing common special tests unique to each peripheral joint area and each spine area in an orthopedic evaluation.
10. Ability to properly document an Athletic Training evaluation and plan of treatment in SOAP note format.
11. Proficiency in creating, writing, and defending an intervention plan for common musculoskeletal injuries associated with sport participation.
12. Ability to critically review sports and orthopedic literature.
13. Ability to apply the relevant literature in developing a rehabilitation program that is evidence based.
14. Ability to create an oral and written case presentation to colleagues, including facilitation of a discussion among colleagues.

### **Instructional Strategies**

The class will meet for 5 hours per week throughout each semester. The class will meet on



Monday at 8:00 – 10:00 in the room 220 College of Health Sciences and Wednesday 8:00 –11:00 in the Shively Training facility or a predetermined assigned location such as research laboratories. This class will be taught primarily as didactic and laboratory presentations. Students will be given reading and written assignments to complete for class discussion and present for the instructor to review.

**Assigned Readings:**

Available in coursebook or via Blackboard web page.

**Required Texts:**

**Orthopedic Physical Assessment**, 2002, 4th edition, by David Magee, Published by WB Saunders.

**Muscle Testing and Function**, 1993, 4<sup>th</sup> edition, by Florence P. Kendall, Elizabeth K. McCreary, and Patricia G. Provance, Published by Williams & Wilkins.

**Physical Rehabilitation of the Injured Athlete (PRIA)**, (3<sup>rd</sup> edition), Andrews JR, Wilk KE, Harrelson G, Saunders, 2004

ADDITIONAL REFERENCES:

- **Physical Examination of the Spine and Extremities**, 1976, by Stanley Hoppenfeld, M.D., published by Appleton-Century-Crofts.
- **Evidence-Based Guide to Therapeutic Physical Agents**, Belange A-Y Lippincott William & Wilkins, 2002
- **Therapeutic Exercise Techniques for Intervention** Bandy WD, Sanders B. Philadelphia: Lippincott William & Wilkins, 2001
- **Handbook of Orthopaedic Rehabilitation** Brotzman SB, (ed). St. Louis: Mosby, 1996.
- **Athletic Injuries and Rehabilitation (AIR)**, Zachazewski JE, Magee DJ, Quillen WS, W.B. Saunders, 1996
- **Clinical Electrophysiology (CE)**, Robinson AJ, Snyder-Mackler L, Williams & Wilkins, 1995.
- **Essentials of Strength Training and Conditioning (ESTC)**, Baechele TR, Earle RW, Human Kinetics, 2000.

**Laboratory Dress** (dictated by anatomical region being studied)

Generally, laboratory attire should allow for visual inspection of the area being studied, allow freedom of movement, and be modest in design. Generally, females should wear a halter-top or sports bra when examining the upper extremity. For men shorts and a T-shirt are appropriate.

**Academic Honesty**

Each student in the class is expected to adhere to the highest standards of academic honesty. Cheating and plagiarism violate the rules of the University and the ethical standards of members in the allied health profession. Violations of the university's rules regarding academic honesty can lead to a failing grade in the course and expulsion from the University. Students may view the Student Rights & Responsibilities Document at <http://www.uky.edu/StudentAffairs/Code/part1.html>.

**Withdrawals and Incompletes**

The last day to withdraw from the course is at the end of the fifth week for fall or spring semester. No withdrawals will be signed after that date.

It is the student's responsibility to properly process withdrawals. Students who fail to process withdrawals or who process them after the time that grade report sheets are printed, will receive a grade of F on the official grade sheet. To correctly process a withdrawal the student must obtain the signature of Dr. Mattacola, obtain the signature of the student's advisor, and take the withdrawal form to the Registrar's office.

Incomplete (I) grades will be given only in extenuating circumstances and never as a replacement for a failing or substandard grade. Any student requesting an incomplete grade must see the course coordinator, Dr. Uhl, for approval and for additional rules governing incomplete grades.

**Administrative**

Students are to be aware of and meet the technical standards and behavioral standards as outlined in Technical Standards and the Behavioral Standards in Patient Care of the College of Allied Health Profession.

Feedback

Students are encouraged to come to the instructor's office to discuss progress in the class. This will be the only means for review of evaluation instruments.

Tests and/or papers will be retained by the course coordinator until approximately three weeks into the succeeding semester or summer session (Feb. 15, June 1, Aug. 1, and Sept. 15).

Office Hours: Tuesday 7:00am to 12:00pm or Saturdays 9:00am – 12:00pm by appointment via email

Course Director:	Tim Uhl PhD ATC PT	Assistant Instructor A.D. Harrison PT	Assistant Instructor Matt Seeley MS ATC
Office:	210c Wethington Health Sciences Bldg 900 S. Limestone	Sports Medicine Biodynamics Center Cincinnati Children's Hospital Medical Center	Biodynamics Laboratory Wenner-Gren
E-mail:	<a href="mailto:tluhl2@uky.edu">tluhl2@uky.edu</a>	<a href="mailto:adrick.harrison@cchmc.org">adrick.harrison@cchmc.org</a>	<a href="mailto:mkseel2@uky.edu">mkseel2@uky.edu</a>
Telephone:	(859) 323-1100 Ext. 80858	(513) 636-9622	(859) 257-4664
Cell Phone:	(859) 230-7841		

### **Attendance Policy**

The instructor expects everyone to attend every class and be on time. If absence is due to external clinical responsibilities it is the student responsibility to notify the professor of the absence or potential absence at the beginning of the semester. Additionally, the student is responsible to obtain information presented during his or her absences and submit prior to absence any assignment due. Intermittent attendance records of student attendance will be kept. Attendance and punctuality will also be considered subjectively in borderline performance which can account for up to 5% of your final grade.

### **University Closing**

Students should be aware of the following sources of information in the event of inclement weather or other problems that might cause the University to close. Remember, if the University is open, students are expected to be in attendance and all tests will be given. If the University is closed on a test day, expect the test to be given on the next class day.

The cancellation or delay of class announcements will normally be made by 6:00 a.m. through the local media. The latest information will be available on the University of Kentucky **INFOLINE at 257-5684**, University of Kentucky **TV Cable Channel 16**, and **WUKY** or the **UK Website at [www.uky.edu](http://www.uky.edu)**.

### **Professional Behavior**

Aside from academic performance, students are professional in training. Such attributes as maturity, positive attitude, curiosity, individual initiative, respectful behavior towards others, motivation and perseverance are considered valuable assets in this quest.

Part of the professional behavior will include conducting yourself with the utmost of safety principles in mind with regards to you and others. This includes clarifying information about techniques when you are in need. If you have a history of problems in an area, it is up to you to inform your partner, and set the limits about the amount of practice that can be performed with you.

### **Class Assignments:**

<b>Assignments</b>	<b>Date Due</b>	<b>Points</b>	<b>Percentage</b>	<b>Grading Scale</b>
MMT quiz	1/19	10	2.9	A = 306 - 340
Review Article on Diagnostic Accuracy	2/2	10	2.9	B = 272 - 305.4
Systematic Review	2/14	40	11.8	C = 238 - 271.4
Lab Practical on Trunk	2/16	30	8.8	
Written Exam on Trunk	2/23	60	17.6	
Knee Practical	3/9	30	8.8	
Knee Examination	3/21	40	11.8	
Written Exam on Muscle Injury, gait, and ankle	4/13	60	17.6	
Topic Presentation	5/2	40	11.8	
Class Participation		20	5.9	
Total		340	100.0	



The University of Kentucky  
Division of Athletic Training  
**Syllabus for Evaluation & Rehabilitation of Athletic Injuries**

### COURSE DESCRIPTION

This is an advanced athletic training course encompassing a regional study of orthopedic evaluation, assessment, management, and rehabilitation of the upper extremity, cervical and thoracic spine. A combination of discussion, lecture, and critical review of literature, laboratory, and student presentations will be employed.

Laboratory experiences will focus on performance of evaluations of regional areas and specific manual techniques of rehabilitation. The course goals and objectives are to improve the student's assessment skills and problem solving abilities, and to deepen the student's knowledge of rehabilitation techniques for common athletic injuries by incorporating therapeutic exercise and specific therapeutic exercise equipment, manual therapy techniques, and modalities.

### COURSE GOALS & OBJECTIVES

**Explain:**

1. The role of the athletic trainer in performing a biomechanical assessment of musculoskeletal disorders.
2. The concepts of assessments, clinical decision-making, and treatment planning.
3. The role of diagnostic testing in orthopedic evaluation and determining when additional diagnostic testing is appropriate.
4. The thought process necessary to determine the correct clinical assessment
5. Factors that predispose an athlete to potential injuries.

**Describe:**

6. The essential elements of an orthopedic evaluation, including the taking of patients' history. The etiology and clinical profile of common pathologies encountered within each area of the peripheral and spinal joints.
7. The physiology of musculoskeletal injury and healing.
8. The rationale for use of various rehabilitation approaches for these common pathologies.

**Demonstrate:**

9. Ability to perform systematic clarifying examinations for all peripheral joints and all areas of the spine.
10. Ability to perform common special tests unique to each peripheral joint area and each spine area in an orthopedic evaluation.
11. Ability to perform a postural examination.
12. Ability to properly document an Athletic Training evaluation and plan of treatment in SOAP note format.
13. Proficiency in rehabilitation techniques of sport and orthopedic injuries.
14. Ability to choose appropriate interventions based on current theory for managing musculoskeletal injuries.
15. Ability to develop, write, and explain a rehabilitation program for an athlete recovering from a musculoskeletal injury.
16. Ability to critically review sports and orthopedic literature.
17. Ability to apply the relevant literature in developing a rehabilitation program that is evidence based.
18. Ability to create an oral and written case presentation to colleagues, including facilitation of a discussion among colleagues.

### **Instructional Strategies**

The class will meet for 5 hours per week throughout each semester. The class will meet on Monday from 7:50am – 10:00am in the room 220 College of Health Sciences and Wednesday 8:00am –11:00am in the Shively Training facility or a predetermined assigned location such as research laboratories. This class will be taught primarily as didactic and laboratory presentations. Students will be given reading and written assignments to complete for class discussion and present for the instructor to review.

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Available in coursebook or via Blackboard web page.

### **Required Texts:**

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- **Clinical Electrophysiology (CE)**, Robinson AJ, Snyder-Mackler L, Williams & Wilkins, 1995.
- **Essentials of Strength Training and Conditioning (ESTC)**, Baechele TR, Earle RW, Human Kinetics, 2000.

### **Laboratory Dress** (dictated by anatomical region being studied)

Generally, laboratory attire should allow for visual inspection of the area being studied, allow freedom of movement, and be modest in design. Generally, females should wear a halter-top or sports bra when examining the upper extremity. For men shorts and a T-shirt are appropriate.

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Tests and/or papers will be retained by the course coordinator until approximately three weeks into the succeeding semester or summer session (Feb. 15, June 1, Aug. 1, and Sept. 15).

### **Office Hours**

Course Director:	Tim Uhl PhD ATC PT
Office:	Wethington Bldg Room 210C 900 S. Limestone
E-mail:	tluhl2@uky.edu
Telephone:	(859) 323-1100 Ext. 80858
Cell Phone:	(859) 230-7841
Office Hours:	By Appointment

### **Attendance Policy**

The instructor expects everyone to attend every class and be on time. If absence is due to external clinical responsibilities it is the student responsibility to notify the professor of the absence or potential absence at the beginning of the semester. Additionally, the student is responsible to obtain information presented during his or her absences and submit prior to absence any assignment due. Intermittent attendance records of student attendance will be kept. Attendance and punctuality will also be considered subjectively in borderline performance which can account for up to 5% of your final grade.

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Part of the professional behavior will include conducting yourself with the utmost of safety principles in mind with regards to you and others. This includes clarifying information about techniques when you are in need. If you have a history of problems in an area, it is up to you to inform your partner, and set the limits about the amount of practice that can be performed with you.



## Schedule of Classes for Evaluation & Rehabilitation of Athletic Injuries

AT 690		Upper Extremity Fall 2004				
Date	Day	Topic	Times	Location	Readings	Assignments Due
8/25/04	<b>W</b>	Overview of Class/Assignments Evaluation & Rehabilitation Theory	8 to 11	Shively	Magee Chp.1 Kendall Chps. 1 & 2	
8/26/04						
8/27/04						
8/28/04						
8/29/04						
8/30/04	<b>M</b>	Neurological Considerations of Pain			1) Neural Mechanisms of Pain Chp. 6 2) Wright, Sluka Article on Blackboard under Neurological Considerations of Pain folder	
8/31/04						
9/1/04	<b>W</b>	<b>LAB</b> Neurological Screening Lecture UE Dermatomes & Myotomes UE Reflexes	8 to 11	Shively	Kendall Chp. 12 Review UE Dermatomes & Myotomes (Magee)	<b>1</b>
9/2/04						
9/3/04						
9/4/04						
9/5/04						
9/6/04	<b>M</b>	<b>Labor Day - NO CLASS</b>				
9/7/04						
9/8/04	<b>W</b>	<b>LAB</b> UE Palpation UE Goniometry / UE MMT	8 to 11	Shively	Kendall Chp. 12	
9/9/04						

9/10/04						
9/11/04						
9/12/04						
9/13/04	<b>M</b>	Sensorimotor Considerations of Rehabilitation Lecture	7:50-9:50	CHS 220	J. Athl Training Vol 37(1): 71-98	<b>Read all 3 Articles Riemann</b>
9/14/04						
9/15/04	<b>W</b>	Sensorimotor Lab	8 to 11	MSL Lab		
9/16/04						
9/17/04						
9/18/04						
9/19/04						
9/20/04	<b>M</b>	Pathophysiology of Healing Tissues	7:50-9:50	CHS 220	Chapter 2 PRIA	<b>2</b>
9/21/04						
9/22/04	<b>W</b>	C-Spine Anatomy & Pathomechanics	8 to 11	Shively	Magee Chp. 3	<b>Exam 1 Due (Eval Theory, Neuro, Healing)</b>
9/23/04						
9/24/04						
9/25/04						
9/26/04						
9/27/04	<b>M</b>	<b>LAB</b> C-Spine Common Injuries & Evaluation	7:50-9:50	Shively	Pre-hospital Spine Care & NATA Position Statement on Emergency Planning on Blackboard in Spine folder	
9/28/04						
9/29/04	<b>W</b>	<b>LAB</b> C-Spine Manual Techniques	8 to 11	Shively		
9/30/04						
10/1/04	<b>F</b>	<b>Fall Break - NO CLASS</b>				
10/2/04						
10/3/04						
10/4/04	<b>M</b>	Concussion Screening/Management		CHS 220	Dr. Hosey Guest Lecture	

10/5/04						
10/6/04	<b>W</b>	<b>LAB</b> Massage Myofascial/Trigger Point Release	8-11	Shively	1) Myofascial Pain Disorders 2) Effects of Massage on Recovery On Blackboard in Alternative Therapies	
10/7/04						
10/8/04						
10/9/04						
10/10/04						
10/11/04	<b>M</b>	Thoracic Spine Anatomy & Pathomechanics	7:50-9:50	CHS 220	Magee Chapter 8 Kendall Chapter 4 & 6	
10/12/04						
10/13/04	<b>W</b>	<b>LAB</b> Posture Evaluation Lab & Rehabilitation integrating trunk in the upper extremity	8-11	Shively	1) Facilitating Serape effect 2) Integrating the trunk in upper extremity rehabilitation article Both articles are available on blackboard in the spine folder	
10/14/04						
10/15/04						
10/16/04						
10/17/04						
10/18/04	<b>M</b>	<b>Lab Practical Neuro Screen, C-spine, T-spine</b>	7:50-9:50	Shively		
10/19/04						
10/20/04	<b>W</b>	Shoulder Anatomy & Pathomechanics Shoulder Evaluation Special Tests	8-11	Shively	Magee Chapter 5	<b>Exam 2 Due: Neuro-Screen, C-spine, T-spine</b>
10/21/04						
10/22/04						
10/23/04						
10/24/04						
10/25/04	<b>M</b>	Shoulder Rehabilitation/Biomechanics Review	7:50-9:50	CHS 220	PRIA Chapter 13	

10/26/04						
10/27/04	<b>W</b>	Shoulder Rehabilitation	8-11	Shively		
10/28/04						
10/29/04						
10/30/04						
10/31/04						
11/1/04	<b>M</b>	Shoulder Surgical Techniques & Rehabilitation Considerations	7:50-9:50	CHS 220	Dr. Wilson Guest Lecture	
11/2/04	<b>T</b>	<b>Presidential Election - NO CLASS</b>				
11/3/04	<b>W</b>	<b>LAB</b> Principles of Manual Therapy Joint Mobilizations	8-11	Shively	PRIA Chapter 6	
11/4/04						
11/5/04						
11/6/04						
11/7/04						
11/8/04	<b>M</b>	Problem-Solving Presentations	7:50-9:50	TBA		<b>3</b>
11/9/04						
11/10/04	<b>W</b>	PNF Techniques and Principles			PRIA Chapter 6	
11/11/04						
11/12/04						
11/13/04						
11/14/04						
11/15/04	<b>M</b>	Elbow Anatomy & Pathomechanics	7:50-9:50	CHS 220	Magee Chapter 6	
11/16/04						
11/17/04	<b>W</b>	<b>LAB</b> Elbow Evaluation & Special Tests	8-11	Shively	Kendall Chapter 8 PRIA Chapter 14	
11/18/04						
11/19/04						
11/20/04						
11/21/04						
11/22/04	<b>M</b>	Catch-up/Review				

11/23/04						
	<b>W</b>	<b>Lab Practical: (Shoulder &amp; Elbow)</b>				<b>Exam 3 Due: (Shoulder &amp; Elbow)</b>
11/24/04						
11/25/04		<b>Thanksgiving - NO CLASS</b>				
11/26/04		<b>Thanksgiving - NO CLASS</b>				
11/27/04						
11/28/04						
11/29/04	<b>M</b>	Wrist & Hand Anatomy & Pathomechanics			Magee Chapter 7 Hand and wrist injury evaluation and rehabilitation chapter available on blackboard in hand and wrist folder	
11/30/04						
12/1/04	<b>W</b>	Case Presentations	TBA	TBA		<b>4</b>
12/2/04						
12/3/04						
12/4/04						
12/5/04						
12/6/04	<b>M</b>	Wrist & Hand Surgical Considerations			Dr. Boland Guest Lecture	
12/7/04						
12/8/04	<b>W</b>	Wrist & Hand Rehabilitation & Management			PRIA Chapter 15	
12/9/04						
12/10/04	<b>F</b>	<b>Last Day of Fall Classes</b>				
12/11/04						
12/12/04						
12/13/04	<b>M</b>	<b>FINALS</b>				
12/14/04	<b>T</b>	<b>FINALS</b>				
12/15/04	<b>W</b>	<b>FINALS</b>				

## Assignments

### (1) Evidenced based modality assignment

Present evidence to support & refute the effectiveness of therapeutic modalities for pain control. Prepare a document to handout that includes: indications, contraindications, and settings.

- Electrical stimulation to reduce pain
- Cryotherapy to reduce pain
- Edema reduction

### (2) Tissue healing article review assignment

Find 2 research articles on tissue healing following musculoskeletal injury. Confirm with classmates that they are different articles. The focus can be on the biomechanics of healing tissue, time frame of healing tissue, what loads pull out repaired tissue, effects of motion versus immobilization for example. Present and informally discuss the results and clinical applications of the research.

### (3) Evidence-based problem solving assignment

Outline the initial evaluation and subsequent treatment plan for an athletic injury. The write-up should include the following:

#### Initial Evaluation

- Diagnosis
- Symptoms
- Mechanism of Injury
- Observation
- Function
- Special Tests
- Palpation
- Neurological Findings
- Differential Diagnosis

#### Treatment Plan

- List of problems
- Prioritize problems
- Specific Goals including time frames
  - Long-term
  - Short-term
- Treatment/Return to play plan
  - Specific interventions by week or post-injury phase
    - Theory of effectiveness
    - Evidence of effectiveness
      - Provide 2-3 research articles to support each theory

#### EXAMPLE

20 y/o male hockey player. Post bankart repair of right shoulder

8 weeks Post-Op

#### **List of problems:**

Decreased ROM  
Decreased flexibility

**Prioritize problems:**

1. Decreased ROM
2. Decreased Flexibility

**Goals:**

Long Term:

1. Return to playing ice hockey with minimal pain 2/10 in 4 months
2. Increase full ROM in 2 months
3. Increase full strength (5/5) in 4 months

Short Term:

1. Increase flexion to 180° in 4 weeks
2. Increase abduction to 180° in 4 weeks
3. Increase internal rotation to T 8 in 6 weeks

**Treatment Plan:**

Phase 2

2-3months

**Intervention**

Ultrasound to scar tissue. 3 MHz for 8 minutes at 1.5w/cm<sup>2</sup> with shoulder in 90° abduction and externally rotated.

**Theory**

Heating collagen increases elasticity. This is a superficial tissue therefore a 3 MHz type US should be used.

**Evidence**

Draper DO, Ricard MD. Rate of temperature decay in human muscle following 3 MHz ultrasound: The stretching window revealed. J Athl Train 30: 304-307, 1995.

Draper DO, Castel JC, Castel D. Rate of temperature increase in human muscle during 1 MHz and 3MHz continuous ultrasound. J ortho and Sports Phy Ther 22: 142-150, 1995.



#### (4) Case Study Presentation

- Write-up and present a case study of one of your athletes that has suffered an injury.
- Use Athletic Therapy Today or Orthopedics format. Information for authors for manuscript submission to Athletic Therapy Today can be found at: <http://www.humankinetics.com/products/journals/submissions.cfm?jid=ATT>  
Orthopedics can be found at <http://www.orthobluejournal.com/author.asp>
- Include in the typed written record: a thorough history, physical exam, assessment, and treatment plan with the initial clinical diagnosis. Present any additional diagnostic tests and their results over the course of the case. This information should be conveyed accurately and succinctly.
- Describe in detail the treatment and rehabilitation program including dates and setbacks.
- In both the written and oral presentations present differential diagnostic possibility and describe how you ruled out other possible diagnoses. Describe to the audience your thought process in making your clinical decision.
- In the discussion section provide a synopsis of the pathological process in general and how this case followed or did not follow what would be a typical course.
- Prepare a professional 15 minute oral presentation using overheads, power point, video, etc (do not read overheads, rather use them to back you up). This should be approached as an educational presentation to the class.
- Include detailed history, mechanism of injury, physical examination, findings, differential diagnoses, final diagnosis, initial management, appropriate referrals, additional diagnostic tests (have diagnostic images available for the class to view or include in power point presentation), rehabilitation plan with short term and long term goals.
- Describe rehabilitation program in detail including dates, frequency, supportive devices, criteria for progression, and objective measurements as the patient progressed through rehabilitation process.
- Provide an overview to the class of the diagnostic pathology of this case including key evaluation points and typical treatment regimen for the particular pathology. Please thoroughly review the literature of the particular pathology you discuss.
- Incorporate a discussion on treatment approaches for this patient, asking questions of the audience, and attempt to incorporate the audience to demonstrate such things as exercises or special evaluation techniques.
- Allow 5 minutes for discussion and questions

Remain calm, if possible and enjoy the process

Your grade for this component will be based in part on the quality and thoroughness of your presentation, the clarity of your material, and your ability to elicit audience interaction through questioning and group participation. Grading criteria are attached.

**AT 670**  
**Scientific Inquiry in Athletic Training I:**  
**Development of Experimental Research**

**Instructor:**

Carl G. Mattacola, PhD, ATC  
Office: Room 210E, CHS Building  
Phone: 323-1100 ext 80860  
E-mail: [carlmat@uky.edu](mailto:carlmat@uky.edu)

**Proposed Course Description:**

The first course of a four part series. . Scientific Inquiry in Athletic Training I is a 2 credit course introducing the student to the research process in athletic training. Coursework will address the conception and methodological procedures of designing and pursuing research in athletic training. The importance of pursuing quality research in athletic training will be stressed and the procedures necessary to complete this process will be presented.

**Course Objectives:**

By completion of the course the student will accomplish two or more of the following:

1. Access and utilize research databases.
2. Discuss the importance of research in athletic training.
3. Review and critically evaluate current research.
4. Design a research study.
5. Conduct a thorough review of literature.
6. Summarize content and critically review research studies.

**General Requirements:**

Students are to be aware of and meet the technical standards and behavioral standards as outlined in Technical Standards and the Behavioral Standards in Patient Care of the College of Allied Health Profession.

**Instructional Strategies**

The class will meet for 2 hours per week. The class will meet on Thursday mornings in the Shively Teaching and Research Laboratory. This class will be taught primarily as a discussion class with some didactic presentations. Students will be given reading and written assignments to complete for class discussion and instructor review. There will be some laboratory experiences with research equipment to familiarize the student with the proper use of equipment.

**Required Texts:**

J. R. Thomas and J. K. Nelson. *Research Methods in Physical Activity*, Champaign, IL: Human Kinetics Publishers, Inc., 1990.

R. A Day. *How to Write & Publish a Scientific Paper*, New York, NY: Oryx Press, 1988.

*Publication Manual of the American Psychological Association*, Washington, DC: American Psychological Association, 1997.

Reference Manager: Student Edition, Version 9.5. Ris.Inc, Berkeley, Carlsbad, 800 Jones Street, Berkeley, CA 94710

### **Assigned Readings:**

Electronic Reserve: [www.uky.edu/libraries/reserves/ereserves.html](http://www.uky.edu/libraries/reserves/ereserves.html)  
Instructions for Masters Thesis: <http://www.rgs.uky.edu/gs/thesisprep.pdf>  
Institutional Review Board (UK): <http://www.rgs.uky.edu/rso/human/medirb.htm>

### **Recommended Texts:**

K. T. Henson. *The Art of Writing for Publication*, Needham Heights, MA: Allyn & Bacon, 1995.  
S. W. Huck, W. H. Cormier, and W. G. Bounds. *Reading Statistics and Research*, New York, NY:Harper & Row Publishers, 1974.  
R.Ray. *Management Strategies in Athletic Training*, Champaign, IL:Human Kinetics Publishers, Inc, 1994.  
W.J Vincent. *Statistics in kinesiology*, Champaign, IL:Human Kinetics Publishers, Inc, 1995.

**Additional References:** The following references can be found at: <http://www.nata.org/jat/index.html>

K. L. Knight and C. D. Ingersoll. Structure of a scholarly manuscript: 66 tips for what goes where. *J Athl.Train.* 31:201-206, 1996.  
K. L. Knight and C. D. Ingersoll. Optimizing scholarly communications: 30 tips for writing clearly. *J Athl.Train.* 31:209-213, 1996.

### **Feedback**

1. Students are encouraged to come to the instructor's office to review tests or to discuss progress in the class. This will be the only means for review of evaluation instruments.
2. Tests and/or papers will be retained by the course coordinator until approximately three weeks into the succeeding semester or summer session (Feb. 15, June 1, Aug. 1, and Sept. 15).

### **Academic Honesty**

1. Each student in the class is expected to adhere to the highest standards of academic honesty. Cheating and plagiarism violate the rules of the University and the ethical standards of members in the allied health profession. Violations of the university's rules regarding academic honesty can lead to a failing grade in the course and expulsion from the University. Students may view the Student Rights & Responsibilities Document at <http://www.uky.edu/StudentAffairs/Code/part1.html>.

