What is "Integrative Biology and Physiology"?

Integrative Biology and Physiology (IBP) is the merging of Physiology, which studies the function of living organisms, and the rapidly advancing fields of molecular, genetic and cellular Biology. Research in Integrative Biology and Physiology enables us to understand how the body works, how it adapts to the environment, and how it malfunctions in disease.

What do IBP students focus on during their PhD?

IBP graduate students at the University of Minnesota Medical School are trained to use sophisticated approaches to study molecular, cellular, and whole-body functions. Our goal is to better understand how living organisms function and discover new mechanisms of disease. Possible focus areas:

- Cardiovascular Biology (e.g. heart failure and atherosclerosis)
- Metabolism and related diseases (e.g. obesity, diabetes, and fatty liver disease)
- Muscular and respiratory function and disease
- Inflammation in health and disease
- Regenerative medicine
- Neurophysiology
- Aging
- Cancer

Physiology is how the body works from the smallest piece of it to the largest piece and how they work together... You can chase that story to anywhere in the body, and have that support in this program that you know you're doing something that's worthwhile and that's going to make a contribution to science.

~IBP Graduate Program alumna
OUR MISSION

The Integrative Biology and Physiology graduate program is committed to creating a creative and productive research environment. The contributions of scientists whose background encompass diversity in culture, disability, ethnicity, gender and economic background are vital to this commitment. Incorporating diversity into all aspects of our program is essential for improving the health and knowledge of all, especially those from historically underrepresented groups.

What Makes our Program Exceptional?

The PhD Graduate Program in Integrative Biology and Physiology (IBP) is a unique hybrid of the field of physiology, the cornerstone of biomedical research and medicine, and the rapidly advancing fields of molecular, genetic and cellular biology.

Hands-On Learning
Superb Faculty
Flexible
A Strong Foundation
Intellectual Stimulation
Career Development
Personal Mentoring
Interdisciplinary Emphasis

We welcome you to join our community at the Graduate Program in Integrative Biology and Physiology!

Department of Integrative Biology & Physiology

University of Minnesota
Driven to Discover*

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