



# INDIANA UNIVERSITY

DEPARTMENT OF ANATOMY AND CELL BIOLOGY  
School of Medicine

August 1, 2016

Randy R. Brutkiewicz, PhD  
Associate Dean for Graduate Studies

Janice Blum, PhD  
Associate Vice Chancellor for Graduate Education at IUPUI  
Associate Dean of the University Graduate School, Indiana University

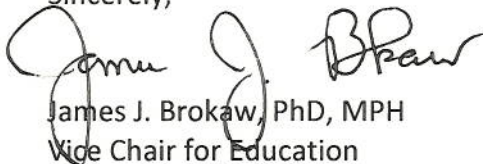
Dear Drs. Brutkiewicz and Blum:

I am formally requesting alterations to the curricula of both of the department's research PhD programs: IBMG-based and department-based. Although most students enter graduate school through the School's umbrella IBMG program, we have retained our stand-alone department-based program to allow us flexibility in admitting certain students in special circumstances.

The requested curricular changes are necessitated by impending changes in the medical school curriculum, which provides several of the required courses for our PhD programs. These curricular changes have been unanimously approved by the department's Graduate Studies Committee.

Thank you for your consideration and please let me know if you require further information.

Sincerely,

  
James J. Brokaw, PhD, MPH  
Vice Chair for Education

CC:  
K. Jones  
J. Bidwell



RRB  
8/2/16

## Request to Modify Degree Plan for Department-Based PhD in Anatomy and Cell Biology (Non IBMG)

### Rationale for Change

The department-based PhD curriculum relies on courses taught within the medical curriculum, specifically the medical courses in gross anatomy, histology, and neuroscience. With the implementation of the new medical curriculum in the 2016-2017 academic year, these stand-alone, discipline-specific courses will no longer be offered. In addition, one of the graduate courses (GRAD G818) has also been discontinued. Thus, we request to modify the degree plan by substituting these discontinued courses with comparable graduate coursework. The current degree plan is outlined below with the modifications indicated.

### Course Requirements

A total of 90 credit hours is required, with 32 hours in courses other than research.

### Core Courses

- At least 3 of the 4 following courses: **(Note that these 4 courses have been discontinued and are no longer offered; see box below for substitutes)**
  - ~~ANAT D850 Gross Anatomy (8 cr.)~~
  - ~~ANAT D851 Histology (4 cr.)~~
  - ~~ANAT D852 Neuroscience and Clinical Neurology (5 cr.)~~
  - ~~GRAD G818 Integrative Cell Biology (3 cr.)~~
- ANAT D861 Seminar (1 cr.) – enrollment is required each year in program
- An approved statistics course

### Minor Courses

A minimum of 12 credit hours of course work other than dissertation research in a related program (e.g., biochemistry, biophysics, medical genetics, microbiology, neurobiology, pathology, pharmacology, physiology, statistics, toxicology, or life science). For a minor in life science, at least 6 credit hours must be taken in one department. The minor must be approved by the student's advisory committee.

### Other Requirements

Students are required to gain experience in teaching by assisting one semester in one of the departmental courses.

### Suggested Replacements for Discontinued Core Courses:

- Students will be required to take at least 4 of the 5 following courses:
  - ANAT D501 Functionally-Oriented Gross Anatomy (5 cr.)
  - ANAT D502 Basic Histology (4 cr.)
  - ANAT D527 Neuroanatomy: Contemporary and Translational (3 cr.) or ANAT D701 Translational Neuroscience (5 cr.)
  - ANAT D853 Human Developmental Anatomy (3 hr.)
  - GRAD G817 Molecular Basis of Cell Structure and Function (2 cr.)

## Request to Modify Degree Plan for Anatomy and Cell Biology PhD through IBMG

### Rationale for Change

In the past, the curriculum of the IBMG-based PhD in Anatomy and Cell Biology has allowed for students to take courses taught within the medical curriculum, specifically the medical courses in gross anatomy (D850), histology (D851), and neuroscience (D852). With the implementation of the new medical curriculum in the 2016-2017 academic year, these stand-alone, discipline-specific courses will no longer be offered. Thus, we request to modify the degree plan by eliminating these discontinued medical courses. Only the equivalent graduate courses in gross anatomy, histology, and neuroscience will be offered. The current degree plan is outlined below with the modifications indicated.

### Course Requirements After Completion of IBMG Core Coursework in Year 1

Students will be required to take at least 32 credit hours of courses, other than research and lab rotations, for a total of 90 hours. Requirements for the major in Anatomy & Cell Biology include Ethics (G505), Skills courses (G655 and G855), Seminar (D861) in years 2 and beyond, and two courses (or one anatomical course plus two courses from the cell biology list) chosen from the following list: **(Note that D850, D851, and D852 have been discontinued and are no longer offered; see box below for modified list without these courses)**

- Gross Anatomy (D501 or ~~D850~~, but both cannot be counted as core courses)
- Histology (D502 or ~~D851~~, but both cannot be counted as core courses)
- Neuroscience (D527 or ~~D852~~, but both cannot be counted as core courses)
- Two courses focusing on advanced aspects of cell biology. Courses for this include Molecular Basis Cell Structure Function (G817), Basic Bone Biology (G819), Concepts of Cancer Biology (G852), Functional Neuroanatomy (N611), any of the Fundamental Neuroscience courses (G743, G744, G745, N612, N614, N616), or other courses approved at the discretion of the Advisory Committee

Students choosing the Life Sciences minor require 12 credits for the minor, though 9 credits may come from the IBMG first semester required core courses: G715, G716 and G717 (all 3 credits each). The remaining 3 or more credits will come from other graduate courses not included in the major, but cannot be research credits (this includes rotation credits--e.g. G718).

### Modified Course List

- Gross Anatomy (D501)
- Histology (D502)
- Neuroscience (D527 or D701, but both cannot be counted as core courses)
- Two courses focusing on advanced aspects of cell biology. Courses for this include Molecular Basis Cell Structure Function (G817), Basic Bone Biology (G819), Concepts of Cancer Biology (G852), Functional Neuroanatomy (N611), any of the Fundamental Neuroscience courses (G743, G744, G745, N612, N614, N616), or other courses approved at the discretion of the Advisory Committee

R.R.B.  
8/2/16

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AUG 1 2016  
In School of Medicine  
Graduate Division

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