



Rehabilitation Sciences Doctoral  
Program Handbook  
2020

see blue.<sup>TM</sup>  
*in everything we do.*

Dear Prospective Student,

Thank you for your interest in the Rehabilitation Sciences Doctoral Program at the University of Kentucky. This program is designed to produce academic leaders in Rehabilitation Sciences for the professions of Communication Sciences & Disorders, Athletic Training, Occupational Therapy and Physical Therapy. Our goal is to prepare outstanding academicians with a broad understanding of the rehabilitation sciences, expertise in their discipline, the ability to advance knowledge through research and scholarship, and skills to fulfill leadership responsibilities. Through academic, clinical, and research experiences, the program is designed to prepare graduates to be scholars, conduct rehabilitation-related research, teach at the university level, direct discipline-specific education programs, work in the rehabilitation services field and collaborate with other professionals to provide leadership in rehabilitation health.

This program offers a unique multi-disciplinary, multi-institutional emphasis. Students will study with professionals from all disciplines and course work is offered from faculty members from four institutions within the Commonwealth: University of Kentucky, Eastern Kentucky University, Murray State University, and Western Kentucky University. Our program is dedicated to the idea of interdisciplinary research, education and service delivery. Core courses may be taken at any of the participating universities and at many sites throughout the Commonwealth of Kentucky through live interactive television with the UK campus in Lexington. Participation in some courses can be obtained using distance learning technology. It is important to note that the program cannot be completed through distance education only. For further information, please call us as 859-218-0497.

Sincerely Yours,  
Esther Dupont-Versteegden, PhD  
Program Director/Director of Graduate Studies  
University of Kentucky - College of Health Sciences  
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900 South Limestone  
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## CHAPTER ONE: GETTING STARTED

### INTRODUCTION

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This handbook is designed to provide prospective and current students with basic information concerning graduate study in the Rehabilitation Sciences Doctoral Program at The University of Kentucky. Topics such as programs of study, admission standards and procedures, financial aid, and graduate faculty are covered. No attempt has been made to include all of the policies governing the various degree programs. Please consult the Graduate School's web site at <http://gradschool.uky.edu/> for additional information. Current information concerning tuition costs and salaries for Teaching and Research Assistants (TA/RA) can be found at <http://www.uky.edu/Registrar/feesgen.htm>.

Detailed and current information regarding policies and procedures for graduate study at the University of Kentucky can be found at The Graduate School website (<http://gradschool.uky.edu/>). **All information currently on the Graduate School Website supersedes any information in this handbook.**

Please investigate and look through the grad school website to complement the information provided in this basic handbook. If you have questions which are not answered in these materials, e-mail the RHB Doctoral Program - Director of Graduate Studies, Dr. Esther Dupont-Versteegden

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**Program Director/Director of Graduate Studies**  
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### COLLEGE OF HEALTH SCIENCES MISSION STATEMENT

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The mission of the University of Kentucky College of Health Sciences (CHS) is to help the people of the Commonwealth of Kentucky and beyond attain the highest level of health possible. We fulfill our mission through creative leadership and productivity in education, research, and service.

### REHABILITATION SCIENCES DOCTORAL PROGRAM MISSION STATEMENT

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The mission of the Rehabilitation Sciences Doctoral Program is to fulfill a leadership role in addressing the rehabilitation needs of individuals in the Commonwealth of Kentucky and beyond through research, education, and service. The Program prepares scholars and scientists, and academic leaders in rehabilitation sciences for the professions of: Athletic Training, Communication Sciences & Disorders, Occupational Therapy, and Physical Therapy.

## **REHABILITATION SCIENCES DOCTORAL PROGRAM LEARNING OBJECTIVES**

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### **Rehabilitation Sciences**

- Demonstrate knowledge of a broad array of systems within which rehabilitation services are provided.
- Understand and value cooperative interdisciplinary practices.
- Demonstrate an understanding of the theoretical underpinnings of assessment, intervention, and program development.
- Demonstrate competence in the provision of service and instruction across diverse populations.
- Analyze the relationship between rehabilitation sciences content and disciplinary content.

### **Disciplinary Knowledge**

- Demonstrate knowledge of the theoretical underpinnings of a discipline.
- Evaluate the discipline's body of knowledge.
- Identify knowledge gaps in a topical area and design and carry out independent and original research to address gaps.
- Demonstrate the ability to generate research questions within discipline.

### **Research and Scholarship**

- Demonstrate expertise in a research methodology adequate to design and carry out independent and original research.
- Develop the ability to participate in a variety of research approaches.
- Design studies using a variety of research models, including a collaborative interdisciplinary focus.
- Demonstrate understanding and application of the ethics of research.
- Demonstrate skills in manuscript review and revision.
- Demonstrate a habit of dissemination of scholarship.

### **Academic Environment**

- Understand the history, structure, function, and governance of higher education.
- Be able to plan, carry out, and evaluate a college level course with minimal supervision by the instructor.
- Demonstrate awareness of program improvement and curriculum development processes.
- Demonstrate abilities to identify funding sources, and prepare, review, revise, and implement grant proposals.
- Provide academic service through consultation, professional leadership, and participation in policy formulation within the student's area of interest or discipline.
- Understand and plan for career development within the promotion and tenure process.

## REHABILITATION SCIENCES LEARNING OUTCOMES

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Program objectives are tailored to reflect individual student scholarly and professional goals through work with the Advisory Committee, Chairpersons, and course work.

## APPLICATION PROCESS

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1. Individuals applying for admission must hold a professional or post-professional master's degree. Eligibility for licensure or clinical certification in Communication Sciences & Disorders, Athletic Training, Occupational Therapy, or Physical Therapy is encouraged, but not required for admission into the program. Those with basic science graduate degrees and interests are also welcomed to apply and will be considered equally for admission. Acceptance into the program is dependent upon identifying and matching your area of research interest with an RHB faculty member willing to serve as your doctoral studies program mentor.
2. Applicants must apply to the [University of Kentucky Graduate School](#).
3. The Rehabilitation Sciences Doctoral Program accepts applications for a fall semester start date only. All application materials must be submitted prior to the fall application deadline.
  - Application deadline for Fall Admission is June 1 for domestic students and March 15<sup>th</sup> for international students.
4. Applicants must submit the following materials:
  - Completed Graduate School Application - (Online application system) <http://gradschool.uky.edu/admissions>
  - Application Fee (paid after completion of on-line application).
  - Official transcripts from all post-secondary institutions attended (2 copies each)
  - Official GRE Scores (\*\*Note\*\* GRE's sent to The Graduate School must be targeted for the Rehabilitation Sciences Doctoral Program. This requires that you enter the following school code (1837) so that your application can be processed.)
  - Official TOEFL scores (For international students only).
  - Three (3) letters of recommendation.
  - Comprehensive resume or Curriculum Vitae.
  - One-page essay detailing your professional goals and reasons for choosing the interdisciplinary program of study and your specific area of research interest.
5. Applicants will be asked to interview with faculty members as a part of the application process. Following receipt of your materials by both The Graduate School and the Rehabilitation Sciences Department, applicants will be asked to come to campus to interview with faculty within the program.
6. Because we believe that a successful doctoral experience depends on faculty guidance, an RHB Doctoral Program Faculty Member must agree to serve as an applicant's primary mentor before an applicant can be accepted into the program. Once an RHB faculty member has agreed to serve as a primary mentor, the applicant will receive acceptance letters from both The Graduate School and Rehabilitation Sciences Doctoral Program.