### **Withdrawals and Incompletes**

1. The last day to withdraw from the course is at the end of the ninth week for fall or spring semester. No withdrawals will be signed after that date.
2. It is the student's responsibility to properly process withdrawals. Students who fail to process withdrawals or who process them after the time that grade report sheets are printed, will receive a grade of F on the official grade sheet. To correctly process a withdrawal the student must obtain the signature of Dr. Mattacola, obtain the signature of the student's advisor, and take the withdrawal form to the Registrar's office.
3. Incomplete (I) grades will be given only in extenuating circumstances and never as a replacement for a failing or substandard grade. Any student requesting an incomplete grade must see the course coordinator, Dr. Mattacola, for approval and for additional rules governing incomplete grades.

### **University Closing**

Students should be aware of the following sources of information in the event of inclement weather or other problems which might cause the University to close. Remember, if the University is open, students are expected to be in attendance and all tests will be given. If the University is closed on a test day, expect the test to be given on the next class day.

The cancellation or delay of classes' announcements will normally be made by 6:00 a.m. through the local media. The latest information will be available on the University of Kentucky **INFOLINE at 257-5684**, University of Kentucky **TV Cable Channel 16**, and **WUKY** or the **UK Website at [www.uky.edu](http://www.uky.edu)**.



**AT 671**  
**Scientific Inquiry in Athletic Training II:**  
**Methodological Procedures**

**Instructor:**

Carl G. Mattacola, PhD, ATC  
Office: Room 210E CHS Building  
Phone: 323-1100 ext 80860  
E-mail: [carlmat@uky.edu](mailto:carlmat@uky.edu)

**Proposed Course Description:**

The second course of a four part series. Scientific Inquiry in Athletic Training II is a 2 credit course that will develop skills and a knowledge base that will aid the student while conducting and critically reviewing research in athletic training. Coursework will address the methodological procedures of designing and pursuing research in athletic training. The importance of pursuing quality research in athletic training will be stressed and the procedures necessary to complete this process will be presented.

**Course Objectives:**

By completion of the course the student will accomplish the following:

1. Design and implement methodological procedures.
2. Prepare and defend a scholarly research study.
3. Utilize and become proficient in the bibliographic database; Reference Manager.
4. Demonstrate proficiency with research equipment used in athletic training research.
5. Define and describe the importance of reliability and validity in the research process.
6. Demonstrate with acquired data the reliability and validity of a methodological procedure.
7. Explain ethical considerations pertinent to research in athletic training.
8. Discuss ethical considerations related to the use of human and animal experimentation.
9. Develop an IRB.

**General Requirements:**

Students are to be aware of and meet the technical standards and behavioral standards as outlined in Technical Standards and the Behavioral Standards in Patient Care of the College of Allied Health Profession.

**Instructional Strategies**

The class will meet for 2 hours per week. The class will meet on Thursday mornings in the Shively Teaching and Research Laboratory. This class will be taught primarily as a discussion class with some didactic presentations. Students will be given reading and written assignments to complete for class discussion and instructor review. There will be some laboratory experiences with research equipment to familiarize the student with the proper use of equipment.

**Required Texts:**

J. R. Thomas and J. K. Nelson. *Research Methods in Physical Activity*, Champaign, IL: Human Kinetics Publishers, Inc., 1990.

R. A Day. *How to Write & Publish a Scientific Paper*, New York, NY: Oryx Press, 1988.

*Publication Manual of the American Psychological Association*, Washington, DC: American Psychological Association, 1997.

### **Assigned Readings:**

Electronic Reserve: [www.uky.edu/libraries/reserves/ereserves.html](http://www.uky.edu/libraries/reserves/ereserves.html)  
Instructions for Masters Thesis: <http://www.rgs.uky.edu/gs/thesisprep.pdf>  
Institutional Review Board (UK): <http://www.rgs.uky.edu/rso/human/medirb.htm>

### **Recommended Texts:**

K. T. Henson. *The Art of Writing for Publication*, Needham Heights, MA: Allyn & Bacon, 1995.  
S. W. Huck, W. H. Cormier, and W. G. Bounds. *Reading Statistics and Research*, New York, NY:Harper & Row Publishers, 1974.  
R.Ray. *Management Strategies in Athletic Training*, Champaign, IL:Human Kinetics Publishers, Inc, 1994.  
W.J Vincent. *Statistics in kinesiology*, Champaign, IL:Human Kinetics Publishers, Inc, 1995.

**Additional References:** The following references can be found at: <http://www.nata.org/jat/index.html>

K. L. Knight and C. D. Ingersoll. Structure of a scholarly manuscript: 66 tips for what goes where. *J Athl.Train.* 31:201-206, 1996.  
K. L. Knight and C. D. Ingersoll. Optimizing scholarly communications: 30 tips for writing clearly. *J Athl.Train.* 31:209-213, 1996.

### **Feedback**

1. Students are encouraged to come to the instructor's office to review tests or to discuss progress in the class. This will be the only means for review of evaluation instruments.
2. Tests and/or papers will be retained by the course coordinator until approximately three weeks into the succeeding semester or summer session (Feb. 15, June 1, Aug. 1, and Sept. 15).

### **Academic Honesty**

1. Each student in the class is expected to adhere to the highest standards of academic honesty. Cheating and plagiarism violate the rules of the University and the ethical standards of members in the allied health profession. Violations of the university's rules regarding academic honesty can lead to a failing grade in the course and expulsion from the University. Students may view the Student Rights & Responsibilities Document at <http://www.uky.edu/StudentAffairs/Code/part1.html>.

### **Withdrawals and Incompletes**

1. The last day to withdraw from the course is at the end of the ninth week for fall or spring semester. No withdrawals will be signed after that date.
2. It is the student's responsibility to properly process withdrawals. Students who fail to process withdrawals or who process them after the time that grade report sheets are printed, will receive a grade of F on the official grade sheet. To correctly process a withdrawal the student must obtain the signature of Dr. Mattacola, obtain the signature of the student's advisor, and take the withdrawal form to the Registrar's office.
3. Incomplete (I) grades will be given only in extenuating circumstances and never as a replacement for a failing or substandard grade. Any student requesting an incomplete grade must see the course coordinator, Dr. Mattacola, for approval and for additional rules governing incomplete grades.

### **University Closing**

Students should be aware of the following sources of information in the event of inclement weather or other problems which might cause the University to close. Remember, if the University is open, students are expected to be in attendance and all tests will be given. If the University is closed on a test day, expect the test to be given on the next class day.

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**AT 672**  
**Scientific Inquiry in Athletic Training III:**  
**Research Design**

**Instructor:**

Carl Mattacola, PhD, ATC  
Office: Room 210E, CHS Building  
Phone: 323-1100 ext 80860  
E-mail: [carlmat@uky.edu](mailto:carlmat@uky.edu)

**Proposed Course Description:**

The third course of a four part series. Scientific Inquiry in Athletic Training III is a 2 credit course that will develop skills and a knowledge base that will aid the student while conducting and critically reviewing research in athletic training. Coursework will address the design of research in athletic training. The importance of pursuing quality research in athletic training will be stressed and the procedures necessary to complete this process will be presented.

**Course Objectives:**

By completion of the course the student will accomplish the following:

1. Discuss various statistical and methodological research designs.
2. Discuss and demonstrate competence in publication styles.
3. Discuss the advantages and disadvantages of statistical models for data analysis.
4. Critic and demonstrate proficiency in organizing results of an acquired data set using data acquisition software specific to athletic training / sports medicine.
5. Demonstrate proficiency in developing figures and tables that are manuscript ready.
6. Demonstrate proficiency in critically reviewing and preparing a research abstract.

**General Requirements:**

Students are to be aware of and meet the technical standards and behavioral standards as outlined in Technical Standards and the Behavioral Standards in Patient Care of the College of Allied Health Profession.

**Instructional Strategies**

The class will meet for 2 hours per week. The class will meet on Thursday mornings in the Shively Teaching and Research Laboratory. This class will be taught primarily as a discussion class with some didactic presentations. Students will be given reading and written assignments to complete for class discussion and instructor review. There will be some laboratory experiences with research equipment to familiarize the student with the proper use of equipment.

**Required Texts:**

J. R. Thomas and J. K. Nelson. *Research Methods in Physical Activity*, Champaign, IL: Human Kinetics Publishers, Inc., 1990.

R. A Day. *How to Write & Publish a Scientific Paper*, New York, NY: Oryx Press, 1988.



### **Assigned Readings:**

Electronic Reserve: [www.uky.edu/libraries/reserves/ereserves.html](http://www.uky.edu/libraries/reserves/ereserves.html)  
Instructions for Masters Thesis: <http://www.rgs.uky.edu/gs/thesisprep.pdf>  
Institutional Review Board (UK): <http://www.rgs.uky.edu/rso/human/medirb.htm>

### **Recommended Texts:**

K. T. Henson. *The Art of Writing for Publication*, Needham Heights, MA: Allyn & Bacon, 1995.  
S. W. Huck, W. H. Cormier, and W. G. Bounds. *Reading Statistics and Research*, New York, NY:Harper & Row Publishers, 1974.  
R.Ray. *Management Strategies in Athletic Training*, Champaign, IL:Human Kinetics Publishers, Inc, 1994.  
W.J Vincent. *Statistics in kinesiology*, Champaign, IL:Human Kinetics Publishers, Inc, 1995.

**Additional References:** The following references can be found at: <http://www.nata.org/jat/index.html>

K. L. Knight and C. D. Ingersoll. Structure of a scholarly manuscript: 66 tips for what goes where. *J Athl.Train.* 31:201-206, 1996.K.  
L. Knight and C. D. Ingersoll. Optimizing scholarly communications: 30 tips for writing clearly. *J Athl.Train.* 31:209-213, 1996.

### **Feedback**

1. Students are encouraged to come to the instructor's office to review tests or to discuss progress in the class. This will be the only means for review of evaluation instruments.
2. Tests and/or papers will be retained by the course coordinator until approximately three weeks into the succeeding semester or summer session (Feb. 15, June 1, Aug. 1, and Sept. 15).

### **Academic Honesty**

1. Each student in the class is expected to adhere to the highest standards of academic honesty. Cheating and plagiarism violate the rules of the University and the ethical standards of members in the allied health profession. Violations of the university's rules regarding academic honesty can lead to a failing grade in the course and expulsion from the University. Students may view the Student Rights & Responsibilities Document at <http://www.uky.edu/StudentAffairs/Code/part1.html>.

### **Withdrawals and Incompletes**

1. The last day to withdraw from the course is at the end of the ninth week for fall or spring semester. No withdrawals will be signed after that date.
2. It is the student's responsibility to properly process withdrawals. Students who fail to process withdrawals or who process them after the time that grade report sheets are printed, will receive a grade of F on the official grade sheet. To correctly process a withdrawal the student must obtain the signature of Dr. Uhl's, obtain the signature of the student's advisor, and take the withdrawal form to the Registrar's office.
3. Incomplete (I) grades will be given only in extenuating circumstances and never as a replacement for a failing or substandard grade. Any student requesting an incomplete grade must see the course coordinator, Dr. Mattacola, for approval and for additional rules governing incomplete grades.

### **University Closing**

Students should be aware of the following sources of information in the event of inclement weather or other problems which might cause the University to close. Remember, if the University is open, students are expected to be in attendance and all tests will be given. If the University is closed on a test day, expect the test to be given on the next class day.

The cancellation or delay of classes' announcements will normally be made by 6:00 a.m. through the local media. The latest information will be available on the University of Kentucky **INFOLINE at 257-5684**, University of Kentucky **TV Cable Channel 16**, and **WUKY** or the **UK Website at [www.uky.edu](http://www.uky.edu)**.

**AT 673**  
**Scientific Inquiry in Athletic Training IV:**  
**Synthesis and Preparation of Data**

**Instructor:**

Carl G. Mattacola, PhD, ATC  
Office: Room 210E, CHS Building  
Phone: 323-1100 ext 80860  
E-mail: [carlmat@uky.edu](mailto:carlmat@uky.edu)

**Proposed Course Description:**

The final course of a four part series. Scientific Inquiry in Athletic Training IV is a 2 credit course to that will develop skills and a knowledge base that will aid the student while conducting and critically reviewing research in athletic training. Coursework will focus on developing the skills needed to critically synthesize material with accepted practice, and prepare professional presentations using acquired data and an appropriate statistical analysis. The importance of pursuing quality research in athletic training will be stressed and the procedures necessary to complete this process will be presented.

**Course Objectives:**

By completion of the course the student will accomplish the following:

1. Discuss and critically evaluate the Discussion components of accepted manuscripts in the medical literature
2. Demonstrate proficiency in developing a Poster Presentation using computer software.
3. Demonstrate proficiency in preparing and printing a Poster Presentation using standard computer applications and hardware
4. Present and defend to the class an oral and poster presentation using acquired data.
5. Become familiar with Human Resource Management in the employment and research setting.
6. Discuss employment practices in a changing healthcare system.
7. Discuss the importance and preparation of effective negotiation strategies.
8. Discuss and explore the various funding agencies specific to athletic training.
9. Develop a research agenda.
10. Develop a working grant application.

**General Requirements:**

Students are to be aware of and meet the technical standards and behavioral standards as outlined in Technical Standards and the Behavioral Standards in Patient Care of the College of Health Sciences Professions.

**Instructional Strategies**

The class will meet for 2 hours per week. The class will meet on Thursday mornings in the Shively Teaching and Research Laboratory. This class will be taught primarily as a discussion class with some didactic presentations. Students will be given reading and written assignments to complete for class discussion and instructor review. There will be some laboratory experiences with research equipment to familiarize the student with the proper use of equipment.

**Required Texts:**

J. R. Thomas and J. K. Nelson. *Research Methods in Physical Activity*, Champaign, IL: Human Kinetics Publishers, Inc., 1990.

R. A Day. *How to Write & Publish a Scientific Paper*, New York, NY: Oryx Press, 1988.

*Publication Manual of the American Psychological Association*, Washington, DC: American Psychological Association, 1997.

### **Assigned Readings:**

Electronic Reserve: [www.uky.edu/libraries/reserves/ereserves.html](http://www.uky.edu/libraries/reserves/ereserves.html)  
Instructions for Masters Thesis: <http://www.rgs.uky.edu/gs/thesisprep.pdf>  
Institutional Review Board (UK): <http://www.rgs.uky.edu/rso/human/medirb.htm>

### **Recommended Texts:**

K. T. Henson. *The Art of Writing for Publication*, Needham Heights, MA: Allyn & Bacon, 1995.  
S. W. Huck, W. H. Cormier, and W. G. Bounds. *Reading Statistics and Research*, New York, NY:Harper & Row Publishers, 1974.  
R.Ray. *Management Strategies in Athletic Training*, Champaign, IL:Human Kinetics Publishers, Inc, 1994.  
W.J Vincent. *Statistics in kinesiology*, Champaign, IL:Human Kinetics Publishers, Inc, 1995.

**Additional References:** The following references can be found at: <http://www.nata.org/jat/index.html>

K. L. Knight and C. D. Ingersoll. Structure of a scholarly manuscript: 66 tips for what goes where. *J Athl.Train.* 31:201-206, 1996.  
K. L. Knight and C. D. Ingersoll. Optimizing scholarly communications: 30 tips for writing clearly. *J Athl.Train.* 31:209-213, 1996.

### **Feedback**

1. Students are encouraged to come to the instructor's office to review tests or to discuss progress in the class. This will be the only means for review of evaluation instruments.
2. Tests and/or papers will be retained by the course coordinator until approximately three weeks into the succeeding semester or summer session (Feb. 15, June 1, Aug. 1, and Sept. 15).

### **Academic Honesty**

1. Each student in the class is expected to adhere to the highest standards of academic honesty. Cheating and plagiarism violate the rules of the University and the ethical standards of members in the allied health profession. Violations of the university's rules regarding academic honesty can lead to a failing grade in the course and expulsion from the University. Students may view the Student Rights & Responsibilities Document at <http://www.uky.edu/StudentAffairs/Code/part1.html>.

### **Withdrawals and Incompletes**

1. The last day to withdraw from the course is at the end of the ninth week for fall or spring semester. No withdrawals will be signed after that date.
2. It is the student's responsibility to properly process withdrawals. Students who fail to process withdrawals or who process them after the time that grade report sheets are printed, will receive a grade of F on the official grade sheet. To correctly process a withdrawal the student must obtain the signature of Dr. Mattacola, obtain the signature of the student's advisor, and take the withdrawal form to the Registrar's office.
3. Incomplete (I) grades will be given only in extenuating circumstances and never as a replacement for a failing or substandard grade. Any student requesting an incomplete grade must see the course coordinator, Dr. Mattacola, for approval and for additional rules governing incomplete grades.

### **University Closing**

Students should be aware of the following sources of information in the event of inclement weather or other problems which might cause the University to close. Remember, if the University is open, students are expected to be in attendance and all tests will be given. If the University is closed on a test day, expect the test to be given on the next class day.

The cancellation or delay of classes' announcements will normally be made by 6:00 a.m. through the local media. The latest information will be available on the University of Kentucky **INFOLINE at 257-5684**, University of Kentucky **TV Cable Channel 16**, and **WUKY** or the **UK Website at [www.uky.edu](http://www.uky.edu)**.

Independent Study in Anatomy  
AT 660  
Summer 2005

Instructors:

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Ann Livengood, MEd, ATC  
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Course Description: This course is a 3-credit cadaver anatomy laboratory course, which will include examination and dissection of the human cadaver. Lectures and laboratory experience will emphasize the musculoskeletal, articular, nervous, and vascular systems particularly as they relate to athletic injury mechanism and evaluation.

Objectives:

General Course Objectives:

At the completion of the course the student will be able to:

- A. Locate on the cadaver; structures of the musculoskeletal, articular, nervous and vascular systems.
- B. Understand the functional application of these anatomical structures (including muscular actions and innervations)
- C. Apply knowledge of the anatomical structures as they relate to the various pathologies seen in athletics.

General Requirements:

Students are to be aware of and meet the technical standards and behavioral standards as outlined in Technical Standards and the Behavioral Standards in Patient Care of the College of Allied Health Profession.

**Instructional Strategies**

The class will meet for **3 hours per day (8-11am)**. The class will meet on Monday - Friday mornings in room **MN342** of the Medical Center. This class will be taught primarily as a laboratory dissection with some didactic lecture. Students will be given reading and written assignments and are expected to come to class prepared for the next day's dissection having reviewed the material prior to coming to class. Students are expected to finish any dissecting that was not completed in class on their own time in the afternoons and evenings.

Required Texts:

K. L. Moore and A. F. Daley. *Clinically Oriented Anatomy*, Baltimore:Lippincott Williams & Wilkins, 1999.

Recommended Texts:

A. Agur and M. Lee. *Grants atlas of anatomy*, Baltimore:Lippincott Williams & Wilkins, 2005.

**Feedback**

1. Students are encouraged to come to the instructor's office to review tests or to discuss progress in the class. This will be the only means for review of evaluation instruments.

2. Tests and/or papers will be retained by the course coordinator until approximately three weeks into the succeeding semester or summer session (Feb. 15, June 1, Aug. 1, and Sept. 15).

### **Academic Honesty**

1. Each student in the class is expected to adhere to the highest standards of academic honesty. Cheating and plagiarism violate the rules of the University and the ethical standards of members in the allied health profession. Violations of the university's rules regarding academic honesty can lead to a failing grade in the course and expulsion from the University. Students may view the Student Rights & Responsibilities Document at <http://www.uky.edu/StudentAffairs/Code/part1.html>.

### **Withdrawals and Incompletes**

1. The last day to withdraw from the course is at the end of the ninth week for fall or spring semester. No withdrawals will be signed after that date.

2. It is the student's responsibility to properly process withdrawals. Students who fail to process withdrawals or who process them after the time that grade report sheets are printed, will receive a grade of E on the official grade sheet. To correctly process a withdrawal the student must obtain the signature of Dr. Mattacola, obtain the signature of the student's advisor, and take the withdrawal form to the Registrar's office.

3. Incomplete (I) grades will be given only in extenuating circumstances and never as a replacement for a failing or substandard grade. Any student requesting an incomplete grade must see the course coordinator, Dr. Mattacola, for approval and for additional rules governing incomplete grades.

### **University Closing**

Students should be aware of the following sources of information in the event of inclement weather or other problems which might cause the University to close. Remember, if the University is open, students are expected to be in attendance and all tests will be given. If the University is closed on a test day, expect the test to be given on the next class day.

The cancellation or delay of classes' announcements will normally be made by 6:00 a.m. through the local media. The latest information will be available on the University of Kentucky **INFOLINE at 257-5684**, University of Kentucky **TV Cable Channel 16**, and **WUKY** or the **UK Website at [www.uky.edu](http://www.uky.edu)**.

### **Course Assignments:**

#### **Grading Procedures:**

Completion of all course assignments are expected on the stated due date. Students will be graded on the following:

Exam 1	20%
Exam 2	20%
Exam 3	20%
Class Presentation I:	5%
Class Presentation II:	5%
Dissection:	10%
Quizzes:	20%

#### **Grading Scale:**

91.5 – 100	A
82.5 – 91.4	B
73.5 – 82.5	C
Below 73.5	E

### **Care of the Cadaver and Prosections**

Athletic Training students have been given the unique opportunity and privilege of dissecting the human body. This opportunity must not be taken lightly as most persons have willed their bodies to the Department of Anatomy and Neurobiology's Body Bequeathal Program for your learning experience. It is imperative that the cadavers be treated with respect and dignity.

**Cadavers must be kept moist and well covered at all times.** When the table is open and the cadaver is not being used, it must be kept covered with the cloth provided. The cloth should be kept moist at all times. Moistening fluid is available to you in the yellow containers throughout the lab. At the end of each dissection session, the body should be moistened with the wetting solution provided, and carefully covered with the moistened cloth. The table should then be closed and the vent closed

**Do not leave unattended cadavers or prosections uncovered, and do not wait for the next person to do the covering.**

## General Guidelines for the Dissection Laboratory

Twenty-four hour access to the laboratory is available for review and/or completion of the dissections between scheduled labs. **This access is a privilege** and will be **revoked** if appropriate care of the cadaveric material and/or appropriate personal demeanor is not exhibited.

It is advisable to wear lightweight, easily washed clothing to the lab. Surgical scrubs may be purchased at the bookstore or through medical supply houses or at Wal-Mart. In addition to scrubs, reusable rubber (available at the medical bookstore), or disposable latex gloves (available at the bookstore or through medical supply houses, Sam's Club etc.) should be worn at all times.

If you wear contact lenses, you may find the preservatives in the cadaveric material irritate your eyes Switching to glasses alleviates this problem.

Please place lab wastes such as cadaveric material removed by dissection in the **gray** containers located throughout the lab. **All tissue containing bone must be kept on your table.** This material is cremated and the ashes may be returned to the family of the donor.

Old and/or broken scalpel blades **must be** disposed of in the **red** containers placed throughout the lab.

There are certain rules concerning use of the gross anatomy lab (MS 203) which **must be adhered to:**

- no food or drink whatsoever may be taken in to the lab
- no visitors (friends, relatives, etc.) may be taken into the lab without prior permission of the course director
- no cameras or other photographic equipment may be taken into the lab
- no cadaveric material leaves the lab at any time for any reason
- unprofessional behavior will not be tolerated in the lab

## Dissection Instructions

**The majority of osteology and surface anatomy features in the course will be left to each student to accomplish by independent study from your atlas as listed in the dissection manual.**

Each dissection group of 5 students should divide themselves into groups of 2-3. For the most part each group will dissect one side of the body. **The responsibilities of dissection are to be shared** on a rotation basis by all members of the group at each table. *Non-participants generally experience difficulty at time of the practical exam.*

In each group of 2-3:

One student will *dissect*

One will *read the dissection instructions* and *handle the atlas* looking up the appropriate figures

**Do not come to the laboratory without an atlas.** (there are usually some available in the lab that were left over from the PT/PA class in the spring)

**Always wear gloves,** either reusable or disposable.

**It is your responsibility to keep your table clean and as grease-free as possible throughout the semester.** Lysol foam cleaner is provided to assist you with this.

The scalpel is generally used only for cutting and reflecting skin, muscles, and other large structures. **Do not leave scalpels blades or scalpels on the table- someone will get hurt!**

Most dissections deep to the surface is achieved by blunt dissection using a probe, fingers, scissors, etc. The lab instructors will demonstrate these techniques in the laboratory but like most skills they are learned by practice- and *patience*.

Each laboratory session will describe where the skin incisions should be made. ***Dissection instructions are highlighted as bold and italicized text.*** As a rule, skin removal is limited to the anatomical region being studied that session.

Typical dissection kits **are not suitable** for lab dissections. You should purchase the following, available individually, or in a kit from the medical bookstore:

**Required Dissection Equipment:**

Much of the equipment will be available in the lab for your use however, you will need:

**Many -No.22 scalpel blades (or similarly curved blade)**

**Gloves**

**Complete each stage of the dissection before proceeding.** When you complete the region to be dissected, be sure you can identify each structure listed in the *Structure Checklist* for that region. In addition, relate the region to previous dissections and review that area as a whole rather than isolation. This method is beneficial for continuity and appreciation of the body as a whole rather than as a collection of isolated regions.

