# INTEGRATIVE AND BIOMEDICAL PHYSIOLOGY

### **Dual-Titles**

## Dual-title Ph.D. in Integrative and Biomedical Physiology and Clinical and Translational Sciences

Requirements listed here are in addition to requirements listed in GCAC-208 Dual-Title Graduate Degree Programs (https://gradschool.psu.edu/graduate-education-policies/gcac/gcac-200/gcac-208-dual-titles/).

IBMP doctoral students interested in having a degree that reflects advanced training in the design, analysis, interpretation, implementation, and dissemination of physiological research aimed at improving human health may apply to pursue a dual-title Ph.D. in IBMP and Clinical and Translational Sciences. The CTS program encourages interdisciplinary scholarly work at the interface between basic sciences, clinical sciences and human health. This program is applicable for students pursuing academic careers in the area of basic research focused on processes that can be targeted through intervention practice; the development or improvement of therapeutics, devices, and/or intervention programs; clinical trials in the academic, public, or private sector; and/or the science of translation and dissemination. The program is well-suited for students pursuing non-academic careers related to drug discovery and implementation of new diagnostics, treatments or devices. The CTS dualtitle complements the expertise that students in IBMP acquire in basic mechanisms underlying disease.

#### **Admission Requirements**

Students must apply and be admitted to the graduate program in IBMP and the Graduate School before they can be admitted to a dual-title degree program. Applicants interested in the dual-title degree program may note their interest in their applications to IBMP. After admission to IBMP, students must apply for admission to and meet the admissions requirements of the CTS dual-title program. Refer to the Admission Requirements section of the CTS Bulletin page (https://bulletins.psu.edu/graduate/programs/majors/clinical-translational-sciences/). Students admitted to the IBMP program will be admitted to the dual-title program in Clinical and Translational Sciences upon the recommendation of a faculty member affiliated with the dual-title. Students must be admitted apply to CTS prior to taking their qualifying exam.

### **Degree Requirements**

To qualify for the dual-title degree, students must satisfy the requirements of the Ph.D. in IBMP, listed on the Degree Requirements tab. In addition, students pursuing the dual-title Ph.D. in IBMP and Clinical and Translational Sciences must complete the degree requirements for the dual-title Clinical and Translational Sciences Ph.D., listed on the Clinical and Translational Sciences Bulletin page (https://bulletins.psu.edu/graduate/programs/majors/clinical-translational-sciences/).

Students' Qualifying Examination committee for the dual-title degree must fulfill composition requirements for IBMP, and at least one of the committee members must hold Graduate Faculty status in Clinical and Translational Sciences. Faculty members who hold appointments in both programs' Graduate Faculty may serve in a combined role. There will be a single qualifying examination, containing elements of both IBMP and Clinical & Translational Sciences. Dual-title graduate degree students may require an additional semester to fulfill requirements for both areas

of study and, therefore, the qualifying examination may be delayed one semester beyond the normal period allowable.

Similarly, the Ph.D. Committee (https://gradschool.psu.edu/graduate-education-policies/gcac/gcac-600/gcac-602-phd-committee-formation/) of a dual-title doctoral degree student must either be chaired by a faculty member holding appointments in both IBMP and Clinical Translational Sciences, or be co-chaired by two faculty members who each represent one discipline. The Ph.D. Committee will oversee the Comprehensive Exam, which must meet the requirements established in the IBMP Program, as well as demonstrate expertise in an area deemed relevant to Clinical Translational Sciences by the Committee chair or co-chair.

Ph.D. candidates must complete a dissertation on a topic that reflects their original research on a topic approved by IBMP and the CTS program; specifically, one that translates biomedical discovery into applications with the goal of improving human health. The dissertation must be accepted by the Ph.D. committee, the head of the graduate program, and the Graduate School.