## CONTACT INFORMATION FOR THE APPLICATION PROCESS

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**Esther Dupont-Versteegden, PhD**  
**RHB Doctoral Program Director/Director of**  
**Graduate Studies**

University of Kentucky - College of Health  
Sciences  
Room 210E  
900 South Limestone  
Lexington, KY 40536-0200  
Phone: (859) 218-0592  
Email: [eedupo2@uky.edu](mailto:eedupo2@uky.edu)

### **The Graduate School**

University of Kentucky  
Vivian Bowling  
[vbowling@uky.edu](mailto:vbowling@uky.edu)  
101 Gillis Building  
Lexington, KY 40506  
Phone: (859) 257 4613

## THE GRADUATE SCHOOL

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For greater detail and further information regarding graduate school policies, please visit the following websites:

- The Graduate School Web Page: <http://gradschool.uky.edu/>
- Academic Calendar: <http://www.uky.edu/registrar/calendar>
- Graduate Student Resources: <http://gradschool.uky.edu/student-resources-0>
- Graduate School Bulletin: <http://gradschool.uky.edu/graduate-school-bulletin>
- Graduation Information: <http://www.uky.edu/Commencement/>

## Graduate Assistantships and Financial Aid

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### **Tuition and Fees**

Information on tuition and fees, along with payment instructions, can be found on the Office of the Registrar website: <http://www.uky.edu/Registrar/feesgen.htm>

### **Graduate Assistantships**

Graduate assistantships are available through each of the disciplines within the Rehabilitation Sciences Doctoral Program. Following review of application materials and the interview process, consideration will be made for limited graduate assistantships within each of the disciplines.

Students receiving a GA, RA or TA assistantship should review the following to better understand their award: <http://gradschool.uky.edu/assistantships>

## **Clinical Doctoral Fellowships**

Clinical Doctoral Fellowships provide funding for doctoral students admitted to the Rehabilitation Sciences Doctoral program. Students work clinically and in exchange are provided a fellowship that includes tuition, stipend, and health insurance. The Fellowships allow students to attend the program full-time. Full-time students finish the program faster and have more productive curricula vitae upon graduation as compared to part-time students. The Fellowships allow us to attract the best students and broaden the opportunities available for future clinical leaders and academic scholars while providing highly motivated, cost efficient clinicians into clinical settings. Advantages of these Fellowships to hiring institutions include: sharing knowledge, providing clinical experiences, and developing methods of translating current research into the clinical setting.

## **Scholarships**

Scholarships available for University of Kentucky students can be found at the following sites:

- Graduate School Scholarships: <http://gradschool.uky.edu/tuition-scholarship-information>
- For other forms of assistantship, please see the University of Kentucky Scholarship website: <http://www.uky.edu/financialaid/scholarships>

## **University of Kentucky WILDCARD ID Card**

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Once a student has been admitted into the Rehabilitation Sciences Doctoral Program, prior to the start of class, they must obtain a WILDCARD ID. Please see the following website for further information and ID office location.

<http://www.uky.edu/Police/UKID/faq.html>

## **University of Kentucky Medical Center ID**

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Students are required to obtain a Medical Center ID that they must wear at all times. IDs are issued through the Security Office located in Pavillion A of the new Chandler Medical Center. See Form Appendix: B for the appropriate form which must be completed PRIOR to obtaining the ID.

## **Student Health Insurance**

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All degree seeking students are eligible for student health insurance. All students who are classified as a GA, RA, TA or other Fellowships are automatically signed up for student health insurance. If a student does not need insurance they are asked to complete an "Insurance Declination Form".

It is the responsibility of all non-funded students to pay for their own student health insurance. A detailed list of eligibility, services and fees are located at the following website: <http://www.ukhealthcare.uky.edu/uhs/>

**Parking Information**

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Students will be required to obtain their own parking permit. Parking information can be found at: <http://www.uky.edu/Parking/>

**Housing Information**

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The following website is available to assist graduate students in finding housing:  
<http://www.uky.edu/Housing/graduate/index.html>

## HELPFUL RESOURCES AT THE UNIVERSITY OF KENTUCKY

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### **The University of Kentucky Library System**

Librarian **Carla Cantagallo** is dedicated to assisting distance students with library resources. She is familiar with the RHB PhD Program and is a valuable resource.

Her contact information is:

Phone: 859 257 0500 ext. 2171      Fax: 859 257 0505      Email: [carla@uky.edu](mailto:carla@uky.edu)

Address: 2<sup>nd</sup> floor, North Wing, Young Library

The library system maintains a humanities, social sciences and life sciences collection in William T. Young Library as well as subject libraries in several colleges and departments around campus, with each library holding materials related to the particular discipline it serves. These materials and their locations are listed in InfoKat, the Libraries' online catalog.

Library website link: <http://www.uky.edu/Libraries/index.php>

- [Agricultural Information Center](#)
- [Audio Visual Services](#) (Young Library)
- [Design Library](#)
- [Distance Learning Library Services](#)
- [Education Library](#)
- [Hub @ WT's Information Commons](#) (Young Library)
- [Law Library](#)
- [Lucille Caudill Little Fine Arts Library and Learning Center](#)
- [Medical Center Library](#)
- [Science Library](#)
- [Shaver Engineering Library](#)
- [Special Collections and Digital Programs](#)
- [William T. Young Library](#)

### **Inter-Library Loan**

Interlibrary Loan attempts to fill gaps in the UK Libraries collection. If the collection lacks items needed for research, University of Kentucky faculty, emeritus faculty, students, and staff may be able to obtain the books or photocopies of the articles needed for their research. The ILL staff will attempt to obtain the material from another library or document vendor. Please see the ILL website for this and more information and instructions for use: [http://www.uky.edu/Libraries/page.php?lweb\\_id=8](http://www.uky.edu/Libraries/page.php?lweb_id=8)

The medical center also has an Interlibrary Loan. If the journal you are seeking is held through the Medical Center, you will need to use their Interlibrary Loan system. Please see the Medical Center's ILL website for this and more information and instructions for use: [http://libraries.uky.edu/libpage.php?lweb\\_id=64&llib\\_id=12](http://libraries.uky.edu/libpage.php?lweb_id=64&llib_id=12)

## **End Note**

EndNote® is a powerful software application that is used to manage personal databases of citations from sources such as journals or books. EndNote can be used to search most of the UK Libraries databases. Selected database references can be easily downloaded into EndNote. Bibliographies and manuscripts can be created using EndNote, and then formatted in a wide range of publication styles including APA, MLA, Chicago, and most major medical journals.

A campus-wide EndNote site license allows all authorized University of Kentucky faculty, students, and staff to download the latest version of EndNote from the following URL: <http://libguides.uky.edu/endnote>

Authentication, via Link Blue, is required to download the software. The easiest way to find the EndNote link on the download page is to type the word “EndNote” in the gray search box. Be sure to comply with all legal provisions required by the site license. Information taken from EndNote Tutorial: University of Kentucky Libraries: <https://libguides.uky.edu/EndNote>

## **Human Subject Training**

Human Subject Training is required if you are to submit an IRB to UK ORI. Information about ORI and how to complete your training can be found at the link below: <http://www.research.uky.edu/ori/>

## **Scheduling Meetings**

One challenge during the doctoral experience is trying to schedule several faculty for committee meetings. Two suggestions for assisting with that process are the Meeting Wizard and Doodle. Both online scheduling programs provide an easy way to ask faculty to respond when coordinating meeting times

- Doodle <http://doodle.com/>

## **Directions for Students Taking Classes at EKU**

### *Registration:*

- Apply as a non-degree seeking student to the EKU graduate school using the online form at <http://gradschool.eku.edu/apply>. You will need to note on the application that you are a UK RHB doctoral student and pay a one-time \$35 application fee. Please notify Dr. Dana Howell that you are planning to register for a course at EKU by emailing her at [dana.howell@eku.edu](mailto:dana.howell@eku.edu).