*HIC LOCUS UBI MORS GAUDET SUCCURRERE VITAE-*  
(Here is the place where death enjoys helping life)

**Reading List**

<b>Date</b>	<b>Topic</b>	<b>Text Book pp.</b>	<b>Dissector Guide pp. on CD</b>
5/9/04 M	Orientation (meet in MN342) 9am		
5/10/04 T	Superficial Back	2-48, 432-460, 691-695	14-17
5/11/04 W	Vertebrae, Scapula, Intermediate and Deep Back	461-474, 996-997	18-21
5/12/04 R	Vertebral Ligaments, Spinal Cord, Neck mm. <b>Quiz 1</b>	475-495	23-24
5/13/04 F	Neck mm., Suboccipital Region		21-23
5/16/04 M	Review		
5/17/04 T	<b>Exam 1</b>		
5/18/04 W	Pectoral Region, Shoulder Joint	665-670, 676-691, 781-795	25-33, 52-55
5/19/04 R	Shoulder, Axilla, Brachial Plexus <b>Quiz 2</b>	695-720	25-33, 48-49
5/20/04 F	Brachial Plexus, Arm, Elbow (Wildcat)	720-763, 795-807	33-38, 55-56
5/23/04 M	Forearm, Wrist, Hand <b>Quiz 3</b>		38-52, 56-57
5/24/04 T	Review	763-781, 807-810	
5/25/04 W	<b>Exam 2</b>		
5/26/04 R	Lumbosacral Plexus, Pelvis, Gluteal Region	297-300, 332-357, 549-562	58-62, 71-74
5/27/04 F	Gluteal Region, Posterior Thigh <b>Quiz 4</b>		71-77
5/30/04 M	<b>Memorial Day- no class</b>		
5/31/04 T	Hip, Thigh	504-549, 563-571, 607-616	62-67, 84-85
6/01/04 W	Popliteal Fossa, Knee <b>Quiz 5</b>	571-575, 617-632	76-79, 86-88
6/2/04 R	Knee Surgery Day		
6/3/04 F	Leg, Ankle	575-593, 632-637	67-69, 76-79, 88
6/6/04 M	Ankle, Foot <b>Quiz 6</b>	593-607, 632-646	69-71, 79-83, 88-91
6/7/04 T	<b>Exam 3</b>		



## TABLE OF CONTENTS

I.	<a href="#">General Information</a>	2
II.	<a href="#">Education</a>	2
III.	<a href="#">Professional Experiences</a>	2-3
IV.	<a href="#">Academic Appointments</a>	3-4
V.	<a href="#">Hospital or Clinical Appointments</a>	4
VI.	<a href="#">Consulting Activity</a>	4
VI.	<a href="#">Teaching Experience</a>	4-6
VIII.	<a href="#">Advising Activity</a>	7
IX.	<a href="#">Administrative Activity and University Service</a>	7-8
X.	<a href="#">Special Assignments- NA</a>	8
XI.	<a href="#">Specialty Board</a>	8
XII.	<a href="#">Honors &amp; Activities</a>	8-9
XIII.	<a href="#">Professional Activity &amp; Public Service</a>	9-10
XIV.	<a href="#">Speaking Engagements &amp; Invited Presentations</a>	10-12
XVI.	<a href="#">Scholarship</a>	12
	A. <a href="#">Refereed Journal Publications</a>	12-14
	B. <a href="#">Non-Refereed Journal Publications</a>	14
	C. <a href="#">Refereed Journal Publications ( In Review)</a>	14-15
	D. <a href="#">Published Refereed Abstracts/Presentations</a>	15-23
	F. <a href="#">Book Chapters</a>	24
	H. <a href="#">Master's Thesis/Project, Completed</a>	24-27
	G. <a href="#">Dissertations, Completed</a>	24
	J. <a href="#">Media Reviews</a>	27
	K. <a href="#">Creative Activity</a>	30
	L. <a href="#">Marketing Research and Consulting</a>	30
XVI.	<a href="#">Other</a>	30
	A. <a href="#">Solicited Gifts</a>	30-31
	B. <a href="#">Organizations / Certifications</a>	31
	C. <a href="#">Professional Societies</a>	31
	D. <a href="#">Continuing Education And Symposiums</a>	31-32

**CARL G. MATTACOLA, PhD, ATC****I. General Information**

Home Address Indigo Farm, 2282 Danville Road, Harrodsburg, KY 40330

Home Phone (859) 734-9700

Office Address Room 210E College of Health Sciences, 900 South Limestone Street, Lexington, KY 40536-0200 Office Phone (859) 323-1100 x 80860

Certificate or Specialty Board Licensure: Year Certified 1990

Board of Certification National Athletic Trainers Association: 02-1922 since 1990 (Nebraska)

Marital Status: Married

Spouse Name: Leslie

**II. Education**

May, 1996                      University of Virginia, Charlottesville, VA  
Doctor of Philosophy, Sports Medicine  
Dissertation: Dynamic Postural Stability following Anterior Cruciate  
Ligament Reconstruction

August, 1991                      University of Virginia, Charlottesville, VA  
Master of Education, NATA Approved Athletic Training Curriculum

May, 1990                      Canisius College, Buffalo, NY  
Bachelor of Science, Physical Education/Athletic Training  
NATA Approved Athletic Training Curriculum

**III. Professional Experiences**

June-July 1996- 1998                      Associate Director: Woodberry Forest School Sports Camp, Woodberry, VA

- Responsible for the care of all participants (ages 10-13), which included organization and administration of daily activities.

### Professional Experiences Cont'd.

- August 1993 – July 1996     Head Athletic Trainer: Woodberry Forest School, Woodberry Forest, VA
- Responsible for the care, prevention, and rehabilitation of the entire student athletic population.
- March 1993 – May 1993     Athletic Trainer: The Foreign Student, Featherstone Productions, Inc., Hampden-Sydney, VA
- Responsible for the care of 40 athletes during football practice and film production.
- August 1991 – May 1993     Head Athletic Trainer: Hampden-Sydney College, Hampden-Sydney, VA
- Responsible for the care and coverage of ten Division III athletic teams  
Including the management and rehabilitation of the general student body.
  - Responsible for budgeting, equipment purchase, and Accident Insurance Coverage.
  - Responsible for the instruction and scheduling of all student athletic trainers.
  - Clinical supervisor of a graduate student in affiliation with the University of Virginia's NATA Approved Athletic Training Curriculum.
- September 1990 – May 1991     Graduate Assistant Athletic Trainer: Hampden-Sydney College, Hampden-Sydney, VA
- Responsibilities included the prevention, management, and rehabilitation of student-athletes, instruction of student athletic trainers, and the shared decision making regarding daily athletic training operations.

### IV. Academic Appointments

- Fall 1999 – Present     Associate Professor: University of Kentucky, Lexington, KY
- College of Health Sciences (CHS)
  - College of Education
  - Division Director, Graduate Athletic Training Education
  - Faculty Associate of the Center for Health Services and Management & Research
  - Full Membership Status as a Graduate Faculty Member: Department of Kinesiology and Health Promotion (February 2002) & Department of Rehabilitation Sciences (April 2002)

**Academic Appointments Cont'd.**

Spring 2005 – July 2006     Acting Associate Dean for Research: University of Kentucky, Lexington, KY (15%)

- CHS Deans Office

Fall 1996 – Spring 1999     Assistant Professor: Temple University, Philadelphia, PA (Full Time)

- Department of Physical Education in the College of Education
- Director, Graduate Athletic Training/Sports Medicine (July 1997)

**V. Hospital or Clinical Appointments- NA****VI. Consulting Activity-**

Department of Health and Human Services: Federal Occupational Health: September 2001 –May 2002

- Consultation of musculoskeletal injuries for Customs Training at the Federal Law Enforcement Training Center (FLETC), Glynco Georgia

**VII. Teaching Experience**

Posturography (KHP 781): University of Kentucky, Lexington, KY Spring 2000

- This course is designed to introduce the student to historical and current concepts in balance testing.

Sports Medicine (KHP 720): University of Kentucky, Lexington, KY Fall 1999

- This course is designed to give an overview of sports medicine and address current issues related to the evaluation and rehabilitation of sport injuries.

Directed Study in Athletic Training (AT 660): University of Kentucky, Lexington, KY Fall 1999

- A specific topic in Athletic Training related to the student's interests is selected for intensive study. Work to be supervised by a graduate faculty member proficient in the area under investigation.

Scientific Inquiry in Athletic Training (AT 670, AT671, AT672, AT673): University of Kentucky, Lexington, KY Fall 1999

- Designed to introduce the student to the research process and special topics in athletic training. Coursework and topics will address the conception and methodological procedures of designing and pursuing research in athletic training. The importance of quality research in athletic training will be stressed and the procedures necessary to begin this process will be introduced.

## Teaching Experience Cont'd.

*Athletic Taping Techniques Special Electives (PT 686 & 686-501):* University of Kentucky, Lexington, KY Fall 1999

- A basic understanding of the anatomy and biomechanics of the application of protective taping is stressed. Restriction and immobilization techniques are described to protect musculotendinous structures and articular joints while providing stability.

*Orthopedics in Athletic Training / Sports Medicine (PE 443):* Temple University, Philadelphia, PA Spring 1998 - May 1999

- This course is designed to address a variety of selected topics related to the evaluation of athletic injuries of orthopedic origin.

*Research in Athletic Training (PE 649):* Temple University, Philadelphia, PA Fall 1997 - May 1999

- The course is designed to introduce the student to research in the discipline of athletic training. The importance of quality research in athletic training will be stressed and the procedures necessary to initiate, conduct, and evaluate research will be introduced. The culmination will be the product of a master's thesis/project.

*Clinical Experience in Athletic Training III: Head, Neck & Spine (PE 243):* Temple University, Philadelphia, PA Fall 1997 – May 1999.

- An examination of the neurological conditions of the head, neck, spine, and trunk including pathology and their care and treatment.

*Human Anatomy and Physiology 1&2 (PE 100 & PE 101):* Temple University, Philadelphia, PA Fall 1996 – May 1999

- Two courses dealing with the anatomical and functional relationships of the human body.

*Seminar I in Athletic Training (PE 247):* Temple University, Philadelphia, PA Fall 1996

- Refinement of musculoskeletal, joint, and isokinetic evaluation skills of the lower extremity.

*Seminar II in Athletic Training (PE 248):* Temple University, Philadelphia, PA Fall 1996

- Refinement of musculoskeletal, joint, and isokinetic evaluation skills of the upper extremity.

*Guest Lecturer, Orthopaedic Basis of Sports Medicine (EDHS 841):* University of Virginia, Charlottesville, VA Spring 1996

- Presented “Functional Assessment of the ACL Reconstructed Patient”

*Instructor of Cadaver Anatomy Laboratory (EDHS 589):* University of Virginia, Charlottesville, VA Summer 1995

- Examination and dissection of the human cadaver emphasizing the musculoskeletal, articular, nervous, and vascular systems as they relate to athletic injury evaluation.

**Teaching Experience Cont'd.**

Instructor of Athletic Injuries Laboratory (EDHS 544): University of Virginia, Charlottesville, VA Fall 1994

- Practical "hands on" experience examining the principles, procedures, and techniques involved in athletic training.

Teaching Assistant, Seminar in Educational Research (EDES 744): University of Virginia, Charlottesville, VA September 1993 - May 1996

- Instruction of research methodology, which involved the procedures of piloting and collecting data, understanding statistical analysis, and the development of a research project in manuscript form.

Teaching Assistant, Research in Athletic Training (EDHS 853): University of Virginia, Charlottesville, VA September 1993 - May 1996

- Instruct and assist in the development of all phases of research design for M.Ed. students, which culminated in research projects in a form acceptable for publication.

Instructor of Physical Education: Farmville Methodist Preschool, Farmville, VA September 1992-May 1993

- Instruction of two, three and four year old classes with emphasis in cooperative interaction and developmental motor patterns.

Affiliated Clinical Supervisor with the University of Virginia: Hampden-Sydney College, Hampden-Sydney, VA August 1991-May 1993

- Evaluated, monitored, and instructed a graduate student from the University of Virginia.

Clinical Supervisor and Instructor for student athletic trainers from Hampden-Sydney College, Lynchburg College and Longwood College: Hampden-Sydney College, Hampden-Sydney, VA August 1991-May 1993

- Responsibilities included daily "hands on" instruction concentrating on injury evaluation and clinical skills.

Student Teacher in Physical Education: Williamsville High School, Williamsville, NY January 1990 - March 1990

- Assisted in the supervision and instruction of 9th through 12th grade physical education classes.
- Responsible for the organization and teaching of team handball and swimming activity units.

Student Teacher in Physical Education: Mount Saint Josephs Elementary School, Buffalo, NY March 1990 - May 1990

- Assisted in the supervision and instruction of pre-school through 7th grade physical education classes.
- Responsible for the lesson development of all classes with emphasis placed on perceptual motor development and overall skill acquisition.

### VIII. Advising Activity

September 2003-2006	Graduate Students – 15 Students
September 2001 – May 2002	Graduate Students – 15 Students
September 2000 – May 2001	Graduate Students – 14 Students
September 1999 – May 2000	Graduate Students – 7 Students
September 1998 – May 1999	Graduate Students – 24 Students
September 1997 – August 1998	Graduate Students – 24 Students
September 1996 – August 1997	Graduate Students – 24 Students

### IX. Administrative Activity and University Service

Acting Associate Dean of Research: College of Health Sciences, University of Kentucky, Lexington, KY January 2005- July 2006

Chair, Search Committee for faculty member in the Division of Athletic Training: College of Health Sciences, University of Kentucky, Lexington, KY June September 2005 - Present

Chair, Search Committee for Associate Dean of Research: College of Health Sciences, University of Kentucky, Lexington, KY June 2004- March 2006

Chair, Search Committee for Assistant/Associate Faculty Position in Division of Athletic Training: College of Health Sciences, University of Kentucky, Lexington, KY September 2005 - Present

Promotion & Tenure Committee: College of Health Sciences, University of Kentucky Lexington, KY June 2003- May 2005

Faculty Review Committee: College of Health Sciences, University of Kentucky Lexington, KY July 2004- January 2005

Faculty Council Member: College of Health Sciences, University of Kentucky Lexington, KY March 2002 – March 2004

Alpha Eta Society President-College of Health Sciences Chapter, University of Kentucky, Lexington, KY September 2003 – May 2005

Alpha Eta Society-Faculty Member: University of Kentucky, Lexington, KY, May 2002 - Present

Department of Clinical Sciences Chair Search Committee: College of Health Sciences, University of Kentucky, Lexington, KY October 2000 – November 2001

Research Advisory Committee: College of Health Sciences, University of Kentucky

Lexington, KY October 1999 – September 2001

Ph.D. Advisory Committee: College of Education, Department of Kinesiology and Health Promotion, University of Kentucky, Lexington, KY December 2000 - Present

Director, Division of Athletic Training CAHP: University of Kentucky, Lexington, KY  
June 1999 – Present

Director, Graduate Athletic Training/Sports Medicine: Temple University, Philadelphia, PA  
September 1997 – May 1999

Academic Retention Committee: November: Temple University, November 1996 - May 1999

Chair, Athletic Training / Anatomy & Physiology Search Committee: Temple University, Philadelphia, PA, September 1997 - May 1998

Graduate Council Committee Member (College of HPERD): Temple University, Philadelphia, PA  
September 1997 - September 1998

Instructional Technology Committee Member: Temple University, September 1996- Present

Physical Health Education Teacher Education Search Committee Member: Temple University,  
November 1996 - May 1997

**X. Special Assignments- NA**

**XI. Specialty Board**

National Athletic Trainers Association- Certified May 25, 1990  
Kentucky Board of Medical Licensure- Certified December 2000

**XII. Honors & Activities**

Recipient to attend the Coalition for Allied Health Leadership, sponsored by the Association of Schools of Allied Health Profession, April 2004- May 2005.

Administrative Intern, Office of the Dean, College of Health Sciences: September 2003 - May 2004

Faculty Sponsor: NATA Graduate Student Scholarship in support of Cale Jacobs June 2003

Faculty Sponsor: NATA Graduate Student Scholarship in support of Stacy Downar June 2003

Faculty Sponsor: NATA Graduate Student Scholarship in support of Mark Rund June 2001

Faculty Sponsor: SEATA Memorial Graduate Scholarship in support of Mark Rund March 2001

Faculty Sponsor: NATA Graduate Student Scholarship in support of Kelly Ramsdell April 2000



Faculty Sponsor: SEATA Memorial Graduate Scholarship in support of Anita Bowman March 2000

Member, Alpha Eta Society: May 2002

Member, Woodford Hounds Hunt Club: 2002, Versailles Kentucky

Member, Cedar Creek Sportsman Club Inc: 2004, Stanford Kentucky

Faculty Sponsor: Ennis W. Cosby Memorial Scholarship in support of Christina Marie Rice

"Excellence in Athletic Training Award" Western New York Surgical Supply May 1990

Student Athletic Trainer: Empire State Games, Syracuse NY August 1988

\*Responsible for assisting in the coverage of Wrestling and management of dormitory based first aid station.

Student Athletic Trainer: National Basketball Association, Memorial Auditorium, Buffalo NY October 1989

\*Responsible for assisting the head athletic trainer of the Cleveland Cavaliers.

Canisius College Football Team: Division III, Canisius College, Buffalo, NY 1986-1989

Canisius College Rugby Team: Club Team, Canisius College, Buffalo, NY 1988

### **XIII. Professional Activity & Public Service**

Editor of the Journal of Sport Rehabilitation: Housed at the University of Kentucky. July 2006 – Present

Member of the National Athletic Trainers' Association Education Council: July 2006 - Present

National Athletic Trainers Association(NATA) Liaison to the Association of Schools of Allied Health Professions(ASAHP): December 2003- to Present

Member of the Editorial Board, Journal of Athletic Training: January, 2001 –

Column Editor, Athletic Therapy Today, Column Title: *Clinical Evaluation and Assessment*: October 2002 - Present

Co-Chair Southeast Athletic Trainers Association (SEATA) Research and Education Committee: June 2002 - Present

Chair: NATA Post-Professional Review Committee. October 2002 – July 2006.

**Professional Activity & Public Service Cont'd.**

Post-Certification NATA Graduate Athletic Training Program Accreditation Site Reviewer: NATA Graduate Review Committee. September 2001 – Present.

Guest Manuscript Assessor: British Journal of Sports Medicine, November 2001- Present

Research Grant Reviewer: Chandler Medical Center, University of Kentucky, Lexington, KY, April, 2000 – Present

Member of the Advisory Board to the Equine Therapy Program at Midway College: Midway, KY, June 2000 – July 2005

Moderator for Research & Case Studies: A Panel Discussion: UK Annual Sports Medicine Symposium, Lexington, KY, May 19-20, 2001

Moderator for Free Communications Presentations: NATA Annual Meeting and Clinical Symposium: Los Angeles, CA, June 20, 2001

Moderator for Free Communications Presentations: NATA Annual Meeting and Clinical Symposium: Nashville, TN, June 30, 2000

Media Reviewer, Slack Publications Inc.: April 2000

Research Grant Reviewer: SEATA Research & Education Committee, February, 2000 – Present

Moderator for Mini Course & Free Communications Presentations: NATA Annual Meeting and Clinical Symposium: Kansas City, MO, June 17-18, 1999

Evaluator of Poster Presentations: NATA Annual Meeting and Clinical Symposium: Kansas City, MO, June 17-18, 1999

Graduate Review Committee (GRC) of the NATA: September 1998 – July 2006

Guest Reviewer: Journal of Athletic Training, September 1998 – January 2001

Board of Directors: Bellwood Hunt Club, May 1998 - July 1999

Moderator for Free Communications Presentations: NATA Annual Meeting and Clinical Symposium: Baltimore, MD, June 18, 1998

Guest Reviewer: Journal of Sport Rehabilitation, September 1997 - Present

Research Grant Reviewer: NATA Research & Education Foundation, April 1997 - Present

**Professional Activity & Public Service Cont'd.**

Abstract Reviewer: NATA Research & Education Foundation Free Communications. January 1996 - Present

Co-Owner, moderator: Sport Science List-proc, January 1996 - September 1997

Student At Large: Athletic Training Research and Education Society, June 1995 - August 1996

University of Virginia Athletic Training/Sports Medicine Program: Developed and maintained a World Wide Web (WWW) site. January 1995 - May 1996

#### **XIV. Speaking Engagements & Invited Presentations**

Interview with Channel 3 with Lesli James-Place: The Profession of Athletic Training. Lexington, KY November 30, 2005, December 2005

National Athletic Trainers Association Annual Meeting and Symposium: “The role of the Foot on Postural Control” Indianapolis, IN, June 10, 2005.

Rehabilitation Sciences Doctoral Program Spring Colloquium: “Good Clinical Practice: Creating a System for Clinical Investigations,” Lexington KY, April 22, 2005.

Southeast Athletic Trainers Association Symposium: “Balancing Life and Work: Keys to Increasing Productivity,” Atlanta GA, March 25, 2005.

Georgia Sports Medicine and Rehabilitation Services Annual Sports Medicine Seminar: “Conservative Management of Ankle Instability” Tifton, Georgia, June 26, 2004.

National Athletic Trainers Association Annual Meeting and Symposium: “Rehabilitation of Lateral Ankle Instability” St. Louis Missouri, June 24, 2003.

Visiting Lecture Series Sponsored by: UNC-CH Sports Medicine Research Laboratory, Department of Exercise and Sport Science, and The Human Movement Science Program “Lower Extremity Joint Stability: Current Research Trends & Clinical Applications”: University of North Carolina, Chapel Hill, NC, February 21, 2003

UNC SPORTS MEDICINE CONFERENCE: “Hand Held Dynamometry-Clinical Uses” University of North Carolina, Chapel Hill, NC, February 22, 2003

4<sup>th</sup> Annual UK Wildcat Sports Medicine Symposium: “Conservative Management of Ankle Instability”, The University of Kentucky, Lexington, KY, May 17 & 18, 2002

Penn State Athletic Training Conference: “Conservative Management of Ankle Instability”, The Pennsylvania State University, State College, Pennsylvania, April 12 & 13, 2002.

**XIV Speaking Engagements & Invited Presentations Cont'd.**

Southeast Athletic Trainers Association Symposium: “From the Field to Publication: Use of Scientific Methods in the Athletic Training Room,” Atlanta GA, March 25, 2001.

Center for Biomedical Engineering, Wenner-Gren Research Laboratory: “Functional Considerations Following ACL Surgery & Rehabilitation,” Lexington, KY, February 2001

CLS 895-001 Advanced Topics in Clinical Laboratory Science: “Research Data Analysis,” University of Kentucky, Lexington, KY, May 22, 2001

University of Kentucky Department of Athletics: “Manual Muscle Testing of the Lower Extremity,” Lexington, KY October 26, 2000

Interview with Jerry Sanders, Channel 27: “Graduate Athletic Training at the University of Kentucky,” Lexington, KY January 28, 2000

Interview with Anthony Ridgeway, WVLK-AM: “Nutritional and Exercise Considerations Following the Holidays”, Lexington, KY January 5, 2000

Central Baptist Hospital & Kentucky Sports Medicine 12<sup>th</sup> Annual Fall Sports Symposium: “Graduate Athletic Training Education” Lexington, KY November 19, 1999

Kentucky Clinic Division of Sports Medicine: “Single-Subject Research” Lexington, KY October 21, 1999

West Chester University Sports Medicine Conference: “Proprioception & its Functional Considerations” West Chester, PA April 19, 1998

Eastern Athletic Trainers Association Annual Meeting & Symposium: “Single-Subject Research”, Buffalo, NY January 3-6, 1998

Instructor of Nutrition : Hampden-Sydney College, Hampden-Sydney, VA  
November-December 1992

- The seminar involved fuel for the athlete, unhealthy diet practices and ergogenic aids.

Curry School of Education, University of Virginia: “Introduction to bibliographic databases in education” Charlottesville, VA September 7, 1995 & January 31, 1996

Instructor of Fitness/Nutrition : Hampden-Sydney College, Hampden-Sydney, VA  
April 1993

- The seminar consisted of misconceptions in nutrition and body fat assessment.

## XV. SCHOLARSHIP

### A. Refereed Journal Publications:

\*Note: Underline and Italics = student for whom I mentored

1. Hosey,R.G., Mattacola,C.G., Kriss,V.M., Armsey,T., Quarles,J.D., Jagger,J. Ultrasound Assessment of Spleen Size in Collegiate Athletes. *Br J Sports Med* 2006;**40**:3:251-254
2. Harkins, K.M., Mattacola, C.G., Uhl, T.L., McCrory, J.L., Malone,T.R. Effects of two ankle fatigue models on the duration of postural stability dysfunction. *Journal of Athletic Training*. 40:13, 191 – 195, 2005.
3. Jacobs,C., Mattacola, C.G. [Gender Comparison of Eccentric Hip Abductor Strength and Knee Joint Kinematics when Landing from a Jump.](#) *Journal of Sport Rehabilitation*. 14:346-355, 2005.
4. DiMattia MA, Livengood AL, Uhl TL, **Mattacola CG**, Malone TR. [What are the validity of the Single-Leg Squat Test and its Relationship to Hip Abduction Strength.](#) *Journal of Sport Rehabilitation*, 14:2; 108 - 123, 2005.
5. Wise MB, Uhl TL, **Mattacola CG**, Nitz AJ, Kibler WB. Shoulder Musculature Activation during supported and unsupported active range of motion upper extremity exercises. *Journal of Shoulder and Elbow Surgeons*. 13: 614-620, 2004.
6. **Mattacola,C.G.**, Jacobs,C.A., Rund,M.A., D.L. Johnson, D.L. Functional Assessment Using The Step-Up-And-Over Test And Forward Lunge Following ACL Reconstruction *Orthopedics*, 27:6 602-608, 2004.
7. Miller, T.L., Santiago, M.C., **Mattacola, C.G.** Influence of varied, controlled distances from the crank axis on peak physiological responses during arm crank ergometry. *Journal of Exercise Physiology Online* 7(3):61-67, 2004.
8. Ramsi,M., Swanik,K.A., Swanik,C.B., Straub,S., **Mattacola,C.G.** Shoulder-Rotator Strength of High School Swimmers Over the Course of a Competitive Season. *Journal of Sport Rehabilitation*. 13: 9-18, 2004.
9. Dolan,M.G., Mychaskiw,A.M., **Mattacola,C.G.**, Mendel,F.C. Effects of cool water immersion and high voltage electrical stimulation for three continuous hours on edema formation in rats. *Journal of Athletic Training*, 38:325-329, 2004.
10. Brindle,T.J., Mattacola,C.G., McCrory,J.L. Electromyographic Comparison Between Subjects Ascending and Descending Stairs With and Without Anterior Knee Pain. *Knee Surgery Sports Traumatology Arthroscopy*. 11:244-251, 2003.
11. Sawyer PC, Uhl TL, **Mattacola CG**, Johnson DL, Yates JW. The Effect of Moist Heat on Hamstring Flexibility and Muscle Temperature. *The Journal of Strength and Conditioning Research*. 2003 May; 17(2): 285-90.

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**Refereed Journal Publications Cont'd**

\*Note: Underline and Italics = student for whom I mentored.

13. Hosey, R.G., **Mattacola, C.G.**, Shapiro, R. Real-Time Video Analysis of Head-First and Feet-First Sliding Techniques in Collegiate Baseball Players. *Clinical Journal of Sports Medicine*. Jul;13(4):242-4, 2003.
14. Uhl T.L., Carver T.J., **Mattacola C.G.**, Mair S.D., Nitz A.J. Shoulder musculature activation during closed chain upper extremity exercise. *Journal of Orthopaedic & Sports Physical Therapy*, 33:109-117, 2003.
15. Wall, S.P., **Mattacola, C.G.**, Levenstein, S, Swanik, C.B. Actigraph as a tool for monitoring training-induced distress in athletes. *Journal of Sport Rehabilitation*, 12:1-12, 2003.
16. **Mattacola, C.G.**, Dwyer, M.K. Rehabilitation of the ankle after acute injury or chronic instability, *Journal of Athletic Training*. 37:413-429, 2002.
17. **Mattacola, C.G.**, Perrin, D.H., Gansneder B.M., Gieck J.H., Saliba E.N., McCue F.C. Strength, functional outcome, and postural stability after anterior cruciate reconstruction. *Journal of Athletic Training*. 37: 262-268, 2002.
18. Lenn, J., Uhl, T., **Mattacola, C.G.**, Yates, J.W., Boissonneault, G.A., Wissam, I., Bruckner, G.G. Effects of fish oil and isoflavones on Delayed Onset Muscle Soreness (DOMS). *Medicine and Science Sports & Exercise*. 34(10): 1605-1613, 2002.
19. Uhl T.L., **Mattacola C.G.**, Johnson, D.L. Clinical assessment and rehabilitation of shoulder and knee sensorimotor control. *Orthopedics* 25(1):75-78, 2002
20. Tierney R.T., **Mattacola C.G.**, Sitler M.R., Maldjian C. Head position and football equipment influence cervical spinal cord space during immobilization.. *Journal of Athletic Training*. 37:185-189, 2002.
21. Tierney, R.T., Maldjian, C., **Mattacola, C.G.**, Straub, S.J., Sitler, M.R. Comparison of cervical spine stenosis measures in normal subjects. *Journal of Athletic Training*. 37:190-193, 2002.
22. Allen, A.D., Sitler, M.R., Marchetto, P., Kelly, J., **Mattacola, C.G.** Assessment of the arthroscopic semitendinosus/gracilis autograft procedure with interference screw fixation for reconstruction of the anterior cruciate ligament. *Orthopaedics*. 24:347-353, 2001.
23. Wolfe, M., Uhl, T.L., **Mattacola, C.G.**, McCluskey, L. Management of ankle sprains and indications for referral. *American Family Physician*. 63:93-104, 2001.
24. Hals, T., Sitler, M.R., **Mattacola, C.G.** Effect of a semi-rigid prophylactic ankle stabilizer on performance in post-acute, functionally impaired ankle sprain subjects. *Journal of Orthopaedic & Sport Physical Therapy*. 30:552-556, 2000.

