# PH.390 (CLINICAL INVESTIGATION)

### Courses

#### PH.390.631. Principles of Drug Development. 2 Credits.

Course location and modality is found on the JHSPH website (https://www.jhsph.edu/courses/).

### PH.390.673. Ethical and Regulatory Issues in Clinical Research. 3 Credits.

Course location and modality is found on the JHSPH website (https://www.jhsph.edu/courses/).

#### PH.390.675. Outcomes and Effectiveness Research. 3 Credits.

Provides an overview of outcomes and effectiveness research. Emphasizes conceptual, design, and analytical aspects of research including policy implications. Covers both experimental (randomized) and observational designs. Addresses spectrum of outcomes and effectiveness research. Includes topics: qualitative research, costeffectiveness and adaptive trial design.

Course location and modality is found on the JHSPH website (https://www.jhsph.edu/courses/).

## PH.390.677. Database Design and Implementation in Clinical Research. 2 Credits.

Presents basic concepts of relational database design for clinical and basic research. Includes development of data collection forms, building databases for both "classic" and "longitudinal" projects using REDCap, data quality control, and data security.

Course location and modality is found on the JHSPH website (https://www.jhsph.edu/courses/).

### PH.390.678. Introduction to Quality Improvement & Knowledge Translation Research. 3 Credits.

Introduces basic principles of quality improvement/knowledge translation (QI/KT) research. Focuses on efforts aimed at increasing the extent to which patients receive evidence-based therapies. Discusses the concepts, methods, and applications of QI/KT theory and explores realworld QI/KT projects. Outlines the development of a research proposal for a specific QI/KT topic. Critically appraises a published guideline. Systematically reviews literature around a QI/KT topic.

Course location and modality is found on the JHSPH website (https:// www.jhsph.edu/courses/).

#### PH.390.703. Presentation Skills. 1 Credit.

Course location and modality is found on the JHSPH website (https://www.jhsph.edu/courses/).

#### PH.390.710. Biomedical Writing I. 2 Credits.

Course location and modality is found on the JHSPH website (https://www.jhsph.edu/courses/).

#### PH.390.711. Biomedical Writing II. 2 Credits.

Introduces the process of writing peer-reviewed research papers and provides a brief overview of grant proposal writing. Emphasizes a logical organization, clear writing, and an understanding of readers' and reviewers' expectations. Prepares selected sections of a first draft of a research paper based on their own research, and they receive feedback on their drafts through in-class discussion and written comments from the instructor.

Course location and modality is found on the JHSPH website (https://www.jhsph.edu/courses/).

#### PH.390.721. Principles of Grant Writing I. 2 Credits.

Considers the principles of successful clinical research strategies and the requirements of funding agencies. Identifies a defined research project together with a suitable team of mentors and collaborators. Develops a written research proposal in the format of a grant application which integrates the scientific principles of the GTPCI curriculum. Course location and modality is found on the JHSPH website (https://www.jhsph.edu/courses/).

#### PH.390.722. Principles of Grant Writing II. 4 Credits.

Considers the principles of successful clinical research strategies and the requirements of funding agencies. Identifies a defined research project together with a suitable team of mentors and collaborators. Develops a written research proposal in the format of a grant application which integrates the scientific principles of the GTPCI curriculum. Course location and modality is found on the JHSPH website (https://www.jhsph.edu/courses/).

#### PH.390.750. Introduction to Clinical Research. 2 Credits.

Provides an intensive introduction to clinical research methods, emphasizing epidemiological & biostatistical methods. Course location and modality is found on the JHSPH website (https:// www.jhsph.edu/courses/).

#### PH.390.751. Seminars in Clinical Investigation. 2 Credits.

Explores topics related to clinical investigation presented by faculty experts from within and outside of Johns Hopkins. Addresses issues related to biomeasurement, the design of randomized clinical trials, challenges with observational cohort studies, studies focusing on special populations (pediatric age group, pregnant subjects, international studies), and research fraud.

Course location and modality is found on the JHSPH website (https://www.jhsph.edu/courses/).

#### PH.390.752. Seminars in Clinical Investigation II. 2 Credits.

Explores in two terms, topics related to the science of clinical investigation presented by faculty experts from within and outside of Johns Hopkins. Addresses issues related to approaches/methods in clinical investigation (the design of clinical trials, challenges with cohort studies, translational studies, overview of artificial intelligence and machine learning, approaches to health services research, biomeasurement; systematic reviews), clinical investigation in special populations (pediatric age group, pregnant subjects, international studies); research fraud; the design of a conceptual framework for a research question and the development of the aims of a research proposal.

Course location and modality is found on the JHSPH website (https:// www.jhsph.edu/courses/).

#### PH.390.801. Professional Goals and Objectives. 1 Credit.

Course location and modality is found on the JHSPH website (https:// www.jhsph.edu/courses/).

**PH.390.820.** Thesis Research in Clinical Investigation. 1 - 22 Credits. Course location and modality is found on the JHSPH website (https:// www.jhsph.edu/courses/).

### PH.390.840. Special Studies and Research in Clinical Investigation. 1 - 22 Credits.

Course location and modality is found on the JHSPH website (https://www.jhsph.edu/courses/).

#### PH.390.855. Research Forum. 1 Credit.

Course location and modality is found on the JHSPH website (https:// www.jhsph.edu/courses/).