

**Indiana University  
New Degree Proposal**

**Title:** Doctor of Philosophy in Biostatistics  
**Campus:** Indianapolis  
**Academic Unit:** School of Science/IU School of Medicine  
**Department:** Mathematical Sciences/Division of Biostatistics

**I. Academic Features**

**Goals/Objectives:**

The increasing role of the health and life sciences in Indiana naturally increases the demand for highly qualified and superiorly trained biostatisticians. Extensive biostatistics expertise is essential to support those working in the research forefront of the life sciences. The role of biostatistics in this arena can hardly be overstated; it is a fundamental scientific component of almost any of the research and development areas of the health and life sciences. The establishment of a Ph.D. program in Biostatistics fills an important void in the education of researchers in the health and life sciences.

**Principal Components:**

90 credit hours beyond the bachelor's degree. The 90 credit hours will consist of 36 hours of core courses; 12 hours of elective courses; 9 to 15 hours in a specified minor area; and 27 to 33 hours of dissertation research. Successful completion of qualifying, preliminary, and final examinations.

**Relation to Existing Programs:**

The program will combine the academic strength of the Department of Mathematical Sciences, which has a very successful master's degree program in Applied Statistics, with the significant experience of health and life science collaboration of the Division of Biostatistics within the IU School of Medicine. This is the perfect combination of elements required to train qualified biostatisticians with the necessary mathematical skills and biomedical experience.

**Coherence with Campus Mission:**

This program is compatible with IUPUI's mission to be Indiana's urban research and academic health sciences campus, and complements its goal of advancing the intellectual growth of its citizens to the highest levels nationally and internationally through research, scholarship and creative activity, teaching and learning, and civic engagement.

**Benefits of the Program for Students, IU, State:**

The current demand for biostatisticians nationally, and in particular in Indiana, far exceeds the supply. In light of the plethora of ongoing research and development projects occurring in the life and health sciences in Indiana this gap is only expected to widen. Presently, there is no Biostatistics Ph.D. program in Indiana. IUPUI with its medical center, combining the IU Schools of Medicine, Nursing and Dentistry, is auspiciously situated in the heart of the state and is uniquely positioned to take a leading role in filling this programmatic void.

**Opportunities for Degree Recipients:**

Graduates of this program are expected to enter academic positions in research and teaching universities or to conduct research for industries in the health and life sciences.

## **II. Implementation (Tables 1, 2A, 2B --attached)**

### **Steady State Enrollment/Degree Completion Projections (year five):**

Headcount	40 (40 new-to-campus)
FTE	24 (24 new-to-campus)
Degree Recipients	8

### **Steady State Expenses and Revenue Sources (year five)]:**

#### ***Expenses***

Faculty	\$84,500 (Incremental)
Support Staff	0
Supplies and Expense	\$166,000 (Fee Scholarship0
Reallocation	<u>0</u>
	\$250,500

#### ***Revenue Sources***

New-to-Campus Student Fees:	\$180,500
Enrollment Change Funding:	\$70,000
Reallocation	<u>0</u>
	\$250,500

***One-time Costs***                      None

***Infrastructure Resources***              None required