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\*Note: Underline and Italics = student for whom I mentored.

25. Campenella, B.J., **Mattacola, C.G.**, Kimura, I.F. Effect of visual feedback and verbal encouragement on concentric quadriceps and hamstrings peak torque of males and females. *Isokinetics and Exercise Science*. 8: 1-6, 2000.
26. Ochsendorf, D.T., **Mattacola, C.G.**, Arnold, B.L. Effect of orthotics on postural sway following planter flexor and dorsiflexor fatigue. *Journal of Athletic Training* 35: 26-30, 2000
27. Allen, J.D., **Mattacola, C.G.**, Perrin, D.H. Effect of microcurrent stimulation on delayed onset muscle soreness. *Journal of Athletic Training*. 34: 334-337, 1999.
28. Arnold, B.L., Gansneder, B.M., VanLunen, B.L., Szczerba, J.E., **Mattacola, C.G.**, Perrin, D.H. Importance of selected athletic trainer employment characteristics in collegiate, sports medicine clinic, and high school settings. *Journal of Athletic Training*. 33: 254-258, 1998.
29. **Mattacola, C.G.**, Lloyd, J.W. Effects of a 6-week strength and proprioception training program on measures of dynamic balance: a single-case design. *Journal of Athletic Training* 32: 127-135, 1997.
30. **Mattacola, C.G.**, Perrin, D.H., Gansneder, B.M., Allen, J.D., Mickey, C.A. A comparison of visual analog scale and graphic rating scales for pain intensity following delayed onset muscle soreness. *Journal of Sport Rehabilitation*. 6: 38-46, 1997.
31. Arnold, B.L., VanLunen, B.L., Gansneder, B.M., Szczerba, J.E., **Mattacola, C.G.**, Perrin, D.H. Characteristics associated with athletic training employment and salaries. *Journal of Athletic Training* 31: 215-218, 1996.
32. **Mattacola, C.G.**, Lebsack, D.A., Perrin, D.H. Intertester reliability of assessing postural sway using the chattecx balance system. *Journal of Athletic Training* 30: 237-242, 1995.
33. Kaminski, T.W., Perrin, D.H., **Mattacola, C.G.**, Szczerba, J.E., Bernier, J.N. The reliability and validity of ankle inversion and eversion torque measurements from the kin com II isokinetic dynamometer. *Journal of Sport Rehabilitation*. 4: 210-218, 1995.
34. **Mattacola, C.G.**, Perrin, D.H. Effects of cold water submersion on isokinetic strength of the plantar flexors. *Isokinetics and Exercise Science*. 3: 152-154, 1993.

**B. Non-Refereed Journal Publications**

1. Harrison, AD., **Mattacola, CG.** Neuromechanical Approach to Patellofemoral Pain Syndrome, Part 2: Young Athletes. *Athletic Therapy Today*, 10:5, 65-66, 2005.
2. Downar, S.J., **Mattacola, C.G.** Isometric Muscle-Force Measurements Obtained by Handheld Dynamometry. *Athletic Therapy Today*, 8:4;38-40, 2003.

3. **Mattacola, C.G.** Introduction to Clinical Evaluation & Testing. *Athletic Therapy Today*, 8:2;24-25, 2003.
4. **Mattacola, C.G.** Higgins, C.W. Management of talus fractures. *Athletic Therapy Today*, 7:32-33, 2002.
5. **Mattacola, C.G.**, Mattacola, G.A. Confidentiality in athletic therapy: The legal perspective. *Athletic Therapy Today*. 4: 13-14, 1999.

### **C. Refereed Journal Publications ( In Review):**

*McGinn, P.A., Mattacola, C.G., Shapiro, R. Malone, T.R., Johnson, D.L.* Six weeks of supervised strength training has no effect on landing kinematics in female basketball players. *Journal of Athletic Training*, In Review.

Lanning, C., Uhl, T.L., Ingram, C., **Mattacola, C.G.**, English, T. Normative Values of Trunk and Hip Strength in Collegiate Athletes. *Journal of Athletic Training*, In Review.

*Jacobs C, Mattacola CG, Uhl TL, Shapiro R, Rayens WS.* Influence of hip abductor strength and endurance on lower extremity landing kinematics. *Journal of Athletic Training*, In Review.

Jacobs, C., Uhl, T.L., Mattacola, C.G., Shapiro, R., Rayens, W.S. Trend Analysis of EMG median frequency during fatiguing exercise of the gluteus medius muscle. *Journal of Electromyography and Kinesiology*.

Bolgia, L.A., Uhl, T.L., Mattacola, C.G., Malone, T.R., Mair, S., Wright, R., Smith, B.T. The Effect of a Simulated Knee effusion on quadriceps function: Implications for Rehabilitation. *Journal of Athletic Training*, In Review

**Mattacola, C.G.**, Dwyer, M.K., Miller, A.K., Uhl, T.L., McCrory, J.L., Malone, T.R. Effect of orthotics on postural stability over a six week acclimation period. *Archives of Physical Medicine and Rehabilitation*. In Review.

### **D. Published Refereed Abstracts/Presentations:**

\*Note: Underline and Italics = student for whom I mentored.

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1. Jacobs, C., Mattacola, C.G., Uhl, T.L., Shapiro, R., Rayens, WS. Hip Abductor Function Influences Kinematics of Landing. ACL Retreat, Lexington, KY April 2006.
2. McGinn, PA, Mattacola, CG, Malone, TR, Johnson, DL, Shapiro, R. Strength training for 6-weeks does not significantly alter landing mechanics of female collegiate basketball athletes. ACL Retreat, Lexington, KY April 2006.



3. LaFalce, JL, Mattacola, C.G., Uhl, T.L., Nitz, AJ. The Contribution of Anterior/Posterior and Medial/lateral Center of Pressure to Equilibrium Score: A Report of Balance Assessment Measures. *Journal of Athletic Training*. 41(2):S53, 2006.
4. Yochem EM, Tripp BL, Uhl TL, Mattacola CG, Shapiro, RL. Recovery of Multijoint Position Sense Acuity in Overhead-throwing Athletes After a Functional Fatigue Protocol. *Journal of Athletic Training*. 41(2):S20, 2006.
5. Briggs DJ, Mattacola CG, Uhl TL, Nitz AJ. Comparison of Navicular Drop Versus an Arch Height Index in Classifying the Foot. *Journal of Athletic Training*. 41(2):S17, 2006.
6. McGinn, PA, Mattacola, CG, Malone, TR, Johnson, DL, Shapiro, R. Strength training for 6-weeks does not significantly alter landing mechanics of female collegiate basketball athletes. *Journal of Athletic Training*. In Review 2006.
7. Tripp BL, Yochem EM, Uhl TL, Mattacola CG, Shapiro R. Functional Fatigue Decreases Upper-extremity Position Reproduction Acuity in Overhead-throwing Athletes. *Journal of Athletic Training*. 41(2):S20, 2006.
8. Sebert JE, Mattacola CG, Uhl TL. Diffuse Shoulder Pain in a Collegiate Swimmer. *Journal of Athletic Training*. 41(2):S77, 2006. .
9. Keskula, D., Mattacola,C.G., Hirt,J. Hubble,W. Development of a Grassroots Effort for Allied Health Students Involvement in the Legislative Process. Association of Allied Health Professions Conference, October 20, 2005, Houston Texas.
10. Mattacola, CG, Mulvihill, CP, Uhl, TL, Nitz, AJ. Muscular Contributions Of The Anterior And Posterior Tibialis, Gastrocnemius, And Fibularis Longus With And Without Orthotics During Bilateral Stance *J Orthop Sports Phys Ther* . 35:5, A26, 2005
11. Stanley OP, Jacobs C, Mattacola CG, Uhl TL, Johnson DL. Hip abduction and adduction strength of injured and healthy collegiate football athletes. *Journal of Athletic Training*, 40:2,S73, 2005.
12. Lanning CL, Uhl TL, Ingram, C, Newsom, S, Mattacola CG, English T. Comparison of Core Strength and Injuries in Collegiate Athletes. *Journal of Athletic Training*, 40:2, S65, 2005.
13. Jacobs C, Mattacola CG, Uhl TL, Shapiro R, Rayens WS. Relationship of hip abductor strength and endurance with the kinematics of landing. *Journal of Athletic Training*, 40:2, S65, 2005.
14. Tripp BL, Uhl TL, Mattacola CG, Srinivasan S, Shapiro R. Functional Multijoint Position Reproduction Acuity in Overhead-throwing Athletes. *Journal of Athletic Training*, 40:2,S91 , 2005.
15. Boling MC, Bolgla LA, Mattacola CG, Uhl TL, Hosey RG. Rehabilitation alters VL and VMO recruitment, decreases pain, and increases function in patients with patellofemoral pain syndrome. *Journal of Athletic Training*, 40:2, S43, 2005.

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\*Note: Underline and Italics = student for whom I mentored.

16. Downar SJ, Mattacola CG, Uhl TL, Malone TR. Isometric Muscle Force Measurements Obtained by Hand-held Dynamometry and Strength Relationships Among Athletes Aged 14 to 22. *Journal of Athletic Training*, 40:2, S65, 2005.
17. Kuschinsky N, Uhl TL, Sciascia A, Mair S, Nitz AJ, Mattacola CG, Muscle Activity Comparison of Four Common Shoulder Exercises in Unstable and Stable Shoulders. *Journal of Shoulder and Elbow Surgery* 13(5):E1-2, 2004
18. Hosey,R.G., Quarles,J.D., Kriss,V.M., Mattacola,C.G. Spleen size in athletes - a comparison of BMI, gender, race, and past history of mononucleosis. *Medicine & Science in Sports & Exercise*, 36:5, S-312, 2004.
19. Jacobs,C., Mattacola, C.G. Eccentric Hip Strength And Kinematic Differences Between The Dominant And Non-Dominant Legs Of Men And Women During A Hoping Task. *Journal of Athletic Training*, 39:2, S-34, 2004.
20. Mulvihill CP, Mattacola CG, Nitz AJ, Uhl TL. Effect Of Orthotics On Balance And The Muscle Activity Of Selected Leg Muscles During Bilateral Stance. *Journal of Athletic Training*, 39:2, S-39, 2004.
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22. Tymkew JA, Jacobs C, Mattacola CG, Uhl TL, Malone TR. Isokinetic and Functional Fatigue Protocols have Similar Effects on Balance. *Journal of Athletic Training*, 39:2, S-114, 2004.
23. Kelly JJ, Mattacola CG, Uhl TL, Johnson DL, Madaleno JA. A Study of the Relationship Between Postural Sway, Navicular Drop, and Ankle Strength in Division I Football Players. *Journal of Athletic Training*, 39:2, S-39, 2004.
24. McGinn, PA, Mattacola, CG, Shapiro, RL, Malone TR, Johnson, DL. Landing Kinematics of Collegiate Women's Basketball Athletes Correlate with Isokinetic Peak Torque Values. *Journal of Athletic Training*, 39:2, S-31, 2004.
25. Kuschinsky N, Uhl TL, Sciascia A, Mair S, Nitz AJ, Mattacola CG. Muscle Activity Comparison of Four Common Shoulder Exercises in Unstable and Stable Shoulders. First International Congress of Shoulder Therapists, Washington, D.C.
26. Mychaskiw AM, Dolan MG, Mendel FC, Mattacola CG: Effects of Cool Water Immersions and High Voltage Electrical Stimulation for Three Continuous Hours on Acute Edema Formation Following Impact Injuries to Rats. *Journal of Athletic Training*, 38:2, S-92, 2003.

**Published Refereed Abstracts/Presentations Cont'd.**

\*Note: Underline and Italics = student for whom I mentored.

27. Livengood LW, Swanik CB, Mattacola CG: Effect of Body Position and Activity Level on the Eccentric Strength of the Shoulder While Performing the PNF D2 Extension Pattern. *Journal of Athletic Training*, 38:2, S-86, 2003.
28. Roller SJ, Livengood AL, Mattacola CG, Uhl TL, Malone TR. Effect Of Prophylactic Ankle Bracing On Postural Control And EMG Of Lower Extremity And Trunk Muscles. *Journal of Athletic Training*, 38:2, S-89, 2003.
29. Silvestri PG, Mattacola CG, Madaleno JA, Johnson DL, Uhl TL. Relationship Between Mechanical Foot Position and Postural Sway. *Journal of Athletic Training*, 38:2, S-52, 2003.
30. Haggerty MC, Uhl TL, Mattacola CG, Shapiro R. Neuromuscular Control Patterns And Strength Of Overhead Athletes And Control Subjects. *Journal of Athletic Training*, 38:2, S-71, 2003.
31. Gecewich BD, Uhl TL, Tripp BL, Shapiro R, Mattacola CG, Kibler WB. Reliability Of Bilateral Scapular Motion Using A Three-Dimensional Electromagnetic Device. *Journal of Athletic Training*, 38:2, S-10, 2003.
32. Mattocks H, Uhl TL, Mattacola CG, Shapiro R, Dome D, Kibler WB. Inter- And Intratester Reliability For A Qualitative Dynamic Observation Method For Scapular Dyskinesis. *Journal of Athletic Training*, S-9, 38:2, 2003.
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34. Brajuha D.A., Nitz A.J., Uhl T.L., Mattacola C.G. EMG analysis of 4 muscles during 3 prescribed core stabilization exercises. *J Orth Sport Phy Ther* 33(2):A7, 2003.
35. Sciascia, A.D., Uhl, T.L., **Mattacola, C.G.**, Nitz,A.J., McCrory, J. & Mair, S.D. Muscle activity comparison of four common shoulder exercises in unstable and stable shoulders. *American Academy of Orthopaedic Surgeons*, 2002.
36. Baker, J.K., **Mattacola, C.G.**, McCrory, J.L., Uhl, T.L., Malone, T.R., Livengood, A.L. Effect of ankle bracing on postural sway during single limb landing from a controlled height. *Journal of Athletic Training*, 37:2, S-26, 2002.
37. Gahan, E.W., **Mattacola, C.G.**, Uhl, T.L., Malone, T.R. Relationship between isokinetic quadriceps and hamstring strength to lower extremity functional tests. *Journal of Athletic Training*, 37:2; S-97, 2002.
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**Published Refereed Abstracts/Presentations Cont'd.**

\*Note: Underline and Italics = student for whom I mentored.

39. McGinn, P.A., Weimar, W.H., **Mattacola, C.G.**, Rudisill, M.E. Dynamic balance of injured division I collegiate athletes on two different surfaces. *Journal of Athletic Training*, 37:2, S-98, 2002.
40. Rankin, C.A., **Mattacola, C.G.**, McCrory, J.L., Uhl, T.L., Malone, T.R. Effect of prophylactic ankle support on muscle latency when landing from a height. *Journal of Athletic Training*, 37:2, S-27, 2002.
41. Sawyer, P., Uhl, T.L., Yates, J.W., **Mattacola, C.G.**, Johnson, D.L. Effects of muscle temperature on hamstring flexibility. *Journal of Athletic Training*, 37:2, S-103, 2002.
42. Hosey, R.G., **Mattacola, C.G.**, Shapiro, R. Real-time video analysis of head-first and feet-first sliding techniques in collegiate baseball players. *Medicine & Science in Sports & Exercise*, 34:5, S-173, 2002.
43. **Mattacola, C.G.**, Rund, M.A., McGinn, P.A., Johnson, D.L. Functional assessment using the step-up-and-over test and forward lunge following ACL reconstruction. *Medicine & Science in Sports & Exercise*, 34:5, S-99, 2002.
44. Uhl TL, Wise MB, **Mattacola CG**, Nitz AJ, Kibler WB. *Electromyographical Comparison of Open and Closed Chain Shoulder Exercises*. American Academy of Orthopaedic Surgeons - Specialty Day for American Shoulder and Elbow Surgeons, Dallas TX
45. Allen, J.D., **Mattacola, C.G.**, Perrin, D.H. Effect of microcurrent stimulation on delayed onset muscle soreness. *The Year Book of Chiropractic*, 2001 Edition, p 19.
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47. Cesarin, T.M., **Mattacola, C.G.**, Sitler, M.R. Efficacy of six weeks of water vs. land training on vertical jump height. *Journal of Athletic Training*, 36:2; S-57, 2001.
48. DiCostanza, K., Straub, S.J., **Mattacola, C.G.**, Sitler, M.R. Effect of adhesive medial longitudinal arch support on postural sway. *Journal of Athletic Training*, 36:2; S-66, 2001.
49. Ramsi, M., Swanik, K.A., **Mattacola, C.G.**, Swanik, C.B. Isometric shoulder rotator strength characteristics of high school swimmers throughout a competitive swim season. *Journal of Athletic Training*, 36:2; S-53, 2001.
50. Robbins, S., Sitler, M., Mucker, J., **Mattacola, C.G.** Volumetric assessment of a prophylactic ankle brace's effect on exercise induced distal lower extremity edema. *Journal of Athletic Training*, 36:2; S-86, 2001.

51. Uhl, T.L., Wise, M.B., **Mattacola, C.G.**, Nitz, A.J. Electromyographical differences between slow and fast closed and open chain shoulder exercises. *Journal of Athletic Training*, 36:2; S-41, 2001.

**Published Refereed Abstracts/Presentations Cont'd.**

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52. Tierney, R.T., Maldjian, C., **Mattacola, C.G.**, Straub, S.J., Sitler, M.R. Comparison of cervical spine stenosis measures in normal subjects. *Journal of Athletic Training*, 36:2; S-71, 2001.
53. Miller, A.K., **Mattacola, C.G.**, Uhl, T.L., McCrory, J.L., Malone, T.R. Effect of orthotics on postural stability over a six week acclimation period. *Journal of Athletic Training*, 36:2; S-67, 2001.
54. Ramsdell, K.M., **Mattacola, C.G.**, Uhl, T.L., McCrory, J.L., Malone, T.R. Effects of two ankle fatigue models on the duration of postural stability dysfunction. *Journal of Athletic Training*, 36:2; S-33, 2001.
55. Rund, M.R., **Mattacola, C.G.**, Uhl, T.L., McCrory, J.L., Malone, T.R., Johnson, D.J. Stabilization times of the lower extremity following ACL reconstruction using two sub-maximal single-leg hop protocols. *Journal of Athletic Training*, 36:2; S-12, 2001.
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57. Carver, T.J., Uhl, T.L., **Mattacola, C.G.**, Nitz, A.J., Mair, S.M. Examination of electromyographic activity of shoulder girdle musculature while progressively increasing glenohumeral axial Compression *Journal of Athletic Training*, 36:2; S-41, 2001.
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59. Madaleno J.A., **Mattacola C.G.**, Johnson D.J., James C.B. Anterior thigh pain in a Division I football player. *Journal of Athletic Training*, 35:2; S-81, 2000.
60. **Mattacola C.G.**, Perrin D.H., Gansneder B.M. Methodological considerations when assessing lower extremity function with a single-leg hop for distance test. *Journal of Athletic Training*, 35:2; S-43, 2000.
61. Tierney R.T., **Mattacola C.G.**, Sitler M.R., Maldjian C. Effect of head position and football equipment on cervical spinal cord space. *Journal of Athletic Training*, 35:2; S-32, 2000.
62. Greco, J., **Mattacola, C.G.**, Sitler M.R. Relationships among a standardized measure for concussion, postural stability, and function in non-injured athletes. *Journal of Athletic Training*, 35:2; S-61, 2000.
63. Allen, A., Sitler, M.R., Marchetto, P., Kelly, J., **Mattacola, C.G.** Effects of endoscopic hamstring reconstruction to repair the ACL of the knee. *Journal of Athletic Training*, 34:2; S-26, 1999.

64. Campenella, B.J., **Mattacola, C.G.**, Kimura, I.F., Cleary, M.A. Effect of visual feedback and verbal encouragement on concentric quadriceps and hamstrings peak torque of males and females. *Journal of Athletic Training*, 34:2; S-26, 1999.

#### **Published Refereed Abstracts/Presentations Cont'd.**

\*Note: Underline and Italics = student for whom I mentored.

65. Gatto, J., Kimura, I.F., Gullick, D., **Mattacola, C.G.**, Sitler, M.R., Kendrick, Z. Effect of beam nonuniformity ratio of three ultrasound machines on tissue phantom temperature. *Journal of Athletic Training*, 34:2; S-69, 1999.
66. Huggard, C.P., Kimura, I.F., **Mattacola, C.G.**, Kendrick, Z.V., Gulick, D., Straub, S.J. Clinical efficacy of dexamethasone iontophoresis in the treatment of patellar tendinitis in collegiate athletes: A double-blind study. *Journal of Athletic Training*, 34:2; S-70, 1999.
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69. Graybash, L.A., Kimura, I.F., **Mattacola, C.G.**, Kendrick, Z.V. Effects of the strength® shoe and plyometric drills on power, strength, speed, and agility of college-aged female volleyball players. *Journal of Athletic Training*, 33:2; S-73, 1998.
70. Hals, T., Sitler, M.R., **Mattacola, C.G.** Effect of a semi-rigid prophylactic ankle stabilizer on performance in post-acute, functionally impaired ankle sprain subjects. *Journal of Athletic Training*, 33:2; S-38, 1998.
71. Shorty, M.B., Kimura, I.F., **Mattacola, C.G.**, Kendrick, Z.V. Double blind clinical efficacy study of dexamethasone iontophoresis on perceived pain and decreased function associated with symptomatic tendinitis. *Journal of Athletic Training*, 33:2; S-68, 1998.
72. Winslow K.A., **Mattacola, C.G.**, Sitler, M.R., Kimura, I.F. Intratester reliability assessing postural stability on the biodex stability system. *Journal of Athletic Training*, 33:2; S-41, 1998.
73. **Mattacola, C.G.**, Perrin, D.H., Gansneder, B.M., Gieck J.H., Saliba E.N., McCue F.C. Dynamic postural stability following anterior cruciate ligament reconstruction. *Journal of Athletic Training*, 32:2; S-9, 1997.
74. Ochsendorf, D.T., **Mattacola, C.G.**, Arnold, B.L. Effect of orthotics on postural sway following planter flexor and dorsiflexor fatigue. *Journal of Athletic Training*, 32:2; S-25, 1997.

75. Watson, D.J., **Mattacola, C.G.**, Perrin, D.H. Effect of a lace-up ankle brace on postural sway, peak torque and total work after a five-week training period. *Journal of Athletic Training*, 32:2; S-39, 1997.
76. **Mattacola, C.G.**, Perrin, D.H., Gansneder, B.M., Allen, J.D., Mickey, C.A. A comparison of visual analog scale and verbal rating scales for pain intensity following delayed onset muscle soreness. *Journal of Athletic Training*, 31:2; S-36, 1996.
- Published Refereed Abstracts/Presentations Cont'd.**
- \*Note: Underline and Italics = student for whom I mentored.
77. Allen, J.D., **Mattacola, C.G.**, Perrin, D.H. Effect of microcurrent stimulation on delayed onset muscle soreness. *Journal of Athletic Training*, 31:2; S-37, 1996.
78. Arnold, B.L., VanLunen, B.L., **Mattacola, C.G.**, Szczerba, J.E., Gansneder, B.G., Perrin, D.H. Characteristics of recently hired athletic trainers: common characteristics and their association to the practice setting. *Journal of Athletic Training*, 31:2; S-45, 1996.
79. Gansneder, B.M., VanLunen, B.L., Arnold, B.L., **Mattacola, C.G.**, Szczerba, J.E., Perrin, D.H. Characteristics of recently hired athletic trainers: what characteristics are most important? *Journal of Athletic Training*; 31:2; S-39, 1996.
80. McGuire, B.A., **Mattacola, C.G.**, Perrin, D.H. Effect of closed chain induced fatigue of the hip and knee extensors on postural sway. *Journal of Athletic Training*; 30:2; S-32, 1995.

### **REGIONAL:**

1. Stanley OS, Jacobs C, Mattacola CG, Uhl TL, Johnson DL. Hip abduction and adduction strength of injured and healthy collegiate football athletes. *Southeast Athletic Trainers Association Annual Meeting*, March 2005
2. Jacobs C, Mattacola CG, Uhl TL, Shapiro R, Rayens WS. Relationship of hip abductor strength and endurance with the kinematics of landing. *Southeast Athletic Trainers Association Annual Meeting*, March 2005.
3. Tripp BL, Uhl TL, Mattacola CG, Srinivasan S, Shapiro R. Functional Multijoint Position Reproduction Acuity in Overhead-throwing Athletes *Southeast Athletic Trainers Association Annual Meeting*, March 2005
4. Boling MC, Bolgla LA, Mattacola CG, Uhl TL, Hosey RG. Rehabilitation alters VL and VMO recruitment, decreases pain, and increases function in patients with patellofemoral pain syndrome. *Southeast Athletic Trainers Association Annual Meeting*, March 2005.
5. Downar SJ, Mattacola CG, Uhl TL, Malone TR. Isometric Muscle Force Measurements obtained by Hand-Held Dynamometry and Strength Relationships among Athletes Aged 14 to 25. *Southeast Athletic Trainers Association Annual Meeting*, March 2004

6. Mulvihill CP, Mattacola CG, Nitz AJ, Uhl TL. Effect Of Orthotics On Balance And The Muscle Activity Of Selected Leg Muscles During Bilateral Stance. *Southeast Athletic Trainers Association Annual Meeting*, March 2004

**Published Refereed Abstracts/Presentations Cont'd.**

\*Note: Underline and Italics = student for whom I mentored.