### *Financial Aid:*

- Register at EKU for course(s). Please note that registration must be completed two weeks before the start of classes, so start the registration process as early as possible. Direct questions about registration to Holly Argo at 859-622-1745.

- Student obtains the concurrent Consortium Agreement Form from the UK Financial Aid Office at 127 Funkhauser. Please contact [OSFAS@uky.edu](mailto:OSFAS@uky.edu) or call 859-257-3172 to obtain form. Student has their Advisor sign the form and then fax the form to EKU Financial Aid office. The completed form is then returned to UK by the EKU financial aid office. The student can begin this process before registering at EKU but it will not be signed or processed until the student is registered.
- EKU bills the student for tuition. The student takes the financial aid awarded to them and pays EKU and/or UK.

*If the Student is being paid via fellowship or assistantship:*

- If a student is being paid via a fellowship or assistantship, i.e., someone at UK is paying for their tuition, they would notify the CHS Registrar, Tammy Jo Edge ([tammy.edge@uky.edu](mailto:tammy.edge@uky.edu)), to register student for the placeholder course. Tammy Jo, in conjunction with the Business Office in the College of Health Sciences, would process the bill via a PRD form per Denise McCarthy (Assistant Dean of Operations) in the University Budget Office.

See notes for *Processing 3 account* below:

- UK and EKU will coordinate the payment of the course using the 3P account
- CHS Registrar, Tammy Jo Edge, will coordinate with Mike Shanks that the student be enrolled in consortium 1001 (CONS1001).
- CONS 1001 is a temporary placeholder ensuring that they are receiving credit for course at EKU. This is important for several reasons. It ensures that the student is enrolled as a full-time student so assistantship and fellowship funding can be processed correctly. Also, it ensures that the student is listed as a full-time student if necessary for financial aid reasons.

*Processing course information from EKU to receive credit for the courses taken at EKU on UK transcript:*

- Student takes course(s) at EKU.
- Tammy Jo Edge (Registrar) reaches out to Mike Shanks (Assoc. Registrar), to register the student for CONS1001, as a temporary place holder for the EKU class the student is taking.

*At the completion of the course:*

- Student obtains transcripts from EKU. Student brings in transcript at completion of the course to The Graduate School at UK. This ensures that the course will be listed on the UK transcripts. At this time the CONS 1001 course will be removed from the UK transcript and the EKU course will be listed.

*If a full-time graduate assistant is taking courses at UK under the consortium agreement, the business side of the process is:*

- Program/student submits the following to the business office:
  - a copy of the student bill from EKU

- a memo stating the students name, amount of tuition, the semester, what course they are taking and where to send the payment to
- Business office submits a PRD through SAP to the University Business Office. Confirm cost center and gl with Denise McCarthy prior to submission.

## CHAPTER TWO: PROGRAM OVERVIEW

### PROGRAM CURRICULUM

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Listed below are the names and a brief description of each of the areas that must be fulfilled in the Rehabilitation Sciences Doctoral program. Where applicable, course numbers, names, and catalog descriptions have been given for each of the areas. It is the responsibility of the student to keep an UPDATED program curriculum on file with the Director of Graduate Studies. Each of these programs is tailored to the individual student and it is imperative that record of this program be on file in order to track progress being made. A copy of the Program of Study Template can be found in the [Important Resources](#).

#### **Rehabilitation Sciences Core Courses (9 credits)**

##### RHB 701: Rehabilitation Sciences Theories & Applications through the Life Span (3 cr)

Explores the theories that form a foundation for the rehabilitation sciences and are common to all the rehabilitation therapies (PT, CD, OT, AT). Included are theories specific to rehabilitation, attachment, adaptation and resilience, cognition, motor learning, empowerment, loss and grief, psycho-immunology, and societal responses to stigmatized groups. Theories are applied to rehabilitation practice and research design across the life span.

##### RHB 714: Critical Appraisal of Research in Rehabilitation Sciences (3 cr)

This course introduces the student to critical appraisal of all forms of research in the Rehabilitation Sciences. The purpose is to further develop the student's competence in carrying out and evaluating research. The student will develop the skills necessary to find, critically evaluate, and synthesize the available research.

##### RHB 720: Research in Rehabilitation Sciences (3 cr)

This course is designed to provide students with a critical review of current practices in research methodologies in the rehabilitation sciences. Students will investigate the expected outcomes of various research methodologies and analytic strategies.

#### **Rehabilitation Sciences Professional Seminars (4 credits)**

##### RHB 770: Professional Seminar II: Introduction to Grant Writing (1 cr)

This course is designed to introduce students to the process and product of grant writing. Students are made aware of the agencies and foundations that support research, training, and special grant opportunities related to rehabilitation sciences and the specific disciplines.

RHB 770: Professional Seminar III: Issues in Teaching & Learning in Higher Ed. (1 cr)

In this course students discuss pedagogical issues in higher education in general and in the rehabilitation sciences specifically. It is intended to serve as preparation for the student's teaching apprenticeship and focuses on didactic and clinical instruction.

RHB 770: Professional Seminar IV: Academia and Beyond (1 credit)

This course is designed to provide students with information related to working in higher education. Students will become aware of the process of promotion and tenure and the development of a detailed career plan.

RHB 770: Research Seminar\* (1 credit)

This course is designed to provide a forum in which the students can present their dissertation research or proposed research ideas and receive feedback on their research from faculty and fellow students. In addition, faculty members from each of the disciplines present their research so students can appreciate the breadth and scope of research currently being conducted in the RHB program.

Students are required to take RHB 770 - Research Seminar twice for 1 credit. Students must then enroll in Research Seminar for zero credits in subsequent semesters.

Students must choose 2 additional Seminars at 1 credit each for a total of 4 credits

**Research Methodologies (minimum 6 credits)**

Students will be required to complete 10 credits\* of courses pertaining to research methodologies. Examples of such courses are:

STA 671 Regression and Correlation (2)

STA 672 Design and Analysis of Experiments (2)

CPH630 Biostatistics II (3)

CPH 664 Design and Analysis of Clinical Trials (3)

EDS 633 Single Subject Research Design (3)

\* STA 570: Basic Statistical Analysis is a prerequisite for research methodology courses.

**Area of Specialization (minimum 12 credits)**

Students will be required to complete at least 12 credits of coursework pertaining to their area of specialization. Individually designed by the student in direct consultation with the Chair and Doctoral Program Committee of the student. Professional discipline specific coursework is an opportunity for the student to gain in depth knowledge of a topic of interest within their respective field or area. These courses may be the form of independent studies and can be tailored to the student's specific needs.

**Teaching Apprenticeship (minimum 2 credits)**

RHB 787: Teaching Apprenticeship in Rehabilitation Sciences\*

The teaching apprenticeship involves the study of instructional methods in higher education including development of syllabi, class presentations, and examinations. Emphasis on classroom dynamics and innovative techniques for instruction will be made.

