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## GREETINGS FROM IUPUI

## Health and life sciences—is one area where impact is made at IUPUI.

It is central to our mission, since IUPUI is the premiere site for training health care professionals in the state. It is an anchor for cross-disciplinary study. And it is a major way for us to contribute to the state's economic vitality.

The Battelle Memorial Institute ranked Indiana as being among the top four in the nation as defined by numbers and concentrations of bioscience jobs. Indiana is home to more than 300 life science manufacturing firms, more than 200 biotechnology or physical science research laboratories, and nearly 1,100 life science product wholesalers.

Our Center for Urban Policy did a study in 2000 which found that 48 percent of all life science industries in 30 central Indiana counties were located in Marion County.

The scale of health and life sciences at IUPUI is undeniable. We have four hospitals near campus, including two Level I Trauma Centers. The IU School of Medicine and its affiliated hospitals boost the area economy by an estimated \$8 billion a year and account for more than 52,000 full- and part-time jobs.

IUPUI researchers attracted just over \$400 million in research grants and awards in 2009-2010 (a jump of nearly 40 percent over the previous year), more than \$350 million of which went to the health schools (medicine, dentistry, nursing, health and rehabilitation sciences). IUPUI's academic programs in health and life sciences include 32 undergraduate majors in 10 schools and 47 graduate programs in 6 schools.

## The true scope of IUPUI's strength in health and life sciences might best be illustrated by the way schools across campus have made it a focal point.

Consider the Kelley School of Business at IUPUI, which offers the "Business of Life Sciences" class. Students use a real life science-related product and develop a business plan as their class project for the semester, translating learning into practice.

A recent class helped Professor of Biomedical Engineering Hiroki Yokota with a plan for approaching pharmaceutical companies about a new compound he discovered that stimulates bone growth. The manufacturing and commercialization of this product could lead to a new drug to treat osteoporosis.

IUPUI also hopes to establish Indiana as a leader in the growing field

of interactive health games. This field uses gaming consoles and web and mobile technologies as tools in health care and wellness education. The firstever Midwestern Conference on Health Games (<u>www.midwesthealthgames.org</u>) is October 29 at the IUPUI Campus Center.

The conference hopes to spark collaborations, interdisciplinary learning, and potential business enterprises and investments that could benefit both Indiana's academic and economic environments in health and life sciences.

Sponsored by the IU School of Informatics at IUPUI, with support from the Games for Health Project, this is an extension of research in which many faculty are already engaged. Conference cochairs Anna McDaniel (Nursing), who developed a smoking prevention game for teens, and Hadi Kharrazi (Medicine) see informatics as the bridge between people who understand the medical or clinical side and those who have programming skills.

Increasing student interest in life sciences prompted our Purdue School of Science to add 16 new faculty, including five in psychology and three in biology. Among the new hires are Simon Atkinson, Ph.D., chair and professor of biology, an internationally respected researcher in the field of kidney failure and the holder of several National Institutes of Health grants. Others have research expertise in Sudden Infant Death Syndrome (SIDS), diseases of the retina, mathematical modeling of blood flow in arteries, and the psychology of pain assessment by health care providers.

Another cross-disciplinary example is our Medical Humanities Program. Historian William Schneider, who holds the Baker-Ort Chair in International Healthcare Philanthropy, is on the faculty of the IU School of Liberal Arts. He recently received a grant from the Henry Luce Foundation to explore western medicine's influence in China. It is a collaboration between the IUPUI Medical Humanities Program/Center on Philanthropy and the Center for the History of Medicine at Peking University. The grant will bring top scholars together to present their research as well as identify major archival holdings in both countries.

**IUPUI is truly a powerhouse in the health and life sciences.** As recent multimillion dollar grants to develop the Indiana Physician Scientist Initiative and a school of public health demonstrate, our community recognizes and supports our focus in this arena.

## CHANCELLOR CHARLES R. BANTZ

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