7. DiMattia MA, Livengood AL, Uhl TL, Mattacola CG, Malone TR. Validating the Single-Leg Squat Test as a Function Test for Hip Abduction Strength. *Southeast Athletic Trainers Association Annual Meeting*, March 2004
8. Dupas, E, Tripp, BL, Uhl, TL, Mattacola, CG, Malone TR. The Effects of a 9-week Strengthening Program on Scapular Muscle Strength. *Southeast Athletic Trainers Association Annual Meeting*, March 2004
9. Kuschinsky, N, Uhl, TL, Sciascia, A, Mair, S, Nitz, AJ, Mattacola, CG. Muscle Activity Comparison of 4 Common Shoulder Exercises in Unstable and Stable Shoulders. *Southeast Athletic Trainers Association Annual Meeting*, March 2004
10. Pearson CL, Uhl TL, Ingram C, Newsome S, Mattacola CG, English RA. Comparison of Core Strength and Injuries in Collegiate Athletes. *Southeast Athletic Trainers Association Annual Meeting*, March 2004
11. Tymkew JA, Jacobs C, Mattacola CG, Uhl TL, Malone TR. Isokinetic and Functional Fatigue Protocols have Similar Effects on Balance. *Southeast Athletic Trainers Association Annual Meeting*, March 2004
12. Bolgla LA, Uhl TL, Mattacola CG, Malone TR, Mair S. The effect of a Simulated Knee Effusion of Quadriceps Function: Implications for Rehabilitation. *Southeast Athletic Trainers Association Annual Meeting*, March 2004
13. Kelly JJ, Mattacola CG, Uhl TL, Johnson DL, Madaleno JA. A Study of the Relationship Between Postural Sway, Navicular Drop, and Ankle Strength in Division I Football Players. *Southeast Athletic Trainers Association Annual Meeting*, March 2004
14. McGinn, PA, Mattacola, CG, Shapiro, RL, Malone TR, Johnson, DL. Landing Kinematics of Collegiate Women's Basketball Athletes Correlate with Isokinetic Peak Torque Values. *Southeast Athletic Trainers Association Annual Meeting*, March 2004
15. Silvestri PG, Mattacola CG, Madaleno JA, Johnson DL, Uhl TL. Relationship Between Mechanical Foot Position and Postural Sway. *Southeast Athletic Trainers Association Annual Meeting*, March 2003
16. Roller SJ, Livengood AL, Mattacola CG, Uhl TL, Malone TR. Effect Of Prophylactic Ankle Bracing On Postural Control And EMG Of Lower Extremity And Trunk Muscles. *Southeast Athletic Trainers Association Annual Meeting*, March 2003



17. Mattocks H, Uhl TL, Mattacola CG, Shapiro R, Dome D, Kibler WB. Inter- And Intratester Reliability For A Qualitative Dynamic Observation Method For Scapular Dyskinesis. *Southeast Athletic Trainers Association Annual Meeting*, March 2003
18. Sciascia AD, Uhl TL, Mattacola CG, McCrory JL, Nitz AJ, Mair SD. Muscle Activity Comparison Of Four Common Shoulder Exercises In Unstable And Stable Shoulders. *Southeast Athletic Trainers Association Annual Meeting*, March 2003

**Published Refereed Abstracts/Presentations Cont'd.**

\*Note: Underline and Italics = student for whom I mentored.

19. Gecewich BD, Uhl TL, Tripp BL, Shapiro R, Mattacola CG, Kibler WB. Reliability Of Bilateral Scapular Motion Using A Three-Dimensional Electromagnetic Device. *Southeast Athletic Trainers Association Annual Meeting*, March 2003
20. Haggerty MC, Uhl TL, Mattacola CG, Shapiro R. Neuromuscular Control Patterns And Strength Of Overhead Athletes And Control Subjects. *Southeast Athletic Trainers Association Annual Meeting*, March 2003
21. Brajuha DA, Uhl TL, Nitz AJ, Mattacola CG. EMG Analysis Of Trunk Muscles During Three Different Core Stabilization Exercises. *Southeast Athletic Trainers Association Annual Meeting*, March 2003
22. Baker, J.K., **Mattacola, C.G.**, McCrory, J.L., Uhl, T.L., Malone, T.R., Livengood, A.L. Effect of ankle bracing on postural sway during single limb landing from a controlled height. *Southeast Athletic Trainers Association Annual Meeting*, March 2002
23. Gahan, E.W., **Mattacola, C.G.**, Uhl, T.L., Malone, T.R. Relationship between isokinetic quadriceps and hamstring strength to lower extremity functional tests. *Southeast Athletic Trainers Association Annual Meeting*, March 2002
24. Higgins, C., **Mattacola, C.G.**, Mair, S.D. Rehabilitation of an ankle injury in a collegiate baseball player. *Southeast Athletic Trainers Association Annual Meeting*, March 2002
25. McGinn, P.A., Weimar, W.H., **Mattacola, C.G.**, Rudisill, M.E. Dynamic balance of injured division I collegiate athletes on two different surfaces. *Southeast Athletic Trainers Association Annual Meeting*, March 2002
26. Rankin, C.A., **Mattacola, C.G.**, McCrory, J.L., Uhl, T.L., Malone, T.R. Effect of prophylactic ankle support on muscle latency when landing from a height. *Southeast Athletic Trainers Association Annual Meeting*, March 2002
27. Sawyer, P., Uhl, T.L., Yates, J.W., **Mattacola, C.G.**, Johnson, D.L. Effects of muscle temperature on hamstring flexibility. *Southeast Athletic Trainers Association Annual Meeting*, March 2002
28. Brindle, T., **Mattacola, C.G.**, Osborne, R., Kruger, J., Fowler, J., McCrory, J.L. An electromyographic comparison between subjects with and without anterior knee pain while ascending and descending stairs. *Southeast Athletic Trainers Association Annual Meeting*, March 2001.

29. Miller, A.K., **Mattacola, C.G.**, Uhl, T.L., McCrory, J.L., Malone, T.R. Effect of orthotics on postural stability over a six week acclimation period. *Southeast Athletic Trainers Association Annual Meeting*, March 2001.

### **Published Refereed Abstracts/Presentations Cont'd.**

\*Note: Underline and Italics = student for whom I mentored.

30. Ramsdell, K.M., **Mattacola, C.G.**, Uhl, T.L., McCrory, J.L., Malone, T.R. Effects of two ankle fatigue models on the duration of postural stability dysfunction. *Southeast Athletic Trainers Association Annual Meeting*, March 2001.
31. Rund, M.R., **Mattacola, C.G.**, Uhl, T.L., McCrory, J.L., Malone, T.R., Johnson, D.J. Stabilization times of the lower extremity following ACL reconstruction using two sub-maximal single-leg hop Protocols. *Southeast Athletic Trainers Association Annual Meeting*, March 2001.
32. Wise M.B., Uhl, T.L., **Mattacola, C.G.**, Nitz, A.J., Kibler, W.B. Electromyographical comparison of open and closed chain shoulder exercises. *Southeast Athletic Trainers Association Annual Meeting*, March 2001.
33. Carver, T.J., Uhl, T.L., **Mattacola, C.G.**, Nitz, A.J., Mair, S.M. Examination of electromyographic activity of shoulder girdle musculature while progressively increasing glenohumeral axial compression. *Southeast Athletic Trainers Association Annual Meeting*, March 2001.
34. James, C.B., **Mattacola, C.G.**, Uhl, T., Lawton, J.N. An accelerated rehabilitation of a hand injury in a collegiate volleyball player. *Southeast Athletic Trainers Association Annual Meeting*, March 2000.
35. Madaleno J.A., **Mattacola C.G.**, Johnson D.J., James C.B. Anterior thigh pain in a Division I football player. *Southeast Athletic Trainers Association Annual Meeting*, March 2000
36. **Mattacola C.G.**, Perrin D.H., Gansneder B.M. Methodological considerations when assessing lower extremity function with a single-leg hop for distance test. *Southeast Athletic Trainers Association Annual Meeting*, March 2000
37. Tierney R.T., **Mattacola C.G.**, Sitler M.R., Maldjian C. Effect of head position and football equipment on cervical spinal cord space. *Southeast Athletic Trainers Association Annual Meeting*, March 2000
38. Campenella, B.J., **Mattacola, C.G.**, Kimura, I.F., Cleary, M.A. Effect of visual feedback and verbal encouragement on concentric quadriceps and hamstrings peak torque of males and females. *Eastern Athletic Trainers Association Annual Meeting*, January 1999.
39. Huggard, C.P., Kimura, I.F., **Mattacola, C.G.**, Kendrick, Z.V., Straub, S.J. Clinical efficacy of dexamethasone iontophoresis in the treatment of patellar tendinitis in collegiate athletes: A double-blind study. *Eastern Athletic Trainers Association Annual Meeting*, January 1999.

40. **Mattacola, C.G.**, Perrin, D.H., Gansneder B.M., Gieck J.H., Saliba E.N., McCue F.C. Dynamic postural stability following anterior cruciate ligament reconstruction. *Mid Atlantic Athletic Trainers Annual Meeting and Convention*, May 16, 1997.

#### **Published Refereed Abstracts/Presentations Cont'd.**

\*Note: Underline and Italics = student for whom I mentored.

41. **Mattacola, C.G.**, Lloyd, J.W. Effects of a six week ankle strength and proprioception training program on dynamic balance: a single-subject design. *Eastern Athletic Trainers Association Annual Meeting*, January 1997.

#### **F. Book Chapters**

**Mattacola, C.G.**, Johnson, D.L. Research Design and Statistics in Sports Medicine. In: Delee, JC, Drez, D, & Miller, MD. eds. *Orthopaedic Sports Medicine: Principles and Practice*. Second Edition. Philadelphia, PA: Saunders Company; 147-167, 2003.

#### **G. Dissertations, Completed**

(Chair)

1. Jacobs, CA. The Influence of Hip Abductor Strength, Endurance, and Asymmetry on Lower Extremity Landing Kinematics. Doctor of Philosophy. University of Kentucky, May 2005.
2. McGinn, P.A. Effects of a 6-week strength-training program on landing kinematics and kinetics of female collegiate basketball athletes. Doctor of Philosophy. University of Kentucky, May 2004.

#### **Dissertations, Completed**

(Committee Member)

1. Tripp, B.L. Functional Multijoint Position Reproduction Acuity in Overhead-throwing Athletes. Doctor of Philosophy. University of Kentucky, May 2004.
2. Cash, T.L. Effects of different exercise promotion strategies and stage of exercise on reported physical activity, self-motivation, and stages of exercise I worksite employees. Doctor of Education. Temple University, August, 1997.

#### **H. Master's Thesis/Project, Completed**

(Major Advisor)

1. LaFalce, JO. The Contribution of Anterior/Posterior and Medial/Lateral Center of Pressure to Equilibrium Score: A Report of Balance Assessment Measures, Masters of Science, University of Kentucky, May 2005
2. Stanley, O. Hip Abduction and Adduction Strength of Injured and Healthy Collegiate Football Athletes. Masters of Science, University of Kentucky, May 2005
3. Downar SJ. Isometric Muscle Force Measurements obtained by Hand-Held Dynamometry and Strength Relationships among Athletes Aged 14 to 25. Masters of Science, University of Kentucky, May 2004
4. Tymkew JA. Isokinetic and Functional Fatigue Protocols have Similar Effects on Balance. Masters of Science, University of Kentucky, May 2004
5. Kelly JJ. A Study of the Relationship Between Postural Sway, Navicular Drop, and Ankle Strength in Division I Football Players. Masters of Science, University of Kentucky, May 2004
6. Mulvihill, CP., Effect Of Orthotics On Balance And The Muscle Activity Of Selected Leg Muscles During Bilateral Stance. Masters of Science, University of Kentucky, May 2003
7. Roller, SJ., Effect Of Prophylactic Ankle Bracing On Postural Control And EMG Of Lower Extremity And Trunk Muscles. Masters of Science, University of Kentucky, May 2003
8. Silvestri, P.G., Relationship Between Mechanical Foot Position and Postural Sway. May 2003
9. Dwyer, M.K. Effect of a six week strength and balance training program on functional ankle instability: A single case design. Masters of Science, University of Kentucky, May 2002.
10. Baker, J.K., Effect of ankle bracing on postural sway during single limb landing from a controlled height. Masters of Science, University of Kentucky, May 2002.
11. Rankin, C.A., Effect of prophylactic ankle support on muscle latency when landing from a height. Masters of Science, University of Kentucky, May 2002.
12. Gahan, E.W., Relationship between isokinetic quadriceps and hamstring strength to lower extremity functional tests. Masters of Science, University of Kentucky, May 2002.
13. Miller, A.K. Effect of orthotics on postural stability during a six-week acclimation period. Masters of Science, University of Kentucky, May 2001.
14. Ramsdell, K.M. Effects of two ankle fatigue models on the duration of postural stability dysfunction. Masters of Science, University of Kentucky, May 2001.
15. Rund, M.R. Stabilization times of the lower extremity following ACL reconstruction using two Sub-maximal single-leg hop protocols. Masters of Science, University of Kentucky, May 2001.
16. Tierney, R.T. Effect of head position and football equipment on cervical spinal cord space. MEd., December 1999.

17. Greco, J.A. Comparison of the standardized assessment for concussion and postural stability and functional ability in a non-injured population. MEd., May 1999.
18. Campenella, B. Effect of visual feedback and verbal encouragement on concentric quadriceps and hamstrings peak torque of males and females. MEd., August, 1998.

**Master's Thesis/Project, Completed Cont'd.**

19. Sicher, D.W. Effects of cryotherapy and thermotherapy on evertor eccentric muscular endurance. MEd., August, 1998.
20. Winslow, K.A. Postural stability intratester reliability on the biodex stability system. MEd., August, 1998.

(Committee Member)

21. DiMattia MA. Validating the Single-Leg Squat Test as a Function Test for Hip Abduction Strength. Masters of Science, University of Kentucky, May2004
22. Dupas, E. The Effects of a 9-week Strengthening Program on Scapular Muscle Strength. Masters of Science, University of Kentucky, August 2004
23. Kuschinsky, N.,Muscle Activity Comparison of 4 Common Shoulder Exercises in Unstable and Stable Shoulders. Masters of Science, University of Kentucky, May2004
24. Pearson CL. Comparison of Core Strength and Injuries in Collegiate Athletes. Masters of Science, University of Kentucky, May2004
25. Brajuha, D.A., EMG Analysis of Trunk Muscles During Three Different Core Stabilization Exercises. Masters of Science, University of Kentucky, May 2003
26. Gecewich, B.D., Validation of a clinical observational evaluation system of scapular dyskinesis using a three-dimensional electromagnetic device. Masters of Science, University of Kentucky, May 2003
27. Haggerty, M.C. Neuromuscular Control and Strength of Overhead Athletes and Control Subjects, Masters of Science, University of Kentucky, May 2002
28. Sciascia, A.D. Muscle activity comparison of four common shoulder exercises in unstable and stable shoulders. Masters of Science, University of Kentucky, May 2002
29. Carver, T.J. Examination of electromyographic activity of shoulder girdle musculature while progressively increasing glenohumeral axial compression. Masters of Science, University of Kentucky, May 2001.
30. Wise M.B. Electromyographical comparison of open and closed chain shoulder exercises. Masters of Science, University of Kentucky, May 2001

31. Sawyer, P.C. Effects of moist heat on hamstring muscle flexibility and muscle temperature. Masters of Science, University of Kentucky, May 2001
32. Allen, A. Effects of endoscopic hamstring reconstruction to repair the ACL of the knee. MEd., May 1999

#### **Master's Thesis/Project, Completed Cont'd.**

33. Gatto, J.V. Effect of beam nonuniformity ratio of three ultrasound machines on tissue phantom temperature. MEd., August , 1998.
34. Huggard, C. Clinical efficacy of dexamethasone iontophoresis in the treatment of patellar tendinitis in collegiate athletes: a double-blind study. MEd., August, 1998.
35. Young, D. Accuracy of total intensity output, beam nonuniformity ratio and effective radiating area of four therapeutic ultrasound machines. MEd, August, 1998.
36. Ganter, J. Effect of injury mechanism on the association between intervertebral foramina canal stenosis and transient upper extremity paresthesia. MEd. May, 1998.
37. Hals, T.M. Effect of a semi-rigid prophylactic ankle stabilizer on performance in post-acute, functionally impaired ankle sprain subjects. MEd. May, 1998.
38. Miller, T.L. Peak physiological responses during arm crank ergometry at various distances from the crank axis in adult women. MEd. May, 1998
39. Hill, G.D. Effects of theraband exercise on forearm flexor strength of elderly inner city adults. Temple University, MEd. January, 1997.
40. Brown, D. Effects of Dexamethasone iontophoresis on symptomatic tendinitis: a double blind study of perceived pain, active range of motion, and isometric force production, MEd, August, 1997.
41. Graybash, L. Effects of the strength shoe and plyometric drills on power, strength, speed, and agility of college aged female volleyball players, MEd, August, 1997.
42. Shorty, M. Double blind clinical efficacy study of dexamethasone iontophoresis on perceived pain and decreased function associated with symptomatic tendinitis, MEd, August, 1997.

#### **J. Media Reviews:**

"Concepts of Athletic Training" (book). Journal of Sport Rehabilitation, 4:292-293, 1995.

#### **K. Grants/Awards:**

Principal Administrator: \$130,000.00, Externally Funded Graduate Assistantships  
University of Kentucky, Lexington, KY September, 2000 - Present

\*Support Graduate Athletic Training / Sports Medicine Graduate Assistantships in affiliated high schools, colleges, and sports medicine clinics in the greater Lexington region.

Co-Investigator: \$1000.00, National Athletic Trainers Association Research and Education Foundation, University of Kentucky, Lexington, KY July, 2005

\* Gender, Structure, and Activity: Variables Affecting Knee Kinematics

\* Co-Investigators: Fazio, M., Sebert, J., C., Mattacola, C.G., Uhl, TL, Jacobs, C., Shapiro, R.

Co-Investigator: \$1000.00, National Athletic Trainers Association Research and Education Foundation, University of Kentucky, Lexington, KY July, 2005

\* Effects of Foot Orthotics on Dynamic Postural Control Tasks in Subjects with CAI

\* Co-Investigators: Sesma, A., Mattacola, C.G., Uhl, TL.

Co-Investigator: \$2500.00, National Athletic Trainers Association Research and Education Foundation, University of Kentucky, Lexington, KY July, 2004

\* Relationship of hip abductor strength and endurance to functional performance

\* Co-Investigators: Jacobs, C., Mattacola, C.G., Uhl, TL

Co-Investigator: \$1500.00, SouthEast Athletic Trainers Association Research and Education Foundation, University of Kentucky, Lexington, KY March, 2004

\* Relationship of hip abductor strength and endurance to functional performance

\* Co-Investigators: Jacobs, C., Mattacola, C.G., Uhl, TL.

Co-Investigator: \$1, 000.00 National Athletic Trainers Association Research and Education Foundation May 2003

\* Effect Of A Functional Rehabilitation Program On EMG Activity And Pain In Patients With Patellofemoral Pain Syndrome

\*Co-Investigators: Michelle Boling, Lori Bolgla, Robert Hosey, Tim Uhl

Co-Investigator: \$1, 000.00 National Athletic Trainers Association Research and Education Foundation May 2003

\* Isometric Muscle Force Measurements Obtained by Hand-held Dynamometry and Strength Relationships Among Athletes Aged 14 to 25"

\*Co-Investigators: Stacey Downar, Tim Uhl, Terry Malone.

Co-Investigator: \$750.00, SouthEast Athletic Trainers Association Research and Education Foundation, University of Kentucky, Lexington, KY March, 2003

\* Effect of a Simulated Knee Effusion on Quadriceps Performance

\* Co-Investigators: Bolgla, L., Mair, S., Uhl, TL., Malone, TR.

Co-Investigator: \$22,045.00, Internally Funded CHS Research Equipment Award to purchase a 3-Dimensional Motion Analysis System

University of Kentucky, Lexington, KY January 2002

\*Co-Investigators: Uhl, TL

Principal Investigator: \$4,000.00 Award for Semi-Rigid Orthotics: Foot Management Inc., Pittsville, MD, September 2002.

Co-Investigators, Mulvihill,CP, Uhl, TL., Nitz,AJ.

### **Grants/Awards Cont'd.**

Co-Investigator: \$47,000.00 Research Equipment Award to purchase a Biodex III Isokinetic Dynamometer from the University of Kentucky, 2002

Co-Investigators: McCrory JL, Shapiro R, Abbas J, Uhl TL.

Principal Administrator: \$1500.00, SouthEast Athletic Trainers Association Research and Education Foundation, University of Kentucky, Lexington, KY March, 2000

\* Electromyographic Firing Patterns in Subjects With and Without Anterior Knee Pain, while Ascending and Descending Stairs

- Co-Investigator: Brindle, T.

Co-Investigator: \$6,816.00, Internally Funded CAHP Research Project

University of Kentucky, Lexington, KY January 2000

\*Effects of Fish Oils and Phytoestrogens on Delayed Onset Muscle Soreness (DOMS)

\*Co-Investigators: Geza Bruckner, PhD, Jon Lenn, Tim Uhl, Gilbert Boissonneault, PhD

Co-Investigator: \$13,000.00, Internally Funded CAHP Research Equipment Upgrade

University of Kentucky, Lexington, KY January 2000

\*Upgrade of the Neurocom Balance Master

Principal Administrator: \$1,500.00, University Graduate Student Development Award

University of Kentucky, Lexington, KY January, 2000

\*Supports the recruitment of new graduate students to the University of Kentucky

Principal Administrator: \$209,084.00, Externally Funded Graduate Assistantships

Temple University, Philadelphia, PA September, 1997

\*Support Graduate Athletic Training / Sports Medicine Graduate Assistantships in affiliated high schools, colleges, and sports medicine clinics in the greater Philadelphia region.

Principal Administrator: \$ 183,522.00, Externally Funded Graduate Assistantships

Temple University, Philadelphia, PA September, 1998

\*Support Graduate Athletic Training / Sports Medicine Graduate Assistantships in affiliated high schools, colleges, and sports medicine clinics in the greater Philadelphia region.



Principal Investigator: \$600.00 Dissertation Grant with the Curry School of Education  
April, 1996

\*Dynamic Postural Stability following Anterior Cruciate Ligament Reconstruction.

### **Grants/Awards Cont'd.**

Principal Investigator: \$1500.00 with District III National Athletic Trainers Association  
April, 1996

\*Dynamic Postural Stability following Anterior Cruciate Ligament Reconstruction.

Grants: (Submitted)

Principal Investigator: \$140,000.00 Center for Disease Control, March 2004.

\*Efficacy of Orthotics-Balance; Comparison across decades

Co-Investigators, Livengood,AL, Harrison, A, Stiles, N., Kim,M.O., Davis,I.

Principal Investigator: \$41,000.00 National Athletic Trainers Association Research & Education  
Foundation. March 2004.

\*Efficacy of Orthotics-Balance; Comparison across decades

Co-Investigators: Livengood, AL, Harrison, A, Stiles, N., Kim,M.O., Davis,I.

Co-Investigator: \$2,500.00 National Athletic Trainers Association Research and Education Foundation  
March 2004

\*Relationship of hip abductor strength and endurance to functional performance

\*Co-Investigators: Cale Jacobs, Tim Uhl

Co-Investigator: \$1,500.00 SouthEast Athletic Trainers Association Research and Education  
Foundation  
March 2004

\*Relationship of hip abductor strength and endurance to functional performance

\*Co-Investigators: Cale Jacobs, Tim Uhl

Co-Investigator: \$98,218.00 National Athletic Trainers Association Research and Education  
Foundation  
March 2003

\* Ultrasound Assessment of Splenic Size in Collegiate Athletes: Development of Normative  
Data and Determining Time to Resolution of Splenomegaly Following Infectious Mononucleosis (Not  
funded)

\*Co-Investigators: Robert Hosey, Vesna Kriss, Thomas Armsey,  
Jim Jagger, JD Quarles, Keith Webster.

Co-Investigator: \$27, 000.00 National Operating Committee on Standards for Athletic Equipment  
January 2002

\*Biomechanical Analysis of the Knee and Hip during Landing with Prophylactic Ankle Braces  
(Not Funded)

\*Co-Investigators: Ann Livengood

Co-Investigator: \$6,000.00 Faculty Development Grant Program, University of Kentucky

Co-Investigators: Terry Malone and Heather Wright

January 2002 (Not Funded)

Principal Investigator: \$50,320.00 NATA Research and Education Foundation

September 1, 2000.

\* Comparison of sliding techniques in high school baseball and softball: the incidence of injuries in head-first versus feet-first techniques. (Not funded)

Principal Investigator: \$2000.00 Pennsylvania Athletic Trainers Association

March 1, 1999.

\* Effects of Head Position and Football Equipment on Cervical Spinal Cord Diameter. (Not funded)

Principal Investigator: \$2000.00 Eastern Athletic Trainers Association

November 1, 1998.

\* Effects of Head Position and Football Equipment on Cervical Spinal Cord Diameter. (Not funded)

Co-Investigator: \$97,000.00 GE-AUR Radiology Research Academic Fellowship

November 1, 1998

\* Effects of Head Position and Football Equipment on Cervical Spinal Cord Diameter. (Not funded)

#### **L. Marketing Research and Consulting:**

Becton Dickinson Consumer Products, Conducted at the University of Virginia, June 1994

\*Testing of various knee braces and athletic shorts.

#### **M. Creative Activity:**

University of Kentucky Division of Athletic Training Web Page: September 2000 – Present

\*Designed and currently maintain role of webmaster for the Division web page.

### **XVI. Other**

#### **A. Solicited Gifts.**

Foot Management Inc: \$3,000.00 donation of foot orthotics for research, Fall 2000.

Monad Corporation: \$5,000.00 equipment loan for research (Microcurrent Electrical Neuromuscular Stimulator) Spring, 1995

## **B. Organizations / Certifications**

KATEC HIV/AIDS Medical Update (Course Number 0899-962-M)

American Red Cross, Basic First Aid

American Red Cross, Advanced Life Saving

### **Organizations / Certifications Cont'd.**

American Red Cross, Water Safety Instructor

American Red Cross, CPR for the Professional Rescuer

## **C. Professional Societies**

NATA Certified Athletic Trainer (Certification # 02-1922, Member # 881652 )

Kentucky Certified Athletic Trainer (Certification # AT- 400)

Athletic Training Research & Education Society (Member C-33)

## **D. Continuing Education And Symposiums**

2nd International Ankle Symposium will be held in Newark, Delaware (USA) October 15-16, 2004.