\*Teaching requirements are individually designed based on the student's past teaching experience. Please see the appropriate form at this link: Teaching Apprenticeship Document. The Teaching Apprenticeship Document can be found listed under the Useful Documents.

### **Research Apprenticeship (minimum 6 credits)**

RHB 789: Research Apprenticeship in Rehabilitation Sciences\*

This apprenticeship involves in-depth study of a discipline specific topic under the direction of a member of the graduate faculty. Emphasis is on scientific methods including development of a research question, methodology, data collection and analyses. Students will complete a supervised research project during the course.

\* One apprenticeship will be completed with the student's committee co-chair. One apprenticeship will be completed outside of the student's discipline. Please see the appropriate form at this link:

Research Apprenticeship Document

### **Dissertation (minimum 4 credits)**

RHB 767: Dissertation Residency Credit (2 credits per semester for a max. of 5 yrs.)

After successful completion of the qualifying examination, students are required to enroll in RHB 767. They will be charged at the in-state tuition rate plus mandatory fees.

Students will remain continuously enrolled in this course every fall and spring semester until they have completed and defended their dissertation.

## **GRADUATE CERTIFICATE PROGRAMS**

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A Graduate Certificate is an integrated group of courses that is designed to have a very clear and focused academic topic or competency as its subject area. Often, a Graduate Certificate may meet a clearly defined educational need of a constituency group, such as continuing education or accreditation for a particular profession; respond to a specific state mandate; or provide a basic competency in an emerging, usually interdisciplinary, area. A Certificate is not a graduate degree program (it is typically between 9 and 15 credits), but it does provide the student formal recognition of the mastery of a clearly defined academic topic.

Graduate Certificates are becoming an increasingly important component of the total range of graduate educational opportunities offered by a modern, comprehensive research university. Often, Certificates are pursued by students who are also pursuing a graduate degree in a traditional discipline, or who may already have earned one or more graduate degrees. For further information of the range of certificates available at UK, please see the following website through the Graduate School:

<http://gradschool.uky.edu/graduate-certificates>

## **DEVELOPMENT OF THE ADVISORY COMMITTEE**

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The student **MUST** form their Advisory Committee before completing 18 credits of class and no later than one year prior to qualifying examinations. The purpose of this committee is to set program requirements, administer the qualifying examination, supervise the preparation of the dissertation, and administer the final examination.

The doctoral committee must have a core minimum of four members:

Member I: Major Professor or Chair

Member II: Co-Chair\*

Member III: Member of the Major Area

Member IV: Representative outside of the Department

### **Member I: Major Professor or Chair**

The Chair of the Student's Advisory Committee is the person most often identified as responsible for the direction of the student's doctoral program and dissertation. This committee member should be from the student's discipline, have expertise in that discipline and/or take the primary role in mentoring the student through the process. Even in those cases where there is significant overlap in scholarly expertise with the Committee Co-Chair, this committee member's title remains Chair. Terms commonly associated with this committee member include mentor and adviser. If a student from a discipline other than OT, PT, AT, or CSD is accepted into the RHB Program (e.g., Audiology, Physiology, Rehab Counseling, Music Therapy, Exercise Physiology, etc.) the student will work with a mentor and/or the RHB Program Director to select a Chair who has full Graduate Faculty status and is from one of the four Programs of CSD, AT, OT, or PT. In unique circumstances any student may request a meeting with the RHB Program Director and/or the DGS if specific conditions would make alternative Chair and/or Co-chair assignments more optimal.

### **Member II: Co-Chair**

\*Unique to the Rehabilitation Sciences Doctoral program, the Committee Co-Chair must be a faculty member from an outside discipline but within the RHB program. The Committee Co-Chair may have significant overlap in scholarly expertise with the Committee Chair in some instances and very little overlap in expertise in other instances. Regardless of the degree of shared expertise with the Chair, the Co-Chair provides scholarly and/or procedural support to the doctoral student in a manner complimentary to that provided by the Chair. In those cases where there is considerable overlap in expertise, the Co-Chair may take a role in directing scholarly content and/or may take a role in directing the process. Committee role definitions should be made by the committee and student on a case-by-case basis. Even when this committee member provides significant overlap in expertise, this committee member's title remains Co-Chair.

### **Member III: Member from the student's major area**

This member is most often another member from the student's major scholarly discipline.

**Member IV: Representative outside of the RHB Doctoral Program/Department.**

Here the student selects a member who fills a role that augments the expertise of other committee members. This member contributes support to the student's work by providing support that is complimentary to the student's scholarly direction, e.g., research design, physiology, gerontology, etc.

Nothing in the descriptions of committee member titles above is designed to minimize the role of any member of the committee in supporting a doctoral student through the process of doctoral education. Committee member descriptions are provided simply to help the student and committee members achieve a healthy and productive outcome. While committee member titles should not change, contributions from particular committee members can be worked out on a case-by-case basis.

Nothing in descriptions of committee member titles should influence authorship of later publications and presentations based upon the student's work. The doctoral student should follow publication and presentation guidelines for contribution to determine authorship and not defer to committee titles.

All four committee members must be listed as Graduate Faculty at the University of Kentucky and at least THREE must possess FULL Graduate Faculty status. If a vacancy in the Advisory Committee does present itself, the student must fill the vacant position as soon as possible. Once the student has selected their advisory committee, and the members of the committee accept, the student will need to register the committee at the following website:

[https://ris.uky.edu/cfdocs/gs/DoctoralCommittee/Selection\\_Screen.cfm](https://ris.uky.edu/cfdocs/gs/DoctoralCommittee/Selection_Screen.cfm)

Each student is required to meet at least twice each year with his or her Doctoral Program Committee.

## **THE QUALIFYING EXAMINATION**

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Once the student has completed all of the course work required of the Rehabilitation Sciences Doctoral program (see Program Curriculum) the student is eligible to take the qualifying examinations. The purpose of a doctoral qualifying examination is to evaluate each student's comprehensive understanding of the field, and to ensure that each student is fully prepared to independently conduct (design, implement, analyze and write) original research.

Although doctoral students in the Rehabilitation Sciences Doctoral Program develop individualized plans of study, the faculty wish to ensure that each student completing the program participates in a standard qualifying examination process. Consequently, content of the qualifying examinations will be individualized to reflect the student's fields

of study, but the format will be consistent across students. That format is described below.

### **Exam Format**

The Qualifying Examination will involve a combination of sit-down (in-house at the university) and take-home examinations. The order of administration for these examinations will be determined by the student's Advisory Committee. The sit-down examination will be closed book and will cover content from the core courses in the curriculum. Questions for this portion of the examination will be developed by the student's Advisory Committee and may include some drawn from a pool of questions written by the program faculty and some written specifically for the student by members of the committee. In addition to the sit-down portion of the examination, the student will be given 2 take-home projects requiring creative application and integration of content in more real world activities (e.g. write a review article, design a course in a given content area, prepare a grant proposal). The time limits for completion of the take-home examinations will be set by the committee, but may not exceed four weeks per project. After completion of both in-house and take-home examinations, the committee will read and evaluate the written responses and then conduct an oral examination not to exceed 2 hours. The oral examination may be used to clarify or follow up on items from the written exams, but need not be limited to those topics.

