

IOWA STATE UNIVERSITY

Undergraduate Research Program

Undergraduate Research at Iowa State University- Getting Started

Adapted with permission from Dr. Norah Warchola

Assistant Teaching Professor Ecology, Evolution and Organismal Biology

Experiential Learning Coordinator Biology, Genetics and Environmental Science

How do I get started?

- Honors Program
 - If you are a student in the Honors Program work directly with the Honors Program staff to identify opportunities that meet Honors Program requirements
 - First Year Honors program
 - Emily Wilcox (515) 294-5827 or eawilcox@iastate.edu
 - University Honors Program questions, Honors project brainstorming, Honors course information
 - Laurie S. Law (515) 294-4292 or lfiegel@iastate.edu
 - For more information visit:
 - <https://www.honors.iastate.edu/research>

How do I get started?

- Identify your motivations for pursuing research
 - Do you want to gain first-hand knowledge in a specific subject area?
 - Do you want to do research because it will help you get into grad/med/vet school?
 - Do you want to earn money doing something relevant to your area of study?
 - Are you thinking you might want to continue your education in a specific discipline area and you want to see if you really like it?
- These factors may affect the types of opportunities you pursue

Types of Research Opportunities

Academic Credit

- Research for academic credit
(often listed as XXXX 2900/2990 or 4900/4990)
 - Examples:
 - BIOL 2990/4990- Undergraduate Research Experience: Research opportunities for undergraduate students in the biological sciences.
 - ENSCI 3900- Internship in Environmental Science: Supervised off-campus work experience in the field of environmental science.
 - Additional research courses may be available through your major. From the ISU Catalog website chose you major, then select 4-year plan, and look for courses numbered 2900/2990 or 4900/4990.

Types of Research Opportunities For Pay

- There are opportunities to earn money doing undergraduate research
- The Undergraduate Research website lists many examples
- Undergraduate Research Assistantship (URA) Program encourages outstanding juniors and seniors to pursue graduate study by offering hands-on experience in a formal research environment.

How do I find a faculty member to work with?

- Identify faculty of interest
- If you have a few semesters left at ISU
 - Take a course the faculty member teaches
 - If you take a course, attend office hours, let the faculty member know you are interested
- Attend department seminars to learn more about research initiatives and faculty areas of interest. Your advisor can help identify when a seminar is held in your department. A few examples are below.
 - BBMB- Thur at 3:40
 - NREM- Fri at 3:10

How do I find a faculty member to work with?

- Do some research on departmental websites in your area(s) of interest. This may extend beyond the department where your major is offered.
- Search your area of interest and “Iowa State University”
- Determine if there is a graduate program
- Look for affiliated faculty as well as those in the department

Contacting a Faculty Member

- Once you've identified a faculty member, contact them via email or if you are currently taking a course from them visit their office hours
- In preparation for the email or meeting become familiar with their work and how it aligns with your interests
 - Read a few of their papers
 - Familiarize yourself with their work
 - Be able to describe why their lab is of interest and why you'd be good fit

Two Categories of Email

- If applying for an opening:
 - address any qualifications the professor is looking for
 - demonstrate your experience
- If asking for a research opportunity:
 - state specifically your interest in that research group
 - explain why research is important for your goals
 - ask to schedule a meeting or say that you will be willing to come to office hours

Professional Email Guidelines

- **Use a clear subject line.** The subject “Undergraduate research opportunities” would work a bit better than “heeeeelp!”
- **Use a salutation and signature.** Don’t jump right into your message or saying “hey,” start with a greeting like “Hello” or “Good afternoon,” address the professor by appropriate title and last name, such as “Prof. X” or “Dr. X” Similarly, instead of concluding with “Sent from my iPhone” include a signature, such as “Sincerely,”
- **Use standard punctuation, capitalization, spelling and grammar.**
- **Add a touch of humanity.** Some of the most effective emails are not strictly business. While avoiding obvious flattery, you might comment on something specific about their research.

Example email 1

Subject: Meeting to discuss undergraduate research opportunities in **topic**

Dear Dr. **Professor**,

I am a **year** student at **university** majoring in **major**. **How you found out about the professor's research. Expression of interest in specific paper or topic.** I would appreciate the chance to talk with you about your research in **topic of interest** and about possible undergraduate opportunities in your lab.

My experience in **research experience or course**, confirmed my intention to develop my research skills and **goal**. I know you are very busy. We could schedule an appointment or I can drop by your office hours on **day and time**.

I have attached my resume and unofficial transcript. Please let me know if there is any other information I can provide. I look forward to talking to you soon.

Best,

Name

Example email 2

Subject: Possible undergraduate research opportunities

Dear Dr. **Professor**,

I am a **(year, major)** at **(university)** and I am writing to ask about opportunities for undergraduate research in your lab beginning **(time period)**. I have conducted undergraduate research on **(topic)** with **(names)** in **(program or class)**. **(Expression of interest in the topic)**. I would like to continue a path of research on **(topic)** and would ultimately allow me to **(career goal)**. I am especially interested in your previous work on **(describe a paper or talk)**.

I have attached my CV and unofficial transcript to this e-mail, but if there is additional information that I have not included that you would like, I would be happy to provide it to you. Thank you for your consideration.

Sincerely,

Name

Email address

- For more information visit the Undergraduate Research website