April 6-7, 2001 in Lexington KY: Kentucky Sports Medicine Clinic, ACL Injuries: The Gender Bias, Research Retreat

March 30, 2000 in Atlanta GA: SEATA Annual Meeting and Clinical Symposium

June 15, 1999 in Kansas City, MS: NATA Annual Meeting and Clinical Symposium

January 4, 1999 in Philadelphia, PA: EATA Annual Meeting and Clinical Symposium

June 16, 1998 in Baltimore, MD: NATA Annual Meeting and Clinical Symposium

January 3, 1998 in Buffalo, NY: EATA Annual Meeting and Clinical Symposium

June 16, 1997 in Salt Lake City, UT: NATA Annual Meeting and Clinical Symposium

May 16, 1997 in Charlotte, NC: The District II Annual Meeting and Convention

June 16, 1995 in Indianapolis, IN: NATA Annual Meeting and Clinical Symposium

June 14, 1994 in Dallas TX: NATA Annual Meeting and Clinical Symposium

June 10, 1993 in Kansas City, MS: NATA Annual Meeting and Clinical Symposium

June 9, 1992 in Charlottesville, VA: The Art and Science of Sports Medicine

June 4, 1992 in Denver, CO: NATA Annual Meeting and Clinical Symposium

May 12, 1992 in Virginia Beach, VA: The District II Annual Meeting and Convention

June 14, 1991 in Charlottesville, VA: The Art and Science of Sports Medicine

May 10, 1991 in Virginia Beach, VA: The District II Annual Meeting and Convention

June 6, 1991 in New Orleans, LA: NATA Annual Meeting and Clinical Symposium

June 12, 1989 in Dallas TX: NATA Annual Meeting and Clinical Symposium

**Curriculum Vitae**  
**Timothy Lee Uhl**

General Information .....	2
I. Education .....	2
II. Professional Experiences .....	2
III. Academic Appointments .....	4
IV. Consulting Activity .....	5
V. Teaching Activity .....	5
<b>University of Kentucky</b> .....	5
<b>University of Virginia</b> .....	5
<b>Continuing Education Courses (Instructor): (25)</b> .....	6
VI. Advising Activity .....	8
VII. Administrative Activity and University Service .....	9
VIII. Special Assignments .....	9
IX. Honors .....	9
X. Professional Activity and Public Service .....	9
<b>Professional Organization and Societies</b> .....	9
XI. Speaking Engagements/Presentations .....	9
<b>Local Invited (32)</b> .....	9
<b>State and Regional Invited (87)</b> .....	9
<b>National Invited (30)</b> .....	9
<b>International Invited (6)</b> .....	9
<b>State and Regional Peer Reviewed (41)</b> .....	9
<b>National Peer Reviewed (63)</b> .....	9
<b>International Peer Reviewed (5)</b> .....	9
XII. Research and Creative Productivity .....	9
<b>Publications: Peer Reviewed Journals (26)</b> .....	9
<b>Publications: Non-Peer Reviewed Journals (11)</b> .....	9
<b>Publications: Journals (In Review)</b> .....	9
<b>Publications: Books and Chapters (11)</b> .....	9
<b>Publications: Abstracts (49)</b> .....	9
XIII. Grant Activity: .....	9

**General Information**

Home Address 876 Edgewood Dr. Lexington, KY 40515

Home Phone 859-971-1506

Office Address College of Health Sciences Room 210C, 900 South Limestone

Office phone (859) 323-1100 x 80858

Birthdate 10/4/62

Marital Status: Married Spouse: Christine M. Uhl MEd ATC

Certificate or Specialty Board Licensure:

Kentucky Athletic Trainer Certification #AT076 since 1999

National Athletic Trainers Association Board of Certification #9-331 since 1985

Certified, Clinical Instructor Educator for National Athletic Trainers' Association  
March 2001

Licensed Physical Therapist

Kentucky License # 1318 1985-present

Georgia # 3123 1990 - 2000

South Carolina #1654 1992 - 2000

Virginia #105005237 1995 - 1999

**I. Education**

1995 - 1998 The University of Virginia, Curry School of Education, Doctorate in Education / Sports Medicine

1988 – 1992 The University of Michigan, Rackham Graduate School, Masters' in Physical Education

1981 - 1985 The University of Kentucky, College of Allied Health Professions, Bachelor of Health Science in Physical Therapy  
Graduated "With Distinction"

**II. Professional Experiences**

July 2005 – present Associate Professor, Department of Rehabilitation Sciences,  
Division of Athletic Training  
Director of Musculoskeletal Laboratory  
University of Kentucky

July 1999 – 2005 Assistant Professor  
Director of Musculoskeletal Laboratory  
University of Kentucky, Division of Athletic Training

September 1998 - May 1999 Staff Physical Therapist, Clinical Researcher  
Lexington Clinic Sports Medicine Center  
Lexington, KY

July 1995 - July 1998 Graduate Assistant Athletic Trainer  
University of Virginia Athletic Department  
Charlottesville, VA

October 1992 - June 1995 Director of Physical Therapy  
The Human Performance and Rehabilitation Center  
Columbus, GA

August 1990 - October 1992 Staff Physical Therapist  
The Human Performance and Rehabilitation Center  
Columbus, GA

July 1988 - August 1990 Graduate Assistant Athletic Trainer  
University of Michigan Athletic Department  
Staff Physical Therapist at MedSport  
University of Michigan Sports Medicine Center  
Research Assistant  
University of Michigan, Department of Orthopaedics  
Ann Arbor, MI

August 1987 - May 1988 Head Athletic Trainer  
Transylvania University  
Lexington, KY

October 1985 - June 1988 Staff Physical Therapist, Coordinator of Athletic Training  
Lexington Clinic Sports Medicine Center  
Lexington, KY

### **III. Academic Appointments**

July 2005 – Present Associate Professor, Department of Rehabilitation Sciences  
College of Health Sciences  
University of Kentucky

March 2001 - Present Assistant Professor, Department of Kinesiology and Health  
Promotion  
College of Education  
University of Kentucky

July 1999 – 2005 Assistant Professor, Department of Rehabilitation Sciences  
College of Health Sciences  
University of Kentucky

2002 - Present Full Membership, Graduate Faculty  
Kinesiology and Health Promotion

Rehabilitation Sciences  
 Research and Graduate Studies, The Graduate School  
 University of Kentucky

July 1999 – 2002 Associate Membership, Graduate Faculty  
 Kinesiology and Health Promotion  
 Research and Graduate Studies, The Graduate School  
 University of Kentucky

#### **IV. Consulting Activity**

1986 - 1988 Consultant, Dennis Van Der Meer Tennis Center

1986 - 1988 Consultant, Nick Bolleteri's Tennis Academy

#### **V. Teaching Activity**

##### **University of Kentucky**

2002 KHP 781 Sports Biomechanics (Co-instructed due to faculty leaving)  
 2002 A&S 157 Sex, Drugs & Your Health  
 2002 - present AT 690 Orthopaedic Evaluation for Athletic Trainers  
 2002 - present PT 862 Orthotics - guest lecture on sport orthotics  
 2002 - present KHP 695 Independent Study  
 2001 - present AT 695 Advance Seminar Athletic Training  
 2001 – present AT 670 Research and Special Topics  
 2001 PT 652 Pathomechanics (filled in for instructor on sabbatical)  
 2001 EXP 396 Experimental Education  
 2000 - present AT 660 Directed study  
 2000 – 2001 KHP 781 Pro Seminar “Orthopaedic Evaluation for Athletic Trainers”  
 2000 – present KHP 781 Pro-Seminar “Applications of Kinesiological EMG”  
 2000 - present KHP 784 Masters' Thesis advisor  
 1999 KHP 720 Sports Medicine  
 1999 KHP 781 Pro-Seminar “Overview of Computer Applications and  
 Research in Athletic Training”  
 1999 – Present PT 686 Athletic Taping Techniques;  
 1999 – Present PT 686 Rehabilitation of the Shoulder – guest lecture on scapular and  
 total shoulder rehabilitation

##### **University of Virginia**

1997 - 1998 Graduate Assistant for Masters Thesis Seminar  
 EDHS 899  
 1996 - 1998 Teaching Assistant for Kinesiology  
 EDHS 354

##### **Continuing Education Courses (Instructor): (25)**



- Feb. 2005 Troover Clinic, Madisonville, KY  
1-Day CEU course *Evaluation and Rehabilitation of the Shoulder*
- July 2004 Kentucky Physical Therapy Inc. Corbin, KY  
1-Day CEU course *Evaluation and Rehabilitation of the Shoulder*
- June 2002 National Athletic Trainers' Association Conference, Dallas, TX.  
1-Day CEU course *Advanced Track Seminar - Surgical management and post-operative rehabilitation of the unstable shoulder: Tissue healing and outcome based considerations.*
- April 2002 Medical College of Virginia, Richmond, VA  
2-Day CEU course: *The Shoulder: Pathologies and Rehabilitation*
- March 2001 American Academy of Orthopaedic Surgeons, San Francisco, CA  
Instructional Course Lecture - *Clinical Issues in Rehabilitation of the Shoulder and Elbow*
- July 2000 Advance in Clinical Education and North American Sportsmedicine Institute, Nashville, TN  
2-Day CEU course: *Orthopedic Management: Upper Quarter Injuries*
- March 2000 American Academy of Orthopaedic Surgeons, Orlando, FL  
Instructional Course Lecture - *Clinical Issues in Rehabilitation of the Shoulder and Elbow*
- March 1999 Southeastern Athletic Trainers' Association Conference, Atlanta, GA.  
*Joint Mobilization of the Shoulder Girdle*
- June 1998 National Athletic Trainers' Association Conference, Baltimore, MD.  
1-Day CEU course  
*Advanced Track Seminar - Joint Mobilization of the Shoulder Girdle*
- June 1997 National Athletic Trainers' Association Conference, Salt Lake City, UT. 1-Day CEU course  
*Advanced Track Seminar - Joint Mobilization of the Shoulder Girdle*
- April 1997 Excel Education Seminars to The Kentucky Chapter of APTA, Louisville, KY.  
2-Day CEU course: *Rehabilitation of the Knee*
- October 1995 Excel Education Seminars, Pennington Gap, VA. 2-Day Course  
*The Shoulder: Mechanics and Rehabilitation*
- June 1995 Central Kentucky Physical Therapy Centers, Bardstown, KY  
2-Day CEU course: *Shoulder Rehabilitation*
- November 1994 Rehabilitation Services of Columbus, Inc. Columbus, GA.  
2-Day CEU course: *Rehabilitation of the Shoulder*
- April 1994 Dogwood Seminars, Birmingham, AL.  
2-Day CEU course: *Shoulder Mechanics and Rehabilitation*
- March 1994 Dogwood Seminars, Bryan, TX.  
2-Day CEU course: *Shoulder Mechanics and Rehabilitation*
- February 1994 Dogwood Seminars, Savannah, GA.  
2-Day CEU course: *Knee Evaluation and Rehabilitation*
- November 1993 Dogwood Seminars, Fort Lauderdale, FL.  
2-Day CEU course: *Shoulder Mechanics and Rehabilitation*
- July 1993 Dogwood Seminars, Salt Lake City, UT.  
2-Day CEU course: *Knee Evaluation and Rehabilitation*

June 1993	Dogwood Seminars, Medford, MA. 2-Day CEU course: <i>Knee Evaluation and Rehabilitation</i>
March 1993	Anderson Memorial Hospital, Anderson, SC. 1-Day CEU course: <i>Shoulder Rehabilitation</i>
March 1993	Dogwood Seminars, Charleston, SC. 2-Day CEU course: <i>Shoulder Mechanics and Rehabilitation</i> (Half of course taught by candlelight)
November 1992	Orthopaedic Rehabilitation Services, Atlanta, GA. 1-Day CEU course <i>Shoulder Evaluation and Rehabilitation Programs</i>
October 1992	The Medical College of Georgia - Continuing Education Seminar, Augusta, GA. 2-Day CEU course: <i>Shoulder Rehabilitation - Post Operative Programs</i>
June 1992	Orthopaedic Rehabilitation Services, Atlanta, GA. 2-Day CEU course: <i>Evaluation and Treatment of Knee Injuries</i>

## VI. Advising Activity

2004 -2005	2 Doctoral student in KHP dissertation director 2 Doctoral students in Rehab Sciences dissertation director 2 Doctoral students in KHP committee member 3 Doctoral student in Rehab Sciences committee member 6 Masters' students in KHP, thesis director 7 Masters' students in KHP, thesis committee member 9 Masters' students in PT, project committee advisor
2003 – 2004	1 Doctoral student in KHP dissertation director 2 Doctoral students in Rehab Sciences dissertation director 4 Doctoral students in KHP committee member 1 Doctoral student in Rehab Sciences committee member 5 Masters' students in KHP, thesis director 10 Masters' students in KHP, thesis committee member 7 Masters' students in PT, project committee advisor
2002 - 2003	1 Doctoral student in KHP dissertation director 1 Doctoral student in Rehab Sciences dissertation director 2 Doctoral students in KHP committee member 9 Masters' students in KHP, thesis director 14 Masters' students in KHP, thesis committee member 9 Masters' students in PT, project committee advisor
2001 – 2002	1 Doctoral student in KHP committee member 6 Masters' students in KHP, thesis director 7 Masters' students in KHP, thesis committee member 9 Masters' students in PT, project committee advisor
2000 – 2001	3 Doctoral students in KHP committee member

	6 Masters' students in KHP, thesis director
	7 Masters' students in KHP, thesis committee member
	8 Masters' students in PT, project committee member
	4 Masters' students in PT content expert member Shenandoah University
1999 – 2000	2 Doctoral students in KHP committee member 3 Masters' thesis in KHP director 3 Masters' thesis in KHP committee member
1996 –1998	3 Masters' students in Athletic Training, University of Virginia

## **VII. Administrative Activity and University Service**

July 2005 – July 2007	College of Health Science, Faculty Council
Jan. 2003 - present	Director, Musculoskeletal Lab, College of Health Sciences
Aug 2001 – present	Accreditation Self-Study Committee, Division of Athletic Training
July 2001 - present	College of Allied Health Professions, Research Advisory Committee
July 2001 - June 2003	College of Allied Health Professions, Practice Plan Advisory Committee
Jan 2000 - present	College of Allied Health Professions, Student Affairs committee
Jan – Aug 2000	Interim appointment on Faculty Senate for colleague on sabbatical

## **VIII. Special Assignments**

October 2003 – January 2004	Ad Hoc Committee to Review the Office of Associate Dean of Research for College of Health Sciences
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## **IX. Honors**

February 2005	Service Award – Sports Physical Therapy Section
October 2003	Affiliate Member of the American Shoulder and Elbow Surgeons
June 2003	National Athletic Trainers' Association Multimedia Student Trainer Award “Core Stabilization Program and Progression” by David Brajuha ATC - advisor Uhl TL
September 2002	American Society of Shoulder and Elbow Therapists Founders Award
September 2001	National Athletic Trainers' Association Research and Education Foundation Nominated for New Investigator Award

- May 2001 Western Hills High School  
Inducted into Green and Silver Society  
Inaugural Hall of Fame class
- Oct. 2000 University of Michigan  
Division of Kinesiology  
“Alumni Achievement Within Ten Years Award”

## **X. Professional Activity and Public Service**

- June 2003 – 2007 National Athletic Trainers Association Research and Education  
Foundation, Research Committee
- Oct 2001-present Journal of Sports Rehabilitation  
Editorial Board
- August 2001 United States Civilian Research and Development Foundation  
Grant reviewer
- June 2000-present Midway College  
Member of advisory board for Equine Therapy curriculum
- Feb – Dec 1999 PhyCor Corporation, Nashville, Tennessee  
Member of the Musculoskeletal Care Council program on Shoulder  
Care initiative
- 1999 - Present Kentucky Bluegrass State Games University of Kentucky  
Volunteer Athletic Trainer
- 1998 - Present Strength and Conditioning Journal  
Reviewer
- 1997 - Present Journal of Athletic Training  
1997 – 2001 Reviewer  
1999 - 2000 Guest Editor for special issue on “Evaluation and  
Management of Shoulder Injuries in the Athlete”  
2001 – present Editorial Board
- 1996 Centennial Olympic Games - Atlanta, GA  
Volunteer Athletic Trainer/Physical Therapist for Beach Volleyball
- 1995 – Present The Journal of Orthopaedics and Sports Physical Therapy  
Reviewer
- 1994 United States Olympic Training Center- Colorado Springs  
Volunteer Athletic Trainer
- 1993 - 1995 Hughston Sports Medicine Center  
Member of the Internal Review Board

## **Professional Organization and Societies**

- 2003 – Present American Society of Shoulder and Elbow Surgeons, Affiliate Member
- 1995 – Present McCue Society
- 1995 - Present Hughston Society
- 1995 - 2000 Virginia Physical Therapy Association

1994 - Present	American Society of Shoulder and Elbow Therapist 2000 – 2002 Secretary/Treasure 2002- present Webmaster 2003 President-Elect 2004 President
1991 - 2000	South Carolina Physical Therapy Association
1990 - 2000	Physical Therapy Association of Georgia
1990 - 1995	Georgia Athletic Trainers Association
1986 - 1988, 1999	American College of Sports Medicine
1985 - Present	National Strength and Conditioning Association
1985 - Present	Kentucky Athletic Trainers Society
1983 - Present	Sports Physical Therapy Section 1992 - 1995 Membership Committee Chairman 1998 - 2001 Team Leader of Membership Service Team
1983 - Present	American Physical Therapy Association
1981 - Present	National Athletic Trainers Association

## XI. Speaking Engagements/Presentations

### Local Invited (32)

Jan 2004	University of Kentucky Athletic Training Staff, Lexington, KY - <i>Biodex inservice on System 3</i>
August 2003	Frankfort Regional Hospital Physical Therapy Department, Frankfort, KY - <i>Athletic Taping for Sport Injuries</i>
September 2000	Asbury College Student Athletic Trainers, Wilmore, KY - <i>Shoulder Evaluation</i>
September 2000	Lexington Clinic Sports Medicine Center Physical Therapists, Lexington, KY - <i>Classification of Scapular Dyskinesis</i>
Sept. 2000	Veteran's Administrative Physical Medicine and Rehabilitation Department, Lexington, KY (7 hours of lecture and lab) - <i>Shoulder Evaluation and Treatment Approach</i>
July 2000	University of Kentucky Student Athletic Trainer Camp, Lexington, KY - <i>Anatomy and Evaluation of the Shoulder</i>
June 2000	American Orthopaedic Society for Sports Medicine Traveling Fellows, Lexington, KY - <i>Classification of Scapulohumeral Firing Patterns</i>
May 2000	American College of Sports Medicine Clinical Scholar Exchange (Traveling Fellows) at Lexington Clinic Sports Medicine Center, Lexington, KY - <i>Classification of Scapulohumeral Firing Patterns</i>

- May 2000 Kentucky Sports Medicine, Lexington, KY  
-*Scientific Basis of Scapular/Shoulder Rehabilitation*
- May 2000 Orthopaedic Surgery Rounds, Lexington, KY  
-*Current Concepts of Shoulder Rehabilitation*
- January 2000 Guest lecture in Biomedical Engineering Seminar, UK  
-*Scapular Muscle Firing Patterns in Normals and Pathological Shoulders*
- October 1999 Asbury College Athletic Training Class, Wilmore, KY  
-*Post-Baccalaureate Graduate Athletic Training*
- October 1998 Georgetown College Athletic Training Class, Georgetown, KY  
-*Evaluation and Rehabilitation of Patellofemoral Pathologies*
- April 1995 The Hughston Clinic Fellows and Residents, Columbus, GA  
-*Therapeutic Modalities*
- June 1993 Arthritis Foundation, Columbus, GA  
-*Exercises for Arthritis*
- May 1993 Tulane Medical School, Grand Rounds Orthopaedics - New Orleans, LA  
-*Rehabilitation of Total Shoulder Arthroplasty*
- May 1993 The Hughston Clinic Residents and Fellows, Columbus, GA  
-*Elbow Rehabilitation*
- April 1993 Muscogee County High School Football Coaches, Columbus, GA  
-*Ankle, Knee, and Hand Taping*
- March 1993 The Hughston Clinic Fellows and Residents, Columbus, GA  
-*Ankle and Knee Rehabilitation*
- April 1993 The Hughston Clinic Fellows and Residents, Columbus, GA  
-*Shoulder Rehabilitation*
- March 1993 Tulane Medical School - Occupational Therapy Students, New Orleans, LA  
-*Rehabilitation of Rotator Cuff Injuries*
- January 1993 Brookstone High School, Columbus, GA  
-*Career in Physical Therapy*
- November 1992 The University of Michigan Kinesiology Parent Weekend, Ann Arbor, MI  
-*Career in Physical Therapy*
- November 1992 The Hughston Clinic Fellows and Residents, Columbus, GA  
-*Use of Therapeutic Modalities in Knee Rehabilitation*
- August 1992 The Human Performance and Rehabilitation Center with The Hughston Sports Medicine Center, Columbus, GA  
-*Inservice on Rehabilitation Protocols for New Physical Therapists*
- August 1992 The Hughston Clinic Sports Medicine Foundation Pre-Season Fellows and Residents Orientation, Columbus, GA  
-*On the Field Evaluation of Athletic Injuries and Return to Play Criteria*
- September 1991 Primary Care Fellows of The Hughston Clinic, Columbus, GA  
-*Rehabilitation of Shoulder Injuries*

- August 1991 Char-Broil Company, Columbus, GA  
-*Back Lifting Seminar*
- May 1991 Army Corps of Engineers, Fort Gaines, GA  
-*Back Lifting Seminar*
- May 1991 Total Systems, Columbus, GA  
-*Back Lifting Seminar*
- February 1991 Lecture to Emory Physical Therapy Students, Atlanta, GA  
-*Sports Medicine and Common Athletic Injuries*
- October 1990 Hughston Orthopaedic Fellow Conference, Columbus, GA  
-*Knee Rehabilitation for Arthroscopic Meniscectomy, Meniscus Repairs, and Plica Excision*

**Speaking Engagements/Presentations**  
**State and Regional Invited (87)**

- Oct 2005 Kentucky Physical Therapy Association, Louisville, KY  
- *Shoulder Rehabilitation applying EMG Evidence to your practice*
- Sept 2005 New Hampshire Musculoskeletal Institute, 12<sup>th</sup> Annual Symposium, Bedford, NH  
-*Scapular Dyskinesia: Evaluating the Problem*  
-*Scapular Dyskinesia: Integrating the Kinetic Chain into the Intervention*
- July 2005 Arizona Athletic Trainers Association, Flagstaff AZ  
-*Rehabilitation Progressions following Surgical Repair of the Shoulder*  
-*Rehabilitation Management of the Complicated Shoulder*  
-*Rehabilitation Considerations of the Scapula*
- May 2005 Visiting Professor at Ohio State University, Columbus, OH  
-*Rehabilitation Considerations of the Scapula*
- May 2005 7<sup>th</sup> Annual University of Kentucky Sports Medicine Symposium, Lexington, KY  
-*Scapular Dyskinesia – Evaluation and Strengthening Techniques*
- March 2005 Visiting Professor at Indiana State University, Terre Haute, IN  
-*Scapular Assessment and Rehabilitation Techniques*
- August 2004 Lexington Clinic Sports Medicine Center's 7th Annual Shoulder Symposium: The Rotator Cuff, Scapular Dyskinesia, and Advanced Rehabilitation, Lexington, KY  
- *Case Studies Panel*  
- *Rotator Cuff Rehabilitation Progression*
- June 2004 20<sup>th</sup> Annual Sports Medicine Seminar, Tifton, GA  
-*Role of the Scapula in Shoulder Impingement*  
-*Rehabilitation of the Scapula*
- June 2004 32nd annual The Arts and Science of Sports Medicine 2004 Charlottesville, VA  
-*Biomechanics of Throwing*  
-*Shoulder Examination Laboratory x2*  
-*Role of the scapula in impingement*

- March 2004 Sports Medicine Symposium – The Upper Extremity, Xenia OH  
 -*Evaluation of the Shoulder*  
 -*Surgical and Rehabilitation Considerations of Rotator Cuff Tear*  
 -*Surgical and Rehabilitation Considerations of Unstable Shoulder*
- March 2004 Southeastern Athletic Trainers 29<sup>th</sup> Annual Member's Meeting and Clinical Symposium, Atlanta, GA  
 -*Shoulder Rehabilitation: Applying EMG Studies to Your Practice*
- August 2003 6<sup>th</sup> Annual Lexington Clinic Sports Medicine Center's: Musculoskeletal Symposium, Lexington, KY  
 - *Closed Kinetic Chain Exercises in Shoulder Rehabilitation*  
 - *Closed Kinetic Chain Rehabilitation Workshop (Lab)*
- June 2003 19<sup>th</sup> Annual Sports Medicine Seminar, Tifton, GA  
 -*The Role of the Scapula in Shoulder Pain*  
 -*Post-operative Rehabilitation following Rotator Cuff Surgery*
- May 2003 5<sup>th</sup> Annual University of Kentucky Sports Medicine Symposium, Lexington, KY  
 -*Rehabilitation of the Unstable Shoulder*
- April 2003 Post-Operative Shoulder Rehabilitation Conference presented by The Human Performance and Rehabilitation Centers and The McCluskey Education and Research Foundation, Inc, Columbus, GA  
 -*Shoulder Rehabilitation Incorporating the Kinetic Chain*  
 -*Upper Extremity Functional Assessment for the Industrial Athlete*  
 -*Shoulder Rehabilitation using the Kinetic Chain (Lab)*
- March 2003 9<sup>th</sup> Annual Sports Medicine Symposium for the Health Care Professional, Sports Medicine Institute, Spectrum Rehabilitation Services & The Christ Hospital, Cincinnati, OH  
 -*Scientific Basis of Shoulder Rehabilitation*
- August 2002 5<sup>th</sup> Annual Lexington Clinic Sport Medicine Center Musculoskeletal Symposium, Lexington, KY  
 -*Assessment of Scapular Dysfunction*  
 -*The Role of Closed Kinetic Chain Exercises in the Rehabilitation Spectrum*  
 -*Advanced Scapular Rehabilitation (Lab)*
- June 2002 18<sup>th</sup> Annual Sports Medicine Seminar, Tifton, GA  
 -*Role of Closed Kinetic Chain Exercise in Upper Extremity Exercise*  
 -*Evaluation of Scapular Dysfunction*  
 -*Biomechanics of Throwing*
- March 2002 16<sup>th</sup> Annual Sports Medicine Symposium, The Valley Hospital Sports Institute, Ridgewood, NJ  
 -*Innovative Shoulder Evaluation Techniques and Demonstration*
- November 2001 14<sup>th</sup> Annual Kentucky Sports Medicine/Central Baptist Hospital Fall Sports Medicine Symposium, Lexington, KY  
 -*Shoulder Rehabilitation*
- September 2001 Kentucky Physical Therapy Association Orthopedic Workshop, Lexington, KY  
 -*Shoulder Instability and Labral Pathology Rehabilitation*



- August 2001 4<sup>th</sup> Annual Lexington Clinic Sport Medicine Center Musculoskeletal Symposium: The Shoulder and the Kinetic Chain Evaluation, Treatment, and Rehabilitation. Lexington Clinic Sports Medicine Center, Lexington, KY  
*-Assessment of Scapular Dysfunction*  
*-The Role of Closed Kinetic Chain Exercises in the Rehabilitation Spectrum*
- June 2001 27<sup>th</sup> Annual University of Virginia Arts and Science Meeting, Charlottesville, VA  
*-Shoulder Evaluation Lecture and Laboratory*
- June 2001 Pennsylvania Athletic Trainers Society Annual Conference, Harrisburg, PA  
*-Integrating the Kinetic Chain into Shoulder Rehabilitation*
- May 2001 3<sup>rd</sup> Annual Wildcat Sports Medicine Symposium, Lexington, KY  
*-Biomechanics of the Throwing Shoulder*
- March 2001 Southeastern Athletic Trainers' Association, 26<sup>th</sup> Annual Clinical Symposia, Atlanta, GA  
*-Assessment of Scapular Dyskinesia*
- October 2000 Division of Kinesiology, University of Michigan, Ann Arbor MI  
*-Classification of Scapulohumeral Dyskinesia and Muscle Firing Patterns*
- August 2000 3<sup>rd</sup> Annual Lexington Sports Medicine Center's Musculoskeletal Symposium, Lexington, KY  
*-Motion Classification and Motor Activation Patterns about the Scapula*
- July 2000 16<sup>th</sup> Annual Sports Medicine Seminar, Tifton, GA  
*-Rehabilitation of Superior Labral (SLAP) Injuries*  
*-Functional Testing of the Upper Extremity and Return to Throwing*
- May 2000 2<sup>nd</sup> Annual Wildcat Sports Medicine Symposium, Lexington, KY  
*-Rehabilitation of Shoulder Instabilities*
- August 1999 2<sup>nd</sup> Annual Lexington Clinic Sports Medicine Center Musculoskeletal Symposium, Lexington, KY  
*-The Kinetic Chain in Action*  
*-Rehabilitation of the Spine (Lab)*
- June 1999 26<sup>th</sup> Annual Art and Science of Sports Medicine, University of Virginia, Charlottesville, VA  
*-Anatomy and Biomechanics of the Throwing Shoulder*
- April 1999 Ohio Athletic Trainers Association, Athens, OH  
*-Biomechanics of Throwing*
- March 1999 The Valley Hospital Sports Medicine Symposium, Newark, NJ  
*-Rehabilitation of the Stiff Shoulder*
- August 1998 1<sup>st</sup> Annual Lexington Clinic Sports Medicine Musculoskeletal Symposium: The Shoulder, Knee, and Kinetic Chain Lexington Sports Medicine Center, Lexington, KY  
*-Assessment of Outcome Measures*