### **Criteria for Evaluation of Qualifying Examination: Approved March 14, 2003**

The Advisory-Examination Committee has complete responsibility for determining the acceptability of the comprehensive examination. The Committee can, however, request assistance from other faculty members in evaluating any or all of comprehensive examination questions. We strongly recommend a Committee of 5 to ensure a majority related to specific voting activities. The criteria below are meant to serve as a guide for the review of students' responses to comprehensive examination questions. They provide the reviewers with a structure for evaluating the adequacy of the answers. This structure can be used in providing oral feedback to students about their performance on the examinations. For questions with multiple parts, the criteria can be applied to each individual part. The adequacy of the question, as a whole, can then be determined based on the merit of the contributing parts.

Individual questions or parts thereof will be rated by individual faculty members before the Advisory Committee meets. The following scale should be used: not acceptable; marginally acceptable; acceptable; better than acceptable; outstanding.

#### **Content:**

##### Accuracy

Information included in the answer is correct. Statements are based on factual information or accurate interpretation of the viewpoint of others. Assumptions or opinions of the student are clearly distinguished from factual information and the views expressed by others. There are no questions related to appropriate use.

##### Completeness

The answer is comprehensive. Each part of the question is answered satisfactorily. If the question has more than one part, information from each part is well integrated; and demonstrates appropriate recognition.

#### Depth

The answer has sufficient detail and rationale to support statements. The answer reflects a knowledge and synthesis of the supporting literature.

#### Documentation

When documentation is required, references are appropriate and timely to the content. There are a sufficient number of references to support the answer.

#### **Style:**

General: The writing should reflect what would be expected of a doctoral student. The responses to those questions for which access to resources is permitted should be of the quality seen in a journal "submission". Extemporaneous writing without access to resources should reflect adequate depth and synthesis.

#### Organization and Clarity

Content is structured logically. The writing is clear, understandable, and grammatically correct. The style reflects that expected of a journal submission.

#### Compliance with guidelines for the question

The student complies with requirements set forth by the writer of the question in terms of spacing, length and so on.

#### Use of a professional writing format

Format is consistent with departmental guidelines. Appropriate headings are used to organize text. These headings follow a consistent, logical format. References to the literature follow accepted guidelines agreed upon by the committee but most commonly include AMA or APA guidelines.

#### **Oral:**

The examinee demonstrates the ability to reflect and respond as expected for a doctoral student. Extemporaneous and planned presentations should be at the level of an instructor.

#### **Organization and Clarity:**

Content is structured logically and presented in an organized fashion. The verbal pattern should be clear, understandable, and grammatically correct.

#### **Professional**

The scheduled or prepared oral presentation, as appropriate, should reflect that expected of an individual at a "Professional Meeting" presentation (Reference: Regional- invited presentation).

### **Ability to Respond to Questions**

The applicant should be able to appropriately defend a position and answer questions with referenced authority as expected at the level of an instructor.

### **Final Grade**

After completion of the examination, the committee members will determine whether the examinee passed or failed the examination based on the student's overall performance.

The qualifying exam **MUST** be approved by the Graduate School a minimum of two weeks prior to the date of the examination. The qualifying exam must be scheduled using the following link:

[https://ris.uky.edu/cfdocs/gs/DoctoralCommittee/Selection\\_Screen.cfm](https://ris.uky.edu/cfdocs/gs/DoctoralCommittee/Selection_Screen.cfm)

The Advisory Committee has 10 days to report the result of the examination. If the student does not pass their qualifying exams, the student can retake the examination a minimum of 4 months after their first attempt. A third attempt is not allowed.

All students accepted into the Rehabilitation Sciences Doctoral program have five years to successfully complete their qualifying exams once they have started classes. Extensions can be given but must be submitted and approved by the Dean of the Graduate School.

Once the student has successfully completed their qualifying examinations, the student will be termed a Doctoral Candidate and will begin the dissertation phase of their education.

## **THE DISSERTATION PHASE**

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Once the student has successfully completed their qualifying examinations they are permitted to propose their dissertation.

### **Dissertation Proposal Format**

To be determined

### **Dissertation Formatting**

All submissions of the dissertation are performed electronically via the Graduate School website. The following link has been posted on the Graduate School Website. Please follow the instructions on proper formatting of your completed document:

<http://gradschool.uky.edu/electronic-thesis-preparation>

### **Dissertation Final Examination**

The final examination (dissertation defense) is conducted by an expanded advisory committee and is chaired by the Director of Graduate Studies or a designee of the Director. The Dean of the Graduate School and President of the University are ex officio members of ALL final examination committees. The examination must be scheduled before hand and made open to the public.

Using the Notification of Intent Form: [Notification of Intent to Schedule Final Examination](#), The Graduate School must be informed 8 weeks prior to the final examination date. At this time the Dean of the Graduate School will assign an Outside Examiner to the Advisory Committee.

A minimum of two weeks prior to the examination the Graduate School must be given the exact time and date of the exam. All members of the advisory committee, including the outside examiner, must have at least two weeks to review the document and request changes.

The defense can take place NO LATER than 8 days prior to the last day of classes of the semester in which the student wishes to graduate.

The student is allowed five years to complete their dissertation defense following completion of their qualifying examinations. An extension of an additional five years may be requested but must be approved by the Dean of the Graduate School. Failure to complete all degree requirements within 10 years of passing the qualifying examinations will result in termination of degree candidacy.

## **REHABILITATION SCIENCES PROGRAM FACULTY**

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Listed below are the faculty members of the Rehabilitation Sciences Doctoral program.

### **Dean, College of Health Sciences**

[Scott M. Lephart, Ph.D., Endowed Chair of Orthopaedic Research](#)

Research interests: neuromuscular and biomechanical analysis of human movement associated with musculoskeletal injury, surgery, rehabilitation, and prevention

### **Associate Dean for Research**

[Anthony Faiola, Ph.D.](#)

Research interests: cognitive and behavioral aspects of clinicians, patients, and family caregivers in their use of mobile and telehealth information technology (mHealth).

### **RHB Program Director & Director of Graduate Studies**

[Esther Dupont-Versteegden, Ph.D., Physical Therapy](#)

Research interests: Investigating the underlying cellular mechanisms of skeletal muscle atrophy in general and sarcopenia in particular.

### **Associate Dean for Faculty & Clinical Engagement**

[Janice Kuperstein, PT, Ph.D., MEd, Physical Therapy](#)

Research interests: Health care delivery system; person-centered care; interprofessional practice.

#### Other Program Faculty

[Richard D. Andreatta, Ph.D., Communication Sciences & Disorders](#)

Research interests: Vocal tract physiology and neural control of speech and non-speech oromotor perception-action, rehabilitation neuroplasticity, and behavioral neuroscience.

[Timothy A. Butterfield, Ph.D., ATC, FACSM, Athletic Training](#)

Research interests: Plasticity of skeletal muscle; functional adaptation of skeletal muscle as a result of exercise; the role of exercise on muscle inflammation, damage and the cellular mechanisms underlying the efficacy of massage therapy.

[Mary Jo Cooley Hidecker, Ph.D., CCC-A/SLP, Communication Sciences and Disorders](#)

Research Interests: Cerebral palsy, Autism, Augmentative and alternative communication (AAC), Early intervention, Epidemiology in communication sciences and disorders, Use of the WHO International Classification of Functioning, Disability, & Health (ICF), Speech, hearing, and language development in individuals with complex communication needs, Telehealth and Parkinson disease, Family-centered evidence-based practice

[Robert A. \(Tony\) English, Ph.D., PT, Physical Therapy](#)

Research interests: clinical functional outcomes testing in people with chronic degenerative conditions. Emphasis on middle aged people.

