

# DEPARTMENT OF CELL BIOLOGY AND PHYSIOLOGY

## Contact Information

### Department of Cell Biology and Physiology

<http://www.med.unc.edu/cellbiophysio>

5200 Medical Biomolecular Research Building, CB# 7545

(919) 966-5241

### Kathleen Caron, Chair

[kathleen\\_caron@med.unc.edu](mailto:kathleen_caron@med.unc.edu)

The Department of Cell Biology and Physiology in the UNC School of Medicine was formed in July 2012 through the merger of the Department of Cell and Developmental Biology and the Department of Cell and Molecular Physiology. The department offers courses for premedical, predoctoral, nursing, pharmacy, physical therapy, and allied health students, as well as students pursuing science majors. However, the department does not offer a formal program leading to an undergraduate degree. Students interested in independent research may register for PHYI 395 for directed readings or laboratory study with a member of the faculty. The following courses are open to undergraduate students majoring in the sciences.

### Graduate Programs

- M.S. in Cell and Developmental Biology (<http://catalog.unc.edu/graduate/schools-departments/cell-biology-physiology>)
- Ph.D. in Cell and Developmental Biology (<http://catalog.unc.edu/graduate/schools-departments/cell-biology-physiology>)
- M.S. in Cell and Molecular Physiology (<http://catalog.unc.edu/graduate/schools-departments/cell-biology-physiology>)
- Ph.D. in Cell and Molecular Physiology (<http://catalog.unc.edu/graduate/schools-departments/cell-biology-physiology>)

## CBIO

### Advanced Undergraduate and Graduate-level Courses

#### CBIO 400. Introduction to Medical Simulation. 3 Credits.

This entry-level medical simulation course focuses on understanding the integration of simulation technology into clinical education, patient safety, and research applications to include the teamwork and communication skills related to these applications.

**Grading status:** Letter grade.

#### CBIO 423. Developmental Toxicology and Teratology. 3 Credits.

Emphasizes topics of current research interest relative to the genesis of environmentally caused and genetically based birth defects. One two-hour session per week (evening).

**Grading status:** Letter grade

**Same as:** TOXC 423.

#### CBIO 607. Gross Anatomy. 2-4 Credits.

Permission of the instructor. Primarily for graduate students. Enrollment by availability of space and material.

**Grading status:** Letter grade.

#### CBIO 627. Regional Anatomy. 3 Credits.

Permission of the instructor. For students of oral surgery, surgical residents, and graduate students.

**Grading status:** Letter grade.

#### CBIO 643. Cell Structure, Function, and Growth Control I. 3 Credits.

Comprehensive introduction to cell structure, function, and transformation.

**Requisites:** Prerequisite, undergraduate cell biology or biochemistry or permission of the instructor.

**Grading status:** Letter grade

**Same as:** BIOC 643, PHCO 643, PHYI 643.

## PHYI

### Undergraduate-level Courses

#### PHYI 50. First-Year Seminar: Human Physiology. 3 Credits.

Clinical cases are used to introduce the study of physiology. Students develop learning objectives and research selected topics in health and disease. Final class project is a group endeavor.

**Gen Ed:** PL.

**Grading status:** Letter grade.

#### PHYI 292. Introduction to Physiology. 5 Credits.

A course in human physiology exploring physiological processes from molecular to organ systems levels including regulation and interrelationships. Five lecture hours a week.

**Requisites:** Prerequisites, CHEM 101 and 102 (or BIOC 107 and 108) and BIOL 252.

**Grading status:** Letter grade.

#### PHYI 395. Undergraduate Research in Physiology. 1-6 Credits.

Permission of the instructor. Directed readings or laboratory study on a selected topic. Final written report required in each term. At least three hours of independent work per week for each unit of credit.

**Requisites:** Prerequisites, BIOL 101/101L and CHEM 101/101L.

**Grading status:** Letter grade.

### Advanced Undergraduate and Graduate-level Courses

#### PHYI 643. Cell Structure, Function, and Growth Control I. 3 Credits.

Comprehensive introduction to cell structure, function, and transformation.

**Requisites:** Prerequisite, undergraduate cell biology or biochemistry or permission of the instructor.

**Grading status:** Letter grade

**Same as:** CBIO 643, BIOC 643, PHCO 643.