- July 1998 14th Annual Tifton Sports Medicine Conference, Tifton, GA  
*-Post Operative Rehabilitation following Arthroscopic Decompression for Impingement*  
*-Biomechanical Analysis of the Arm During Pitching*
- June 1998 25th Annual Art and Science of Sports Medicine, University of Virginia, Charlottesville, VA  
*-Examination of the Shoulder Upper Quarter Peripheral Neurological Lesions*
- July 1997 13th Annual Tifton Sports Medicine Conference, Tifton, GA  
*-Post Operative Rehabilitation following Arthroscopic Decompression for Impingement*  
*-Rehabilitation of Shoulder Instabilities*
- June 1997 24th Annual Art and Science of Sports Medicine, University of Virginia, Charlottesville, VA  
*-Examination of the Athlete's Shoulder*  
*-Lab Shoulder Instability in the Athlete*  
*-Scapular Dyskinesia*
- June 1996 23rd Annual Art and Science of Sports Medicine, University of Virginia, Charlottesville, VA  
*-Evaluation of Shoulder Injuries*
- June 1996 12th Annual Tifton Sports Medicine Conference, Tifton, GA  
*-Biomechanics of Pitching*  
*-Evaluation of The Thrower's Shoulder*  
*-Rehabilitation of The Thrower's Shoulder*
- July 1995 11th Annual Tifton Sports Medicine Conference, Tifton, GA  
*-Shoulder Rehabilitation*
- March 1995 Southeastern Athletic Trainers Association, District XI Meeting, Atlanta, GA  
*-Upper and Lower Extremity Neurological Lesions*
- March 1995 Southern Medical Association, Atlanta, GA  
*-Lower Extremity Rehabilitation*  
*-Post-Operative Rehabilitation of Achilles Tendon Repair*  
*-Therapeutic Modalities*
- February 1995 Southeastern Athletic Trainers Association Student Trainers Meeting, Columbus, GA  
*-Therapeutic Exercise Principles*
- July 1994 10th Annual Tifton Sports Medicine Conference, Tifton, GA  
*-Functional Progression for Knee Rehabilitation*  
*-Rehabilitation of Shoulder Instabilities*
- May 1994 Physical Therapy Association of Georgia, Jekyll Island, GA  
*-Knee Evaluation and Rehabilitation*
- April 1994 Southern Medical Association, Columbus, GA  
*-Non-Operative Management of Impingement Syndrome*
- May 1993 3rd Annual Occupational Injury Course, Columbus, GA  
*-Video and Biomechanical Assessment of Occupational Injuries in the Workplace*

- April 1993      Advanced Clinical Education Seminar, Dallas, TX  
 -*Contemporary Concepts in Knee and Shoulder Rehabilitation*,  
 Lab Assistant
- January 1993      Georgia Athletic Trainers Association, Swanee, GA  
 -*Rehabilitation of Shoulder Instabilities*
- January 1993      Alabama Physical Therapy Association, Auburn, AL  
 -*Post-Operative Rehabilitation for Knee Ligament Injury*  
 - *Surface Anatomy of the Knee (Lab)*
- July 1992      8th Annual Tifton Sports Medicine Conference, Tifton, GA  
 -*Shoulder Rehabilitation*
- May 1992      The Hughston Clinic- The Team Physician Conference Meeting,  
 Callaway Gardens Pine Mountain, GA  
 -*ACL Rehabilitation*
- January 1992      Southeastern American College of Sports Medicine Symposium,  
 Auburn, AL  
 -*Rehabilitation for Ligamentous Sprains, Strains, and Contusions  
 about the Knee*
- July 1991      7th Annual Tifton Sports Medicine Seminar, Tifton, GA  
 -*Rehabilitation of Shoulder Injuries*
- June 1991      Occupational Injury Seminar, Columbus, GA  
 -*Rehabilitation of Upper Extremity Overuse Disorders*  
 -*Use of Video in Biomechanical Analysis*

### **National Invited (30)**

- June 2005      56<sup>th</sup> Annual Meeting and Clinical Symposia of National Athletic  
 Trainers' Association, Indianapolis, IN  
 -*Manual Therapies of the Shoulder Joint, Techniques to Enhance  
 Dynamic Stabilization*
- February 2005      American Physical Therapy Association Combined Section Meeting  
 New Orleans, LA  
 -*Scapular Dyskinesia: Examination and Intervention in Patients with  
 Upper-Quarter Dysfunctions*
- June 2004      55<sup>th</sup> Annual Meeting and Clinical Symposia of National Athletic  
 Trainers' Association, Baltimore, MD  
 -*Rehabilitation Considerations of the Scapula*
- February 2004      Combined Section Meeting of the American Physical Therapy  
 Association, Nashville, TN  
 -*Evidence based Approach to Shoulder Evaluation*
- December 2003      24<sup>th</sup> Annual Team Concept Conference sponsored by the Sports  
 Physical Therapy Section, Las Vegas, NV  
 - *Scapular Rehabilitation for Dynamic Stabilization*  
 -*Post-operative Management of Shoulder Instability*  
 -*Neuromuscular Training of Shoulder Girdle*

- June 2003 National Athletic Trainers' Association 54th Annual Meeting and Clinical Symposia, St. Louis, MO.  
(Co-leader of shoulder special interest group)  
*- Special Interest Group: Shoulder, Dynamic Function of the Scapula*  
*- Minicourse: The Role of the Scapula in Glenohumeral Impingement*
- September 2002 American Society of Shoulder and Elbow Therapist and The University of Washington Department of Orthopedics and Sports Medicine "The Challenge of the Rotator Cuff" Seattle, WA  
*- Basic Science of Tendon Tissue Healing*
- June 2002 National Athletic Trainers' Association 53<sup>rd</sup> Annual Meeting and Clinical Symposia, Dallas TX.  
(Co-leader of shoulder special interest group)  
*- Special Interest Group: Shoulder, Dynamic Function of the Shoulder*
- October 2001 American Shoulder and Elbow Surgeons, Napa, CA.  
*- Rehabilitation of Tennis Injuries*
- October 2001 EBI Sports Medicine Symposium, Parsippany, NJ  
*- Assessment of Scapular Dysfunction and Rehabilitation*
- February 2001 Shoulder Special Interest Group of The Sports Physical Therapy Section at Combined Section Meeting of American Physical Therapy Association, San Antonio, TX  
*- Scapular Dysfunction Classification System*
- October 2000 American Society for Shoulder and Elbow Therapists 10<sup>th</sup> Annual Conference, Dallas, TX  
*- The Process of Developing a New Scapular Dyskinesia Classification System*
- June 2000 National Athletic Trainers' Association 51st Annual Meeting and Clinical Symposia, Nashville, TN  
*- Soft Tissue Mobilization for the Shoulder*  
*- Mobilization Techniques for the Shoulder (Lab)*
- May 2000 American College of Sports Medicine 47<sup>th</sup> Annual Meeting, Indianapolis, IN  
*- Scientific Basis of Shoulder/Scapular Rehabilitation*  
*- Office Based Shoulder/Elbow Rehabilitation (Lab)*
- February 2000 Combined Sections Meeting of American Physical Therapist Association, New Orleans, LA  
*- Measurement of Scapular Dysfunction and Glenohumeral Proprioception*
- October 1999 American Society for Shoulder and Elbow Therapist Conference, Philadelphia, PA  
*- Classification of Scapular Dyskinesia Patterns*
- June 1999 National Athletic Trainers' Association Conference, Kansas City, KS  
*- Joint Mobilization of the Shoulder (Lab)*
- June 1997 National Athletic Trainers' Association Conference, Salt Lake City, UT

- February 1996      - *Evaluation of the Shoulder*  
American Physical Therapy Association - Combined Sections  
Meetings, Atlanta, GA  
-*The Evaluation and Treatment of a Patient with a Spinal Accessory  
Nerve Injury*
- February 1995      American Physical Therapy Association - Combined Sections Meeting,  
Reno, NV  
-*Tibial Plateau Fracture from Skiing*  
-*Total Shoulder Rehabilitation*
- March 1994          Kirchner Joint Replacement Seminar, Aspen, CO  
-*Total Shoulder Rehabilitation*
- February 1994      American Physical Therapy Association - Combined Sections Meeting,  
New Orleans, LA  
-*Functional and Range of Motion Outcomes of Total Shoulder -  
Arthroplasty*  
-*Scapular Dyskinesia*
- February 1993      American Physical Therapy Association - Combined Sections Meeting,  
San Antonio, TX  
-*Rehabilitation of Rotator Cuff Deficient Patient*

### **Speaking Engagements/Presentations**

#### **International Invited (6)**

- April 2005          Closed Meeting The Shoulder, Saturnia, Italy  
-*Post-surgical Rehabilitation of the Rotator Cuff*
- December 2004      Shoulder and Elbow Surgery-Controversies 2004, Physiotherapy  
Symposium, Liverpool, UK  
-*Assesment and Management of Scapular Dysfunction*  
-*Rehbilitation Progression of Shoulder Exercises based on EMG  
evidence*  
-*Assessment and Management of Scapular Dysfunction (Hands-on  
Laboratory)*
- May 2004            First International Congress of Shoulder Therapist, Washington, D.C.  
-*Classification of Exercise Terminology*
- July 2003            Scapular Summit, Lexington Clinic Sports Medicine Center,  
Lexington, KY  
-*Bilateral Scapular Kinematics and EMG Findings in  
Pathological Patients*

### **Speaking Engagements/Presentations**

#### **State and Regional Peer Reviewed (41)**

Students underlined

- April 2005          Southeastern Athletic Trainers 30<sup>th</sup> Annual Clinical Symposium and

Member's Meeting, Atlanta, GA  
 Poster- *Hip abduction and adduction strength of injured and healthy collegiate football athletes.* Stanley OS, Jacobs C, Mattacola CG, **Uhl TL**, Johnson DL

Poster- *Functional Multijoint Position Reproduction Acuity in Overhead-throwing Athletes* Tripp BL, **Uhl TL**, Mattacola CG, Srinivasan C, Shapiro R.

Oral- *Relationship of hip abductor strength and endurance with the kinematics of landing.* Jacobs C, Mattacola CG, **Uhl TL**, Shapiro R, Rayens WS

March 2004

Southeastern Athletic Trainers 29<sup>th</sup> Annual Member's Meeting and Clinical Symposium, Atlanta, GA

Poster- *Isometric Muscle Force Measurements obtained by Hand-Held Dynamometry and Strength Relationships among Athletes Aged 14 to 25* Downar SJ, Mattacola CG, **Uhl TL**, Malone TR

Poster - *Effect Of Orthotics On Balance And The Muscle Activity Of Selected Leg Muscles During Bilateral Stance*  
Mulvihill CP, Mattacola CG, Nitz AJ, **Uhl TL**

Poster – *Validating the Single-Leg Squat Test as a Function Test for Hip Abduction Strength*  
DiMattia MA, Livengood AL, **Uhl TL**, Mattacola CG, Malone TR

Poster – *The Effects of a 9-week Strengthening Program on Scapular Muscle Strength*  
Dupas, E, Tripp, BL, **Uhl, TL**, Mattacola, CG, Malone,

Poster – *Muscle Activity Comparison of 4 Common Shoulder Exercises in Unstable and Stable Shoulders*  
Kuschinsky, N, **Uhl, TL**, Sciascia, A, Mair, S, Nitz, AJ, Mattacola, CG

Poster - *Comparison of Core Strength and Injuries in Collegiate Athletes*  
Pearson CL, **Uhl TL**, Ingram C, Newsome S, Mattacola CG, English RA

Poster – *Isokinetic and Functional Fatigue Protocols have Similar Effects on Balance*  
Tymkew JA, Jacobs C, Mattacola CG, **Uhl TL**, Malone TR:

Poster - *Strength and Fatigability of the Dominant and Non-Dominant Hip Abductors*

Jacobs C, Seeley MK, **Uhl TL**, Sterling W, Goodrich L

Oral – *The effect of a Simulated Knee Effusion of Quadriceps Function: Implications for Rehabilitation*

Bolglia LA, **Uhl TL**, Mattacola CG, Malone TR, Mair S

Oral – *A Study of the Relationship Between Postural Sway, Navicular Drop, and Ankle Strength in Division I Football Players*

Kelly JJ, Mattacola CG, **Uhl TL**, Johnson DL, Madaleno JA

March 2003

Southeastern Athletic Trainers 28<sup>th</sup> Annual Member's Meeting and Clinical Symposium, Atlanta, GA

Oral- *EMG Analysis Of Trunk Muscles During Three Different Core Stabilization Exercises*

Brajuha DA, **Uhl TL**, Nitz AJ, Mattacola CG

Poster- *Neuromuscular Control Patterns And Strength Of Overhead Athletes And Control Subjects*

Haggerty MC, **Uhl TL**, Mattacola CG, Shapiro R

Poster- *Reliability Of Bilateral Scapular Motion Using A Three-Dimensional Electromagnetic Device*

Gecewich BD, **Uhl TL**, Tripp BL, Shapiro R, Mattacola CG, Kibler WB

Poster- *Muscle Activity Comparison Of Four Common Shoulder Exercises In Unstable And Stable Shoulders.*

Sciascia AD, **Uhl TL**, Mattacola CG, McCrory JL, Nitz AJ, Mair SD

Poster- *Inter- And Intratester Reliability For A Qualitative Dynamic Observation Method For Scapular Dyskinesia*

Mattocks H, **Uhl TL**, Mattacola CG, Shapiro R, Dome D, Kibler WB

Poster- *Effect Of Prophylactic Ankle Bracing On Postural Control And EMG Of Lower Extremity And Trunk Muscles*

Roller SJ, Livengood AL, Mattacola CG, **Uhl TL**, Malone TR

Poster- *Relationship Between Mechanical Foot Position and Postural Sway*

Silvestri PG, Mattacola CG, Madaleno JA, Johnson DL, **Uhl TL**

March 2002

Southeastern Athletic Trainers 27<sup>th</sup> Annual Member's Meeting and Clinical Symposium, Atlanta, GA

Poster - *Rehabilitative Techniques for Treating Spondylolisthesis*  
Sciascia AD, **Uhl TL**

Poster - *Retrospective Analysis of Time to Return to Activity for Distal Tibiofibular Syndesmotom Ankle Sprains in Division I Football Players.*  
Silvestri PG, **Uhl TL**, Madaleno JA, Blackport RM

Poster - *Assessment and Management of Thoracic Outlet Syndrome in a Collegiate Swimmer* Uhl CM, Rankin CA, **Uhl TL**

Poster - *Effect of Ankle Bracing on Postural Sway during Single Limb Landing from a Controlled Height* Baker JK, Mattacola CG, McCrory JL, **Uhl TL**, Malone TR, Livengood AL.

Poster - *Relationship between Isokinetic Quadriceps and Hamstring Strength to Lower Extremity Functional Test.* Gahan EW, Mattacola CG, **Uhl TL**, Malone TR.

Poster - *Effect of Prophylactic Ankle Support on Muscle Latency when Landing from a Height* Rankin CA, Mattacola CG, McCrory JL, **Uhl TL**, Malone TR.

Poster - *Effects of Muscle Temperature on Hamstring Flexibility*  
Sawyer P, **Uhl TL**, Yates JW, Mattacola CG, Johnson DL.

August 2001

Combined meeting of Kentucky and Tennessee Orthopaedic Society, White Sulpher Springs, WV  
 Oral- *Correlation of Proximal Humerus Physcal Changes with Symptoms in Skeletally Immature Throwers* Robbe R, Mair SD, **Uhl TL**, Muldoon K

June 2001

Hughston Society, Columbus, GA  
*EMG Analysis of Closed Chain Rehabilitation Exercises Performed at Two Different Speeds* **Uhl TL**, Wise MB, Mattacola CG, Nitz AJ, Kibler WB

May 2001

Alabama Athletic Trainers' Association, Gulf Shores, AL  
 Oral- *The Effect of Moist Heat on Hamstring Flexibility and Muscle Temperature* Sawyer P, **Uhl TL**, Mattacola CG, Yates JW

May 2001

6<sup>th</sup> Annual Orthopaedic Residents and Fellows Arthroscopy Conference, Useppa, FL  
 Oral- *Proximal Humeral Physcal Changes in Skeletally Immature Throwing Athletes* Robbe R, Mair SD, **Uhl TL**, Muldoon K

March 2001

Southeastern Athletic Trainers' Association Conference, Atlanta, GA



Poster - *Electromyographical Differences between Slow and Fast Closed and Open Chain Shoulder Exercises* **Uhl TL**, Wise MB, Mattacola CG, Nitz AJ, Kibler WB

Poster - *Examination of Electromyographic Activity of Shoulder Girdle Musculature while Progressively Increasing Glenohumeral Axial Compression* Carver TJ, **Uhl TL**, Mattacola CG, Nitz AJ, Mair SD

Poster - *Times of the Lower Extremity Following ACL Reconstruction Using Two Submaximal Single-Leg Hop Protocols* Rund MR, Mattacola CG, **Uhl TL**, McCrory JL, Malone TR, Johnson DJ

Poster - *Effect of Orthotics on Postural Stability Over a Six-Week Acclimation Period* Miller AK, Mattacola CG, **Uhl TL**, McCrory JL, Malone TR

Oral - *Electromyographical Comparison of Open and Closed Chain Shoulder Exercises* Wise MB, **Uhl TL**, Mattacola CG, Nitz AJ, Kibler WB

Oral - *Effects of Two Ankle Fatigue Models On the Duration Of Postural Stability Dysfunction* Ramsdell KM, Mattacola CG, **Uhl TL**, McCrory JL, Malone TR

- September 2000 Kentucky Medical Association, Louisville, KY  
Oral Presentation – *Assessment of Scapular Dyskinetic Movements and Muscle Firing Pattern*. Maddux JQ, **Uhl TL**, Kibler WB, Brooks PB, Zeller B, McMullen J
- April 2000 Southeast Athletic Trainer’s Association Conference, Atlanta, GA  
Poster - *An Accelerated Rehabilitation of a Hand Injury in a Collegiate Volleyball Player* James CB, Mattacola CG, **Uhl TL**, Lawton JN
- April 2000 Southeast Athletic Trainer’s Association Conference, Atlanta, GA  
Oral Presentation - *Retrospective Analysis of Time to Return to Activity for Distal Tibofibular Syndesmotom Ankle Sprains in Division I Football Players* **Uhl TL**, Madaleno J, Sawyer P, Allen J
- January 2000 Southeast American College of Sports Medicine, Charlotte, NC  
Poster - *EMG Analysis of Trunk and Lower Extremity Musculature in Tennis Ground Strokes* Schiff SK, **Uhl TL**, Zeller B, Chandler TJ, Kibler, WB
- June 1989 Michigan Physical Therapy Association, Lansing, MI  
Poster - *Kinematics of Forward and Backward Walking on the Treadmill* Pande P, Phillips J, **Uhl TL**, Brown S

**Speaking Engagements/Presentations****National Peer Reviewed (63)**Students underlined

- Feb 2006 American Physical Therapy Association Combined Section Meeting, San Diego, CA  
Poster - *The Use of Ultrasound Imaging to Measure Select Trunk Muscle Activation During Induced Pain*  
Kiesel K, Underwood F, **Uhl T**, Nitz A
- June 2005 56<sup>th</sup> Annual Meeting and Clinical Symposia of National Athletic Trainers' Association, Indianapolis, IN  
Oral- *Hip abduction and adduction strength of injured and healthy collegiate football athletes.* Stanley OS, Jacobs C, Mattacola CG, **Uhl TL**, Johnson DL
- Oral- *Rehabilitation alters VL and VMO recruitment, decreases pain, and increases function in patients with patellofemoral pain syndrome.*  
Boling MC, Bolgla LA, Mattacola, CG, **Uhl TL**, Hosey RG
- Oral- *Relationship of hip abductor strength and endurance with the kinematics of landing.* Jacobs C, Mattacola CG, **Uhl TL**, Shapiro R, Rayens WS
- Oral- *Isometric muscle force measurements obtained by Hand-held dynamometry and strength relationships among athletes aged 14 to 22.*  
Downar SJ, Mattacola CG, **Uhl TL**, Malone TR
- Oral- *Comparison of core strength and injuries in college athletes.*  
Lanning CL, **Uhl TL**, Ingram C, Newsom S, Mattacola CG, English T
- Oral- *Electromyographic analysis of hip rehabilitation exercises.*  
Bolgla LA, **Uhl TL**
- Oral- *Functional multijoint position reproduction acuity in overhead-throwing athletes.* Tripp BL, **Uhl TL**, Mattacola CG, Srinivasan S, Shapiro R
- February 2005 American Physical Therapy Association Combined Section Meeting, New Orleans, LA  
Poster - *The Relationship between Isokinetic Peak Torque Testing and Star Excursion Balance Test*  
Brannock M, Chick W, Eastwood L, English RA, **Uhl TL**
- Poster - *The Relationship between Lower Extremity Isokinetic Work and Single Leg Functional Hop Work Test*

Brannock M, Chick W, Eastwood L, English RA, Uhl TL

- October 2004 American Shoulder and Elbow Surgeons 21<sup>st</sup> Annual Meeting, New York, NY  
 Oral- *Three Dimensional Scapular Kinematics in Injured and Non-Injured Subjects, and in Symmetrical and Asymmetrical Subjects*  
 Kibler WB, Tripp BL, **Uhl TL**
- October 2004 American Society of Shoulder and Elbow Therapists 14<sup>th</sup> Annual Conference, New York, NY  
 Oral- *Shoulder Strength and Flexibility of Youth Baseball Players*  
**Uhl TL**, Mair, SD, Robbe, R, Brindle, K
- June 2004 National Athletic Trainers' Association 55<sup>th</sup> Annual Meeting and Clinical Symposia, Baltimore, MD  
 Oral- *A Study Of The Relationship Between Postural Sway, Navicular Drop, And Ankle Strength In Division I Football Player.* Kelly JJ, Mattacola CG, **Uhl TL**, Johnson DL.
- Oral- *Comparison of Three-Dimensional Scapular Kinematics In Pathologic and Non-Pathologic Subjects.* Tripp BL, **Uhl TL**, Kibler WB.
- Oral- *Effect of Foot Orthotics on Balance and the Muscle Activity of Selected Leg Muscles during Bilateral Stance.* Mulvihill CP, Mattacola CG, Nitz AJ, **Uhl TL**
- Poster- *Joint Position Sense of Loaded and Unloaded Active Shoulder Internal Rotation Movements.* Brindle TJ, **Uhl TL**, Nitz AJ, Shapiro R.
- Poster- *Isokinetic and Functional Fatigue Protocols Have Similar Effects on Balance.* Tymkew JA, Jacobs C, Mattacola CG, **Uhl TL**, Malone TR.
- Poster- *Validating The Single-Leg Squat Test As A Functional Test For Hip Abduction Strength.* DiMattia MA, Livengood AL, **Uhl TL**, Mattacola CG, Malone TR.
- June 2004 51<sup>st</sup> Annual Meeting of the American College of Sports Medicine, Indianapolis, IN  
 Oral- *A Comparison of Traditional and Abbreviated Tennis Serves: A Preliminary Report* Seeley M, **Uhl TL**, McGinn PA, Kibler WB, Shapiro R.
- April 2004 9<sup>th</sup> Annual Gait and Clinical Movement Analysis Society Meeting, Lexington, KY

- March 2004 Oral - *Postural Response of Unilateral Below-Knee Amputee during External Perturbation.* Bowman A, **Uhl TL**, McCrory JL, Shapiro R  
American Association of Orthopaedic Surgeons, San Francisco, CA  
Poster – *Femoral Rollback in a PCL Reconstructed Knee, an In-Vivo Study* Wilson T, **Uhl TL**, Johnson DL, Holzhauser M.
- February 2004 Combined Section Meeting of the American Physical Therapy Association, Nashville, TN  
Oral- *The effect of progressive nerve stretching on the diameter and electrophysiological properties of the rat sciatic nerve.* Quick NE, McCrory JL, Nitz AJ, **Uhl TL**, Shapiro R,
- October 2003 American Shoulder and Elbow Surgeons Basic Science Meeting, Dana Point, CA  
Oral- *Validity of Clinical Assessment of Scapular Dyskinesis – A Preliminary Report.* **Uhl TL**, Kibler WB, Tripp BL, Gecewich BD, Shapiro R
- October 2003 American Society of Shoulder and Elbow Therapists, Dana Point, CA  
Oral- *Electromyographic Assessment of 13 Rehabilitation Exercises.* **Uhl TL**, Lawson L, Klare K  
Oral- *Electromyography of Shoulder and Scapular Musculature during Progressive Elevation Exercises* Gaunt B, Uhl TL, Humphrey L, Calico RM, McCluskey GM.
- June 2003 National Athletic Trainers' Association 54<sup>th</sup> Annual Meeting and Clinical Symposia, St. Louis, MO  
Poster- *Effect Of Prophylactic Ankle Bracing On Postural Control And EMG Of Lower Extremity And Trunk Muscles* Roller SJ, Livengood AL, Mattacola CG, **Uhl TL**, Malone TR
- Oral- *Muscle Activity Comparison Of Four Common Shoulder Exercises In Unstable And Stable Shoulders* Sciascia AD, **Uhl TL**, Mattacola CG, McCrory JL, Nitz AJ, Mair SD
- Oral- *Inter- And Intratester Reliability For A Qualitative Dynamic Observation Method For Scapular Dyskinesis* Mattocks H, **Uhl TL**, Mattacola CG, Shapiro R, Dome D, Kibler WB
- Oral- *Reliability Of Bilateral Scapular Motion Using A Three-Dimensional Electromagnetic Device* Gecewich BD, **Uhl TL**, Tripp BL, Shapiro R, Mattacola CG, Kibler WB
- Oral- *Neuromuscular Control Patterns And Strength Of Overhead Athletes And Control Subjects* Haggerty MC, **Uhl TL**, Mattacola CG, Shapiro R
- Oral- *Relationship Between Mechanical Foot Position and Postural Sway* Silvestri PG, Mattacola CG, Madaleno JA, Johnson DL, **Uhl TL**