[Christopher Fry, Ph.D., Athletic Training & Clinical Nutrition](#)

Research interests: contribution of different progenitor cells to muscle adaptation, and his current work explores muscle quality and stem cells in the recovery of muscle mass and function following injury.

[Geetanjali Gera, Ph.D., P.T.](#)

Research interest: Quantification of coordination deficits in movement control, balance and postural control deficits in neurologically impaired individuals, assessment of gait and balance problems using body-worn sensors, neurorehabilitation.

[Phillip Gribble, PhD, ATC, FNATA, Athletic Training](#)

Research interests: neuromuscular consequences of ankle and knee injuries and developing intervention strategies to alleviate health care burden from these injuries

[Charles Hazle, PT, PhD, Physical Therapy](#)

Research interests: Evaluation and treatment of spinal and peripheral joint disorders, and manual therapy education, MSK imaging, and clinical reasoning.

[Nick Heebner, PhD, ATC, Athletic Training](#)

Research interests: Injury prevention and performance enhancement in sport, military, and occupational populations; Return to duty/activity following musculoskeletal injury; and the use of inertial measurement units to quantify movement and activity workload.

[Johanna M. Hoch, PhD, ATC Athletic Training](#)

Research interests: health-related quality of life following musculoskeletal Injury; patient-reported outcome instrument psychometric property evaluation in high functioning, physically active populations; outcomes assessment

[Matt Hoch, PhD, ATC Athletic Training](#)

Research interests: mitigating sensorimotor compromise and enhancing patient-centered care following traumatic lower extremity injuries to reduce the long-term consequences of these conditions over the lifespan.

[H. Isabel Hubbard, PhD, CCC-SLP](#)

Research interests: designing and honing treatment of aphasia and cognitive-linguistic impairments across etiology and characterizing and accounting for age-related changes that are specific to individuals who are aging with brain injury.

[Nathan Johnson, PT, DPT, PhD, Physical Therapy](#)

Research interests: Cardiorespiratory fitness and brain health, preventative medicine through lifestyle modifications.

[Joneen Lowman, PhD, CCC-SLP, Comm. Science & Disorders](#)

Research interests: school-age language and literacy intervention; use of information technology and its application to treatment in school-aged children; telerehabilitation

[Terry R. Malone, Ed.D., PT, FAPTA, Physical Therapy](#)

Research interests: Soft tissue healing; outcomes assessment; knee and shoulder; articular cartilage.

[Robert C. Marshall, Ph.D., CCC-SLP, Communication Sciences & Disorders](#)

Research interests: Post-stroke speech and language disorders; communication disorders following head injury.

[Kirby Mayer, Ph.D., DPT, Physical Therapy](#)

Research Interest: muscle and physical function outcomes for patients with and who have survived acute critical illness; post intensive care syndrome; critical care rehabilitation; ICU physical therapy; outcomes for patients with end-stage organ disease undergoing transplantation; outcomes for survivors living in rural Kentucky

[Peter A. Meulenbroek, Ph.D., CCC-SLP, MSCI, Communication Sciences & Disorders](#)

Research interests: Cognitive and social communication disorders after traumatic brain injury (TBI), Clinical trials; efficacy of social communication intervention

[Arthur J. Nitz, Ph.D., PT, ECS, OCS, Physical Therapy](#)

Research interests: Clinical trials; efficacy of PT intervention Clinical trials; efficacy of PT intervention (Trigger point dry needling), Electrophysiologic assessment, spinal manipulation

[Brian Noehren, Ph.D., PT, Physical Therapy](#)

Research interests: Running injury mechanics, knee osteoarthritis, anterior cruciate ligament reconstruction rehabilitation and outcome measures, pain physiology, Novel therapeutic treatments and their effect on mechanics and pain, biomechanics, therapeutic interventions and patellofemoral pain and mechanics.

[Anne D. Olson, PhD, CCC-A, Communication Sciences & Disorders](#)

Research interests: Aural Rehabilitation for adults with hearing loss, prevention programs to promote healthy hearing in young adults.

[Judith L. Page, Ph.D., CCC-SLP, FASHA, FNAP, Communication Sciences & Disorders](#)

Research interests: Alternative and augmentative communication strategies; early intervention; communication interventions for individuals with severe disabilities and complex communication needs; interprofessional/collaborative practice.

[Charlotte Peterson, Ph.D., Joseph Hamburg Endowed Professor](#)

Research interests: Cellular and molecular mechanisms regulating muscle adaptation

[Travis Thomas, Ph.D., RDN, CSSD, LD, FAND, AT & Clinical Nutrition](#)

Research interests: Medical Nutrition Therapy & Nutrition for Athletic Performance. Role of vitamin D in promoting muscle health and performance; Nutrition interventions that influence the nitrate–nitrite–nitric oxide pathway in clinical populations

[Timothy L. Uhl, Ph.D., ATC, PT, FNATA, Athletic Training](#)

Research interests: Effectiveness of clinical interventions to treat upper extremity injuries. Assessment of readiness to return to sport or normal function. Assessment of arm usage in overhead sports. Biomechanical and Neuromuscular assessment of the upper extremity demands in sport and daily activity.

[Joshua Winters, PhD, CSCS, Rehabilitation Science](#)

Research interests: Understanding how biomechanical factors such as altered movement strategies, dynamic joint loading, and neuromuscular function influence physical performance and risk of musculoskeletal injury within active military warfighters and active populations.

**Eastern Kentucky University:** Occupational Therapy Program Faculty

[Renee Causey-Upton, Ph.D., OTD, OTR/L](#)

Research interests: preoperative education, readiness for discharge, total joint replacement, adult rehabilitation, occupational therapy education

[Colleen Schneck, SC.D., OTR/L, FAOTA](#)

Research interests: Child development, sensory processing, visual perceptual skills, school-based practice.

[Anne Fleischer, PhD, MPH, OT/L, CLT-LANA](#)

Research interests: oncology rehabilitation, interprofessional practice, neurorehabilitation

[Dana Howell, Ph.D., OTD, OTR/L, FAOTA](#)

Research interests: Qualitative research, interprofessional practice and education, quality of life of rural seniors, and adult physical dysfunction and rehabilitation.

[Camille Skubik-Peplaski, PhD, OTR/L, FAOTA](#)

Research interests: occupation-based practice, occupational therapy practice framework, reimbursement, client-centered practice and the therapy environment.

**Western Kentucky University:** Communication Disorders Program Faculty

[Richard Dressler, PhD, CCC-SLP](#)

Research interests: Use of computers in speech therapy, conversational coding systems, and evaluation of cognitive disorders. Use of video-conferencing technology to connect individuals in rural areas with local support groups, and for offering remote service delivery of speech services to rural patients.

[Lauren Bland, PhD, CCC-SLP](#)

Research interests: Service delivery models, interprofessional education, clinical supervision, professional issues and ethics, higher education pedagogy

## **REHABILITATION SCIENCES DOCTORAL PROGRAM LABORATORIES**

**TAALC Lab:** *Jane Kleinert, Ph.D.; Judy Page, Ph.D. (CSD) and Jacqui Kearns, Ed.D. (Human Development Institute)*

We have a SPDG grant which is federal monies allocated to the Kentucky Department of Education (KDE) for personnel development. Our SPDGA is entitled: Teaching Age-appropriate Academic Learning via Communication. The object is to complete training and research on improving communication services to public school age students and persons with severe disabilities. The TAALC projects works in conjunction with the KDE to assist school districts and Special Education Cooperatives across the state to initiate strong intervention programs for communication and AAC use in the schools when needed. We develop materials and on-line training modules for use with teachers and SLPs in Kentucky and nationally. Our current data shows improvement in communication status of students in Kentucky. From our previous research with the National Alternate Assessment Center (2008-2012) and the National Collaborative States Center (NCSC- 2011-2016) we analyzed an extensive national data set on the communication status of students in Alternate Assessment (students with severe intellectual disabilities) and the AAC needs of such students. We have recently submitted for a grant that would allow us to access the KY data on students in Alternate Assessment and study why historically there is only minimal progress across the grade span in the area of communication skills with these students.

