

# Iowa Biosciences Academy

## Codirectors

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**Faculty:** <https://iba.biology.uiowa.edu/people>

**Website:** <https://iba.biology.uiowa.edu>

Iowa Biosciences Academy (IBA) is a highly competitive undergraduate research and academic enrichment program funded by the National Institutes of Health. The program identifies academically talented undergraduate, underrepresented students who aspire to research careers and gives them first-rate training that facilitates entry into doctoral programs in biomedical, behavioral, and biophysical sciences.

Iowa Biosciences Academy students have opportunities to work in research laboratories with faculty mentors during the course of their undergraduate careers. The program's faculty represents a broad range of disciplines in the basic and biomedical sciences. IBA students also benefit from specialized course work, career counseling, and academic advising for biomedical and bioscience careers.

## Undergraduate Program

Students selected for Iowa Biosciences Academy must maintain good standing in academics and research. Good academic standing requires a g.p.a. of at least 3.00 and is evaluated at the end of each semester. Good research standing is determined by each student's research mentor. Students work with their mentors throughout the academic year and summer.

## Students Accepted from High School

Students admitted to IBA from high school spend their first year at the University of Iowa establishing good academic standing and conducting laboratory experiences.

During fall semester, IBA students enroll in BIOL:1808 Ways of Knowing Science (1 s.h.), where they explore subdisciplines of scientific research represented on campus and learn about the scope and methods of scientific research before diving into the content that is the focus of most biology courses.

During spring semester, IBA students enroll in IBA:1041 IBA Student Development Seminar (1 s.h.), which is designed to help them navigate their laboratory rotations. They also enroll in IBA:3992 IBA Research in Biomedical Science (0 s.h.) and complete a research rotation. The rotation, which is set up by IBA staff, introduces students to laboratory research at the University.

Students may choose to remain on campus for the eight-week summer session. They earn pay for laboratory work with their research mentors and may participate in IBA events. After completing a full year of research experience, each student is evaluated for admission to the IBA Scholar Program. Students who earn admission may continue in IBA throughout the year.

## Students Accepted from College

Applications also are accepted from current University of Iowa undergraduates majoring in the sciences as well as students transferring to Iowa. Students accepted to IBA during their

first, second, or third year of college join the appropriate class of IBA scholars. During their first semester of participation, new undergraduates complete lab rotations and establish good academic standing. They also enroll in IBA:1041 IBA Student Development Seminar (1 s.h.). Once students are matched with a research mentor, they earn pay for their laboratory work during summer and the academic year. They also enroll in IBA:3992 IBA Research in Biomedical Science (0 s.h.).

## Admission

Students apply to Iowa Biosciences Academy during their senior year of high school or once they are undergraduate students.

Applicants must:

- have a strong interest in pursuing a research career;
- have a qualifying academic major;
- be in good academic standing;
- submit an IBA application, including short essays; and
- submit one letter of recommendation from a science/math instructor or research mentor.

Admission requires an interview. Admission decisions are generally made in March, July, and October. For more information, including an online application form, see the Iowa Biosciences Academy website.

## Faculty

Faculty members from the University's broad range of basic and biomedical science disciplines serve as teachers and mentors to IBA students. They represent many departments, including anatomy and cell biology, biochemistry, biology, biomedical engineering, chemistry, health and human physiology, microbiology and immunology, molecular physiology and biophysics, neuroscience, nursing, physics, and psychological and brain sciences.

## Courses

### Iowa Biosciences Academy Courses

#### **IBA:1041 IBA Student Development Seminar 1 s.h.**

Academic and professional development; presentations by faculty researchers, admissions representatives, or students in graduate bioscience programs; discussions about succeeding at the University; talks by professional educators on topics such as effective study skills.

#### **IBA:3992 IBA Research in Biomedical Science 0 s.h.**

Registration in a section taught by student's research mentor. Requirements: enrollment in IBA.

#### **IBA:5045 Entering Mentoring 0 s.h.**

Process of becoming an effective research mentor; mentoring methods and resolution of mentoring dilemmas; secondhand exposure to the experiences of other mentors; strategies for managing mentoring challenges.