- June 2003 Annual Conference & Exposition of the American Physical Therapy Association, Washington, DC  
 Poster – *Motor Control of Shoulder Proprioception at Various Speeds*  
Brindle T, **Uhl T**, Nitz A, Shapiro R
- Oral - *Electromyographic Assessment of Thirteen Rehabilitation Shoulder Exercises* Lawson L, Klare K, **Uhl TL**
- May 2003 Gait and Clinical Movement Analysis Society, Wilmington, DE  
 Poster - *Proprioceptive Measures of Active Glenohumeral Movements*  
Brindle T, **Uhl TL**, Nitz AJ, Shapiro R
- April 2003 Arthroscopic Association of North America, Phoenix, AZ  
 Poster - *Femoral Rollback in a PCL Reconstructed Knee, an In-Vivo Study* Wilson TC, **Uhl TL**, Johnson DL
- February 2003 Combined Sections Meeting of the American Physical Therapy Association, Tampa, FL  
 Oral – *Trunk Muscle Activation Performing Three Core Stabilization Exercises* Nitz AJ, Brajuha D, **Uhl TL**, Mattacola CG
- September 2002 American Society of Shoulder and Elbow Therapist Annual Conference Seattle, WA  
 Oral - *Muscle Activity Comparison of 4 Common Shoulder Exercises in Unstable and Stable Shoulders* Sciascia A, **Uhl,TL**, Mair SD, Nitz AJ, Mattacola CG, McCrory J
- June 2002 National Athletic Trainers' Association 53<sup>rd</sup> Annual Meeting and Clinical Symposia, Dallas, TX  
 Poster - *Retrospective Analysis of Time to Return to Activity for Distal Tibiofibular Syndesmotic Ankle Sprains in Division I Football Players*  
Silvestri PG, **Uhl TL**, Madaleno JA, Blackport RM
- Poster - *Relationship between Isokinetic Quadriceps and Hamstring Strength to Lower Extremity Functional Tests* Gahan EW, Mattacola CG, **Uhl TL**, Malone TR
- Poster - *Effects of Muscle Temperature on Hamstring Flexibility*  
Sawyer P, **Uhl TL**, Yates JW, Mattacola CG, Johnson DL
- Oral - *Rehabilitative Techniques for Treating Spondylolisthesis*  
Sciascia AD, **Uhl TL**
- Oral - *Effect of Prophylactic Ankle Support on Muscle Latency when Landing from a Height* Rankin CA, Mattacola CG, McCrory JL, **Uhl TL**, Malone TR

Oral - *Effect of Ankle Bracing on Postural Sway during Single Limb Landing from a Controlled Height* Baker JK, Mattacola CG, McCrory JL, **Uhl TL**, Malone TR, Livengood AL

Oral - *Assessment and Management of Thoracic Outlet Syndrome in a Collegiate Swimmer* Uhl CM, Rankin CA, **Uhl TL**

- June 2002 American Physical Therapy Association, Cincinnati, OH  
*EMG Analysis of Shoulder Muscle Fatigue During Resisted Shoulder Elevation* Minning S, Elliot C, **Uhl TL**, Malone TR
- February 2002 American Academy of Orthopaedic Surgeons - Specialty Day for American Shoulder and Elbow Surgeons, Dallas TX  
*Electromyographical Comparison of Open and Closed Chain Shoulder Exercises* **Uhl TL**, Wise MB, Mattacola CG, Nitz AJ, Kibler WB
- October 2001 American Society of Shoulder and Elbow Therapists, Napa, CA  
*Electromyographical differences between slow and fast closed and open chain shoulder exercises* **Uhl TL**, Wise MB, Mattacola CG, Nitz AJ, Kibler WB
- June 2001 National Athletic Trainers' Association Conference, Los Angeles, CA  
Oral - *Electromyographical Differences between Slow and Fast Closed and Open Chain Shoulder Exercises* **Uhl TL**, Wise MB, Mattacola CG, Nitz AJ, Kibler WB
- Oral - *Examination of Electromyographic Activity of Shoulder Girdle Musculature while Progressively Increasing Glenohumeral Axial Compression* Carver TJ, **Uhl TL**, Mattacola CG, Nitz AJ, Mair SD
- Oral - *Times of the Lower Extremity Following ACL Reconstruction Using Two Submaximal Single-Leg Hop Protocols* Rund MR, Mattacola CG, **Uhl TL**, McCrory JL, Malone TR, Johnson DJ
- Poster - *Effect of Orthotics on Postural Stability Over a Six-Week Acclimation Period* Miller AK, Mattacola CG, **Uhl TL**, McCrory JL, Malone TR
- Oral - *Electromyographical Comparison of Open and Closed Chain Shoulder Exercises* Wise MB, **Uhl TL**, Mattacola CG, Nitz AJ, Kibler WB
- Oral - *Effects of Two Ankle Fatigue Models On the Duration Of Postural Stability Dysfunction* Ramsdell KM, Mattacola CG, **Uhl TL**, McCrory JL, Malone TR
- June 2001 American Orthopaedic Society for Sports Medicine, Keystone, CO.  
Oral - *Correlation of Proximal Humerus Physseal Changes with*

- Symptoms in Skeletally Immature Throwers* Mair SD, **Uhl TL**, Robbe R, Muldoon K
- June 2001 American Orthopaedic Society for Sports Medicine, Keystone, CO  
Oral - *Gender Differences in Kinematics and EMG Activity in the Single Leg Squat* Zeller BL, McCrory J, Kibler WB, **Uhl TL**
- May 2001 Experimental Biology, Orlando, FL  
Poster- *The Effects of Fish Oil and Isoflavons on Delayed Onset Muscle Soreness* Lenn J, **Uhl TL**, Mattacola CG, Yates JW, Boissonneault GA, Wissam I, Bruckner G
- November 2000 American Association of Physical Medicine and Rehabilitation, San Francisco, CA  
Poster - *Motor Firing Patterns of Scapulohumeral Rhythm* Kibler WB, **Uhl TL**, Maddux JWQ, Brooks PV, Zeller B, McMullen J
- October 2000 American Shoulder and Elbow Surgeons, Austin, TX  
Oral Presentation – *Clinical Reliability of a Scapular Dyskinesia Classification System* Kibler WB, **Uhl TL**, Maddux JQ, Brooks PB, Zeller B, McMullen J
- June 2000 National Athletic Trainer’s Association Conference, Nashville, TN  
Oral Presentation – *Retrospective Analysis of Time to Return to Activity for Distal Tibiofibular Syndesmotom Ankle Sprains in Division I Football Players* **Uhl TL**, Madaleno J, Sawyer P, Allen J
- Poster - *An Accelerated Rehabilitation of a Hand Injury in a Collegiate Volleyball Player* James CB, Mattacola CG, **Uhl TL**, Lawton JN
- March 2000 American Academy of Orthopaedic Surgeons, Orlando, FL  
Instructional Course - *Clinical Issues in Rehabilitation of the Shoulder and Elbow* **Uhl TL**, Wilk KE, Kibler WB
- June 1999 National Athletic Trainers’ Association Conference, Kansas City, KS  
Oral - *Correlation between Joint Position Sense and Motor Latencies in Throwing and Non-Throwing Athletes* **Uhl TL**, Gieck JH, Perrin DH, Arnold BL, Saliba E, Ball DW
- Poster – *The Effect of a Single Bout of PNF Stretching on Hamstring Flexibility* Spernoga SG, **Uhl TL**, Arnold BL, Gansneder BM
- Poster - *Effectiveness of Shoulder Bracing in Limiting Active Range of Motion* McLeod IA, **Uhl TL**, Arnold BL, Gansneder BM

- June 1998 National Athletic Trainers' Association Conference, Baltimore, MD  
Poster - *Joint Reposition Sense of the Healthy Shoulder Before and After Isotonic Exercise* Couper KL, **Uhl TL**, Perrin DH, Gansneder BM
- June 1992 The National Athletic Trainers' Association Conference, Denver, CO  
Oral Presentation - *Arthroscopic vs. Open Rotator Cuff Repairs*  
**Uhl TL**, Baker CL, Liu S
- March 1991 Orthopaedic Research Society, Anaheim, CA  
Poster - *The Effects of Weight Bearing on Anterior Displacement of the Tibiofemoral Joint* **Uhl TL**, Loubert PV, Wojtys E
- June 1988 National Athletic Trainers Association Conference, Indianapolis, IN  
Poster - *Use of an Orthotic Device in the Treatment of Posterior Heel Pain* Wooten BP, **Uhl TL**, Chandler TJ
- May 1988 American College of Sports Medicine, Dallas, TX  
Oral Presentation - *Flexibility Findings of Junior Elite Tennis Players*  
**Uhl TL**, Kibler WB, McQueen C
- February 1987 American Academy of Orthopaedic Surgeons, San Francisco, CA  
Poster - *Physical Evaluation Findings of Junior Elite Tennis Players* Kibler WB, **Uhl TL**, Herms R

### Speaking Engagements/Presentations

#### International Peer Reviewed (5)

Students underlined

- August 2005 XXth International Society of Biomechanics and 29<sup>th</sup> American Society of Biomechanics meetings, Cleveland, OH  
*Function Fatigue Decrease Three-Dimensional Multijoint Position Reproduction in Overhead Athletes.* Tripp BL, **Uhl TL**, Mattacola CG, Srinivasan C, Shapiro R
- October 2004 The Fourth Pan-Pacific Conference on Rehabilitation and Hong Kong Physiotherapy Association Annual Congress, Hong Kong, China  
Oral – *Measure of Lumber Multifidus Muscle Contraction with Ultrasound Imaging.* Kiesel KB, **Uhl TL**, Underwood FB, Rodd DW, Nitz AJ
- October 2004 Second International Ankle Symposium, Newark, DE  
Oral - *Muscular Contributions of the Anterior and Posterior Tibialis, Gastrocnemius, and Fibularis Longus with and without Orthotics during Bilateral Stance.* Mattacola CG, Mulvihill CP, Nitz AJ, **Uhl TL**.
- May 2004 First International Congress of Shoulder Therapist, Washington, D.C.  
Oral – *Assessment of Scapular Symmetry in Pathologic and Non-*



*pathologic subjects using a Three-dimensional Motion Analysis System.*

Tripp BL, **Uhl TL**, Kibler WB, Gecewich BD

Oral – *Muscle Activity Comparison of Four Common Shoulder Exercises in Unstable and Stable Shoulders.* Kuschinsky N, **Uhl TL**, Sciascia A, Mair S, Nitz AJ, Mattacola CG.

Oral – *Electromyography of Shoulder and Scapular Musculature during an Elevation Strengthening Progression.* Gaunt BW, **Uhl TL**, Humphrey L, Calico RM

## **XII. Research and Creative Productivity**

Students underlined

### **Publications: Peer Reviewed Journals (26)**

Harkins, KM, Mattacola CG, Uhl TL, Malone TR, McCroory JL, *Effects of 2 Ankle Fatigue Models on the duration of Postural Stability Dysfunction.* Journal of Athletic Training 40(3):191-196, 2005

Jacobs C, **Uhl TL**, Seeley MK, Sterling W, Goodrich L, *Strength and Fatigability of the Dominant and Non-Dominant Hip Abductors.* Journal of Athletic Training 40(3):203-206, 2005

Bolgia LA, **Uhl TL**, *Electromyographical Analysis of Hip Rehabilitation Exercises in a Group of Healthy Subjects.* Journal of Orthopaedics and Sports Physical Therapy. 35(8):487-494, 2005

DiMattia MA, Livengood AL, **Uhl TL**, Mattacola CG, Malone TR, *What are the validity of the single-leg squat test and its relationship to hip abduction strength.* Journal of Sport Rehabilitation 14(2):108-123, 2005

Wise MB, **Uhl TL**, Mattacola CG, Nitz AJ, Kibler WB, *The effect of limb support on muscle activation during shoulder exercises.* Journal of Shoulder and Elbow Surgeons 13(6): 614-620, 2004

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#### **Publications: Non-Peer Reviewed Journals (11)**

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### **Publications: Journals (In Review)**

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**Publications: Abstracts (49)**

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Sciascia AD, Uhl TL, *Rehabilitative Technique for Treating Spondylolisthesis.* Journal of Athletic Training, 37(2)supplement:S-12-13,2002

Baker JK, Mattacola CG, McCrory JL, Uhl TL, Malone TR, *Effect of Ankle Bracing on Postural Sway During Single Limb Landing from a Controlled Height.* Journal of Athletic Training, 37(2)supplement:S-26-27,2002

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Sawyer P, Uhl TL, Yates JW, Mattacola CG, Johnson DL, *Effect of Muscle Temperature on Hamstring Flexibility.* Journal of Athletic Training, 37(2)supplement:S-103,2002

Spernoga SG, Uhl TL, Arnold BL, Gansneder BM, *Duration of Maintained Hamstring Flexibility following a One-Time Modified Proprioceptive Neuromuscular Facilitation Stretching Protocol.* Year Book of Sports Medicine, Mosby 2002

Wolfe MW, Uhl TL, Mattacola CG, McCluskey LC, *Management of Ankle Sprains, Analgesia* File

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Ramsdell KM, Mattacola CG, **Uhl TL**, McCorry JL, Malone TR. *Effects Of Two Ankle Fatigue Models On The Duration Of Postural Stability Dysfunction*. Journal of Athletic Training, 36(2): S-33, 2001

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Carver TJ, **Uhl TL**, Mattacola CG, Nitz AJ, Mair SM. *Examination of Electromyographic Activity of shoulder Girdle Musculature while Progressively Increasing Glenohumeral Axial Compression*. Journal of Athletic Training, 36(2): S-41, 2001

**Uhl TL**, Wise MB, Mattacola CG, Nitz AJ, Kibler WB. *Electromyographical differences between slow and fast closed and open chain shoulder exercises*. Journal of Athletic Training, 36(2): S-41, 2001

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James CB, Mattacola CG, **Uhl TL**, Lawton JN, *An Accelerated Rehabilitation of a Hand Injury in a Collegiate Volleyball Player*. Journal of Athletic Training, 35(2):S-65, 2000

**Uhl TL**, Madaleno J, Sawyer P, Allen J, *Retrospective Analysis of Time to Return to Activity for Distal Tibofibular Syndesmotic Ankle Sprains in Division I Football Players*. Journal of Athletic Training, 35(2):S-39, 2000

**Uhl TL**, Gieck JH, Perrin DH, Arnold BL, Saliba E, Ball DW, *The Correlation Between Joint Position Sense and Neuromuscular Control of the Shoulder*. Journal of Athletic Training, 34(2): S-10, 1999

Spernoga SG, **Uhl TL**, Arnold BL, Gansneder BM, *Duration of Maintained Hamstring Flexibility Following a One-Time Modified Proprioceptive Neuromuscular Facilitation Stretching Protocol*. Journal of Athletic Training, 34(2): S-76, 1999

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Couper KL, **Uhl TL**, Perrin DH, Gansneder BM, *Joint Reposition Sense of the Healthy Shoulder Before and After Isotonic Exercise*. Journal of Athletic Training, 33(2): S-26, 1998

### **Publication: Multimedia**

Brajuha DA, Roller S, Gecewich BD, Mulivahill CP, Silvestri PG, Uhl TL, ACL Protocol CD 2003

Brajuha DA, Uhl TL Core Stabilization Program and Progression CD 2002

**Publications: Book Reviews**

**Publications: Professional Newsletters**

Sciascia AD, Uhl TL, *Rehabilitative Techniques for Treating Spondylolisthesis*. NATA News, 10:52-55, 2003

Uhl TL, *Knee Taping* Hughston Health Alert, 13(4):6, 2001

**XIII. Grant Activity:**

- July 2005      **National Athletic Trainers Association Research and Education Foundation Osternig Master's Grant**  
 Project: Gender, Structure, and Activity: Variables Affecting Knee Kinematics  
 Investigators: PI's: Fazio M, Sebert J, Mattacola CG, Uhl TL, Jacobs C, Shapiro R  
 Status: Funded  
 Amount: \$1000.00
- July 2005      **National Athletic Trainers Association Research and Education Foundation Osternig Master's Grant**  
 Project: Effects of Foot Orthotics on Dynamic Postural Control Tasks in Subjects with Chronic Ankle Instabilities  
 Investigators: Sesma A, Mattacola CG, Livengood A, Uhl TL, Schlosser T  
 Status: Funded  
 Amount: \$1000.00
- Feb. 2005      **DJ Ortho**  
 Project: The Identification of Clinical Indicators to Assist Physicians in the Prescription of Unloader Knee Orthoses  
 Investigators: Johnson DL, Seeley MK, **Uhl TL**, Shapiro R, Spigelman T, Turnquist T,  
 Status: In review  
 Amount: \$22,310.00
- Feb. 2005      **Lexington Clinic Research and Education Foundation**  
 Project: The Effectiveness of Pro S3 on Scapular Kinematics and Proprioception  
 Investigators: **Uhl TL**, Tripp BL  
 Status: Funded  
 Amount: \$71,398.00 (4-68592)
- October 2004   **National Institution of Health**  
 Project: Overweight and Obesity Control: Police and Firefighters  
 Investigators: Clayton R, Allweiss P, Bastin S, Boissonneault G, Boosalis M, Bruckner G, **Uhl TL**  
 Status: Resubmitted  
 Amount: \$2,866,000.00
- July 2004      **National Athletic Trainers Association Research and Education Foundation**  
 Project: Relationship of hip abductor strength and endurance to functional performance  
 Investigators: Jacobs C, Mattacola, CG, **Uhl TL**  
 Status: Funded  
 Amount: \$2500.00 (4 – 68154)
- April 2004      **Association of Schools of Allied Health Professions**  
 Project: The Effectiveness of Shoulder Slide versus Traditional Rehabilitation Protocol following Rotator Cuff Repair, A Randomized Clinical Trial

- Investigators: **Uhl TL**  
 Status: Rejected  
 Amount: \$5,381.00
- March 2004 **Southeastern Athletic Trainers' Association Research and Education Foundation**  
 Project: Relationship of hip abductor strength and endurance to functional performance  
 Investigators: Jacobs C, Mattacola CG, **Uhl TL**  
 Status: Funded  
 Amount: \$1,500.00 (4- 68155)
- March 2004 **National Institution of Health**  
 Project: Overweight and Obesity Control: Police and Firefighters  
 Investigators: Clayton R, Allweiss P, Bastin S, Boissonneault G, Boosalis M, Bruckner G, **Uhl TL**  
 Status: Rejected  
 Amount: \$3,066,125.00
- Nov. 2003 **The University of Kentucky Major Research Equipment Grant**  
 Project: HUMAC/Windows XP Software for Cybex Norm  
 Investigators: English T, **Uhl TL**  
 Status: Funded  
 Amount: \$8,975.00 (209199)
- Jan. 2003 **National Athletic Trainers' Association Research and Education Foundation**  
 Project: Isometric Muscle Force Measurement Obtained by Hand-Held Dynamometry among Athletes Age 14-25  
 Investigators: Downar S, Mattacola CG, **Uhl TL**  
 Status: Funded  
 Amount: \$1000.00 (4-67177)
- Jan. 2003 **National Athletic Trainers' Association Research and Education Foundation**  
 Project: Effect of a Functional Rehabilitation Program on EMG activity and Pain in Patients with Patellofemoral Pain Syndrome  
 Investigators: Boling M, Bolgia L, Mattacola CG, **Uhl TL**  
 Status: Funded  
 Amount: \$1000.00 (4-67094)
- Aug. 2003 **McCluskey Education and Research Foundation**  
 Project: Electromyography of Shoulder and Scapular Musculature During Progressive Elevation Exercises  
 Investigators: **Uhl TL**, Gaunt B, Calico RM, Humphrey L  
 Status: Funded  
 Amount: \$865.00 (4-67179)
- April 2003 **Physical Therapy Association of Georgia**  
 Project: Electromyography of Shoulder and Scapular Musculature During Progressive Elevation Exercises  
 Investigators: **Uhl TL**, Gaunt B, Calico RM, Humphrey L  
 Status: Rejected

- Amount: \$865.00  
 March 2003 **Southeastern Athletic Trainers Association Research and Education Committee**  
 Project: Effect of a Simulated Knee Effusion on Quadriceps Performance  
 Investigators: Bolgia, L., Mair, S., **Uhl, TL.**, Malone, TR.  
 Status: Funded
- Amount: \$750.00 (4-66870)  
 2002 **Lexington Clinic Foundation**  
 Project: Scapular Dyskinesia Classification System  
 Investigators: Mattocks H., **Uhl TL**  
 Status: Funded
- Amount: \$1387.00 student received the award  
 2002 **United States Tennis Association Sport Science Research Grant**  
 Project: Biomechanical Patterns and Muscle Activations in the Traditional Complete Backswing Serve and the Abbreviated Serve  
 Investigators: McCrory JL, Kibler WB, **Uhl TL**, Shapiro R  
 Status: Funded
- Amount: \$15,000.00 (4-66135)  
 2002 **American Shoulder and Elbow Society**  
 Project: Evaluation of Scapular Dyskinesia  
 Investigators: **Uhl TL**, Kibler WB, McCrory JL  
 Status: Funded
- Amount: \$13,500.00 (4-65698)  
 2002 **Internally Funded CAHP Research Equipment Award**  
 Project: To purchase a 3-Dimensional Motion Analysis System  
 Investigators: Mattacola CG, **Uhl TL**  
 Status: Funded
- Amount: \$22,045.00  
 2001 **University of Kentucky - Research Equipment Award**  
 Project: Research Equipment Award to purchase a Biodex III Isokinetic Dynamometer  
 Investigators: McCrory JL, Shapiro R, Abbas J, Mattacola CG, **Uhl TL.**  
 Status: Funded
- Amount: \$47,000.00  
 2001 **National Strength and Conditioning Association**  
 Project: The Effect of Resistance Bands on Elbow and Shoulder Movement and Muscle Activation during Countermovement Jumping  
 Investigators: Bowman A, McCrory JL, **Uhl TL**  
 Status: Funded
- Amount: requested \$2026.00, received by student \$1317.00  
 2000 **University of Kentucky Medical Research Fund**  
 Project: Investigation of Humeral Physeal Radiographic Changes in the Immature Throwing Athlete  
 Investigators: Mair SD, **Uhl TL**, Robbe R, Muldoon K  
 Status: Funded
- Amount: \$13,845.00

- 1999 **Sports Physical Therapy Section**  
 Project: Comparison of Scapular Muscle Activation Patterns between Patients with Rotator Cuff Tendonitis and Healthy Subjects  
 Investigators: **Uhl TL**  
 Status: Funded  
 Amount: \$ 842.00 (4-63611)
- 1998 **American Shoulder and Elbow Society**  
 Project: Analysis of Normal and Abnormal Thoracoscapulothoracic Rhythm  
 Investigators: Kibler WB, **Uhl TL**, McMullen J, Rayens MK  
 Status: Rejected  
 Amount: \$20,000.00

### Other Support

- 2004 **Lexington Clinic Research and Education Foundation**  
 Clinical Trial: The effectiveness of the ProS3 on scapular kinematics and proprioception.  
 Investigators: Uhl TL, Tripp BL  
 Status: In Review  
 Amount: \$72,327.00
- 2004 **Nesar Systems of Darlington, PA** Fixed Price Agreement to perform research study on device. Submitted for Review April 10, 2004, received \$ 4925.00
- 2003 **Nesar Systems of Darlington, PA** – Donated two -Nesar 150 Shoulder Slides for development of research project in cooperation with Department of Orthopedics and Sports Medicine and the Department of Rehabilitation Sciences at the University of Kentucky. Estimated retail value (\$1000.00)
- Sept. 2003 **Baltimore Therapeutic Equipment Company**  
 Designated the University of Kentucky Musculoskeletal Laboratory as a Beta test site for the Primus a device used to evaluate muscular function and simulate functional tasks. Company provided equipment, retail value of \$50,000.00  
 Research projects: 1) Correlation of 3 measures of lower extremity work  
 2) A Descriptive Analysis of normative hip strength in baseball athletes age 15-25
- 2003 **Unicam Incorporated of Ramsey, NJ** – Donated a Unicam Elite TPS 2 cycle ergometer for development of research project related to rehabilitation of lower extremity injuries. Estimated retail value (\$800.00)
- 2003 **Unicam Incorporated of Ramsey, NJ** – Donated a Balance Trainer BT-2 for development of research project related to rehabilitation of lower extremity injuries and retraining balance. Estimated retail value (\$1000.00)
- 2003 **The Sports Medicine Institute – Spectrum Rehabilitation Services and The Christ Hospital** – Donated \$250.00 to the University of Kentucky, Division of Athletic Training Alumni Fund for lecturing services at their 9<sup>th</sup> Annual Sports Medicine Symposium

- 2003 **College of Education, Department of Kinesiology**-teaching overload for KHP 781 (Sports Biomechanics) provided \$1,000.00 for purchase of additional equipment for a 3-D electromagnetic sensor system
- 2002 **Lexington Clinic Foundation for Medical Education and Research**  
Donated \$3,900.00  
Funds used to purchase additional equipment for 3-D electromagnetic sensor system
- 2001 **Dynamic Edge (exercise device)**  
Provided by manufacturer to research it benefits to strengthen trunk musculature  
Co-investigator  
Status: Data collecting  
Amount: \$1500.00 (equipment received for UK)
- 2000 **The effects of fish oils and phytoestrogens on Delayed Onset Muscle Soreness (DOMS)**  
Internal funding by College of Allied Health Professions  
Co-investigator  
Status: Completed  
Amount: \$6,816.00
- 1999 **Start-up award as new Assistant Professor**  
University of Kentucky Medical Center Research Fund Award  
\$29,970.00 Account # 2-07642

#### **XIV. Other Productivity**

- April 2003 WEKU public radio interviewed regarding USTA Tennis Study project
- April 2003 Channel 36 (ABC) interviewed regarding USTA Tennis Study project
- March 2003 Kentucky Living magazine - *"Kids' Sports Safety"*
- February 2001 Media interview with WKYT Channel 27 on Carpal Tunnel Syndrome
- September 9, 2000 Article in the Peoria Journal Star, Peoria, IL regarding youth baseball study
- August 26, 2000 Article in the Lexington Herald Leader "Doctors study Young Arms" pg. C1 & C4. (Local)
- August 22, 2000 Media coverage for Youth Baseball Study on WVLK radio, WLEX (NBC affiliate) Channel 18 and WTVQ (ABC affiliate) Channel 36 Television Stations. (Regional)
- 1989 Wooten - Uhl Brace  
Received patent (# 4,841,957) - orthotic device for the

treatment of posterior heel pain  
Sold by New Options



**Brothers, Sheila C**

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**From:** Robert B. Grossman [robert.grossman@uky.edu]  
**Sent:** Thursday, September 21, 2006 8:38 AM  
**To:** Brothers, Sheila C  
**Cc:** Mattacola, Carl; Arnold J. Stromberg  
**Subject:** Re: Proposals in Academic Programs

At 10:08 AM -0400 9/19/06, Brothers, Sheila C wrote:

Could you please tell me if the new grad cert in Applied Statistics and the new MS in Athletic Training have been reviewed yet by AP? They are/were holdovers from late last semester.

Both have been unanimously approved.

-- Bob