**Capilouto Lab** *(in conjunction with UK Children's Hospital and NFANT Labs, LLC):*

Accomplishing coordination of SSB is a complex challenge for any infant; but is especially challenging for immature and neurologically compromised neonates<sup>4</sup>. We hypothesize that the quantitative measures of sucking performance that we are uniquely able to collect in newborns will identify those infants likely to experience long-term feeding problems, enabling early intervention to be initiated. Quantitative measures are collected using a pediatric medical device that measures and documents sucking parameters critical for safe and efficient liquid swallow. Analyses of preliminary data

(IRB# 15-0052F6A) suggest that our measurements distinguish infants with coordinated SSB patterns from those with poor coordination. Poor SSB coordination leads to slower transit times for moving liquid, increased time to swallow and a concomitant likelihood for airway penetration and/or aspiration as well as feeding-related apnea and bradycardia<sup>5</sup>. Results from the current pilot study will differentiate, with sensitivity and specificity, those infants at risk for aversive feeding outcomes so that intervention can be initiated early, thereby reducing readmissions and preventing “failure to thrive” long term. We test our hypothesis with three specific aims: (1) Describe the early sucking behavior of healthy term infants. (2) Describe the early sucking behavior in healthy preterm infants from initiation of oral feeding through hospital discharge to post discharge. (3) Assess the relation between early sucking behavior and sucking performance at 4 months uncorrected age.

### **The EKU-OT Research Center**

The EKU-OT Research Center is located within the Occupational Therapy Department, at 107 Dizney Building, on the campus of Eastern Kentucky University in Richmond. Research taking place there can be reviewed through the Department's web page. The Research Center is used by multiple research teams, who schedule meeting times in the Center, as well as by a variety of research support workers, such as graduate assistants and transcriptionists. The Center includes four workstations, one of which is a Macintosh video analysis system. Data analysis software available there also include Hyper Research, Ethnography, and SPSS. Research meeting support includes video projection from laptops, tea and coffee service, refrigerator, and a selection of local take-out menus. Secure data storage, methods reference library, conference phone, and audio-recording equipment are also available. The EKU-OT Research Center serves as the primary research space of the Endowed Chair in Occupational Therapy and is restricted to research use by Department faculty members and doctoral students.

### **Muscle Mechanics lab (Butterfield lab)**

Our laboratory investigates the mechanical and physiological properties of muscle tissue during *in-vivo* ambulation and exercise using a number of models. We collect direct, real time measurements of mechanical properties and performance of skeletal muscle during modified use, and measure the cellular responses thereafter. Although it is known that muscle adapts following various modes of exercise, we continue to investigate interventions to potentiate the beneficial effects of exercise and optimize the cellular response. The additional contributions of altered muscle function to bone and joint health is of great clinical interest, and we have devised new methodologies to further our understanding of the impact of abnormal muscle function on bone, cartilage, and ligament health during exercise.

Current projects include:

- Uncovering the mechanisms of massage efficacy in young and aged skeletal muscle
- Facilitating recovery of muscle function after injury / damage
- Massage as an intervention to attenuate disuse atrophy
- Uncovering the role of titin during muscle responses to chronic overload

- Mechanisms underlying periarticular muscle dysfunction following closed ACL rupture
- Mechanical properties of laryngeal muscles: effects of age and exercise on TA muscle architecture and function

### **Laryngeal and Speech Dynamics Laboratory**

Directed by Drs. Richard Andreatta and Joseph Stemple, this lab is dedicated to the study of physiological mechanisms underlying the human vocal tract during speech and vocalization. The lab currently supports many lines of research that together addresses the integrative nature of vocal function and speech production. Research lines include neuroimaging using fMRI, sensory perception, laryngeal physiology, and basic research in laryngeal muscle biology in animal models. The lab boasts a comprehensive array of technologies that allow for the recording and analyses of respiratory, phonatory, and neural subsystems during a variety of dynamic and static speech/voice tasks. The lab is equipped with several stimulus and transducing systems including: (1) a servo-linear motor for mechanically evoked reflex studies of the trigemino-facial pathway, (2) a precision vibrotactile delivery system for somatosensory perceptual and movement-related gating studies, (3) an automated muscle force assessment workstation for analyzing lip, jaw and tongue muscle performance skills in vivo, (4) kinematic transducers for various orofacial motion tracking applications, and (5) state-of-the-art tools for visual imaging of vocal function, acoustic analysis of the voice signal, and aerodynamic assessment of voice production including respiratory and glottal airway measures. A full-size Faraday booth built within the lab space is also available for EMG and evoked response studies.

### **Running Injury Laboratory**

The Running Injury Laboratory is directed by Dr. Brian Noehren, PhD, PT. The lab is focused on the biomechanics of common lower extremity injuries and is staffed by the running injury lab group. This research is part of the biodynamics lab, which is centrally located on campus and is adjacent to the medical center. The research is focused on a number of key areas including: a) The understanding and mechanics of how runners become injured. From this research the lab group is actively engaged in testing promising new treatments. b) This group is also interested in how having an ACL reconstruction affects the way patients walk. Previous research suggests that a high percentage of individuals who have had an ACL reconstruction will go onto develop knee osteoarthritis. From this, the lab group hopes to determine some of the factors that may be related to the future development of osteoarthritis. c) In collaboration with Dr. Lattermann, this group is engaged in some very exciting work in the area of patellofemoral osteoarthritis. Current projects include:

- Prolonged alterations to muscle following knee surgery and physical therapy
- High accuracy motion analysis using commodity depth camera for clinical lower extremity research
- A biopsychosocial approach to define mechanisms of patellofemoral pain
- Dynamic whole body control following ACL reconstruction

### **Human Performance Lab (HPL)**

The newly renovated Human Performance Lab (HPL) is housed in the first floor and basement level of the Multidisciplinary Science Building on Rose Street and includes over 3700 square feet of shared space, overseen by the Colleges of Health Sciences and Education. It is co-directed by Dr. Charlotte Peterson (Health Sciences) and Rob Shapiro (Education). It contains equipment capable of assessing physical function, strength, motion, and gait, as well as for exercise training; computers with all software necessary for data collection and analysis are also onsite. The HPL enables investigators of various backgrounds to conduct more extensive and sophisticated 3D motion analysis, exercise interventions, and treatment programs. Current projects include: Peterson Lab funded projects:

- Role of satellite cells in adult skeletal muscle growth and maintenance (NIH-R01).
- Novel actions of metformin to augment resistance training adaptations in older adults (NIH-R01).
- Strength training and arthritis trial (NIH-BIRT).
- New role for satellite cells in response to muscle ischemia (NIH-BIRT)

### **Sports Medicine Research Institute**

The University of Kentucky Sports Medicine Research Institute (SMRI) is a multidisciplinary research center focused on injury prevention and performance optimization, musculoskeletal health and rehabilitation, metabolism, and neuro-cognition. SMRI is dedicated to excellence in research, community outreach, and collaboration — all leading to one outcome: optimal health.

Focusing on tactical athletes and youth and collegiate-level athletes, SMRI explores ways to minimize injury, optimize performance and maximize career longevity and quality of life. Test models include those specific to risk mitigation, nutrition, fatigue, endocrine health, sleep and stress, battlefield medicine, adaptive technology, concussion, orthopaedic-related injury prevention and rehabilitation interventions, healthy aging, and women's health.

SMRI will provide outreach opportunities incorporating applicable strategies on injury prevention, human performance, sports nutrition and overall wellness to recreational and competitive youth, high school, collegiate, professional, and senior athletes, coaches, parents, and other health care providers.

### **Center for Muscle Biology**

The mission of the CMB is to 1) catalyze muscle research through pilot funding, 2) strengthen grant applications through provision of state-of-the-art expertise and services, and 3) serve as a hub of multidisciplinary collaboration by enabling students, early-stage and senior investigators with different scientific backgrounds to incorporate muscle structure/function analyses into their research programs. It is widely recognized

that aging and chronic diseases are characterized by muscle dysfunction and progressive muscle weakness and wasting. Clinical studies show that loss in muscle strength is often an early and strong predictor of increased mortality, as well as increased disability. Further, disuse due to injury and immobility, such as confinement in the ICU, often result in protracted muscle weakness which negatively impacts quality of life. Thus, our motto: ***Muscle powers health***

CMB researchers study a variety of muscles (skeletal, cardiac, diaphragm, laryngeal, tongue and extraocular) and the effects of aging, sepsis, heart failure, diabetes, arthritis, cancer, injury and exercise on muscle function. The ultimate goal of the CMB is to identify and develop therapeutic strategies to combat muscle weakness and wasting, in concert with primary injury and disease prevention/treatment, for improved clinical outcomes, including lower mortality and disability, shorter hospital stays, and increased functional independence and overall quality of life. We strive to translate therapeutic and rehabilitation strategies for muscle weakness and wasting through strong bench to bedside programs. The CMB integrates basic, translational and clinical researchers together with clinicians, including physicians, physical therapists, speech language pathologists, nutritionists and others, which will be facilitated by Center designation. The CMB offers several core services, resources and equipment, including the Human Muscle Bank, Muscle Immunohistochemistry and Molecular Imaging Core (MIMIC), Muscle Function Core and the Human Performance Lab.

## **CHAPTER THREE: REHABILITATION SCIENCES DOCTORAL PROGRAM PROCEDURES AND EXPECTATIONS STUDENT ADVISING**

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Upon admission to the Doctoral Program, each student will be assigned a preliminary “Faculty Mentor” who will serve as a provisional advisor (the Director of Graduate Studies will serve as the student’s official advisor until a permanent advisor has been identified and formalized with the Graduate School). The Faculty Mentor, working in collaboration with relevant departments and the student, will develop an individually tailored specialization of study and research within the framework of the Doctoral Program curriculum. This may include the required completion of courses (for example research methods or statistics) in which the student is found to be deficient or that are necessary for successful completion of his or her intended research focus. By the end of the first year, each student should have selected a permanent Faculty Advisor. It is

anticipated that by the end of the Fall semester of his or her second year in the Doctoral Program, each student will have formed a four member (minimum) Advisory Committee that must include at least three Doctoral Program Faculty, one of whom will serve as chair.

Students are expected to be respectful and responsive to communication from the Faculty Mentor and to meet with their advisor on a regular basis. The advisor's role is to assist the graduate student with any problems that may arise in their Doctoral Program, to monitor the student's progress, and to serve as an intellectual mentor during the student's tenure in the Doctoral Program.

Graduate students are not obligated to remain with or to retain their initial mentor and/or advisor. With the approval of the DGS, any student may change advisor at any time during his or her tenure in the Doctoral Program. At the end of the first semester in residence, the DGS will contact each student with regard to any desired change in advising. It is understood that changes will occur as students define or re-define their area of interest or otherwise change focus and direction in their graduate Doctoral Program.

## **GUIDELINES FOR DISMISSAL**

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### **University Guidelines - Scholastic Probation**

When students have completed 12 or more semester hours of graduate course work with a cumulative GPA of less than 3.00, they will be placed on scholastic probation. Students will have one full-time semester or the equivalent (9 hours) to remove the scholastic probation by attaining a 3.00 cumulative GPA. If probation is not removed, students will be dismissed from the Graduate School. Students who have been dismissed from the Graduate School for this reason may apply for readmission after two semesters or one semester and the eight-week summer term. If they are accepted by the program, re-admitted students will have one full-time semester or the equivalent (9 hours) to remove the scholastic probation by attaining a 3.00 cumulative GPA. Exceptions to this policy can be made only by the Dean of the Graduate School. Students placed on scholastic probation are not eligible for fellowships or tuition scholarships and may not sit for doctoral qualifying examinations, or master's or doctoral final examinations.

### **Termination**

The Dean of the Graduate School may terminate a student's enrollment in a particular program for the following reasons:

- Scholastic probation for three enrolled semesters
- Having failed twice the final examination for the master's degree or the qualifying examination
- In cases where the student's Advisory Committee recommends termination after the qualifying examination has been passed, the Graduate Faculty in that program will meet to vote on the recommendation. When the Graduate Faculty of that program concurs and the student dissents, the student will have an opportunity to meet with

the Graduate Faculty of the program, after which a second vote will be taken and a final recommendation will be made to the Dean of the Graduate School.

Each program sets specific requirements and standards of performance, evaluative procedures and criteria, and procedures for terminations of all students. The student should be informed of these criteria at the time of enrollment by the Director of Graduate Studies of the program.

### **RHB Guidelines**

The RHB Doctoral Program expects its graduate students to perform above the minimal standards set by the university in the preceding paragraphs. Specifically:

- Students must obtain a grade of "B" or better in RHB core courses.
- Students are allowed a grade of a "C" in only two credited activities (class, seminar, independent study, research experience, or apprenticeship) during their doctoral education.
- A grade of E in any coursework is grounds for dismissal from the program.
- Failure to meet any of these expectations is grounds for dismissal from the program.
- In addition, the program expects the student to maintain a level of scholarship and research productivity that is satisfactory to the student's mentor and committee, and actively participate in their academic program which includes:
  - Revise and submit a Program of Study annually.
  - Attend RHB Program Colloquiums
  - Advise the Program Director or the Director of Graduate Studies if of a leave of absence from courses or the program
  - Update and meet with Advisors to update the Assessment of Student Performance Form Annually
  - Complete all Teaching and Research Apprenticeship forms and assure that the documentation is complete before the first third of the semester has passed
  - Complete all Independent Study forms and assure that the documentation is complete before the first third of the semester has passed

Failure to meet any of these expectations is grounds for the doctoral advisory committee to recommend remediation or dismissal from the program.

### **Assessment of Student Performance**

Students are to complete an Assessment of Performance Form every year. The evaluation form was designed to provide the student and committee members a foundation for assessing the student's progress in the Ph.D. Program. The evaluation consists of the following domains: 1) Program Objectives (rehabilitation sciences, area of specialization, and discipline specific knowledge base; research and scholarship; academic environment), 2) Scholarly and Professional Independence, and 3) Summary of Performance. The evaluation form can be found on the RHB Website:

<https://www.uky.edu/chs/rehabilitation-sciences-phd-program/important-resources>

