Preparing Yourself for Undergraduate Research

Talk to lots of people and listen to their advice
Faculty advisors/Professors in classes/Other students who do research
Concentrate on your course work in the early semesters. Good grades will help you get into a lab!
Take appropriate classes so you know the theory behind the work done in the laboratory.
Wait until you have enough time in your schedule to spend at least 5 hours a week on your project.

Do some research and generate a list of professors whose work you are interested in
Get on the web at http://www.gonzaga.edu/undergradresearch and check out the research interests of the faculty. Read or at least look at a reference from their lab. Look at their web pages. Find out what it is like to work in the lab by talking to other students that work with her/him.

Contact the professors on your list
Start by sending the professors an email telling them something about yourself and why their research is interesting to you. If your grades are excellent, tell them that. If you are thinking about graduate school, tell them that. If you have lab or field experience in their area, tell them that. It is OK to sell yourself to the faculty and encourage them to talk to you. Be politely persistent! It will show that you have the commitment and energy to work hard on their research

Options to Consider
What are you doing with your summer vacations? Think about doing research here at Gonzaga or at another research institution.
Do you want to receive a stipend, volunteer in the lab, or get some academic credit?
Biology majors - Are you in the Research Concentration?
Chemistry majors – Where will you do your senior thesis project?

Things to Keep in Mind
Research takes time. Don’t get involved until you comfortably can spend at least 5 hours a week in the lab. You must learn how to balance class work with research if you expect to have an effective research experience.

A research experience will not make up for poor grades when you apply to medical school or graduate school. Research is essential if you are applying for graduate schools, but again you will need good grades to be considered. Research is not required for medical or veterinary school. It will be helpful and give you something to talk about in your interview, but only if you can talk intelligently about your project.

You will need letters of recommendation to apply to medical, veterinary, or graduate school. If you do a good job in your research, that will help provide you with some of these letters.

The term “independent research” can be confusing. At Gonzaga, the term independent means that a student has their own project to work on and think about in collaboration with a faculty member and other undergraduates. It does not mean that you have to have an idea in mind to approach a faculty member.
Important dates for paid research positions at Gonzaga

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<th>Fall Semester</th>
<th>Spring Semester</th>
<th>Summer</th>
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<td>Applications Available</td>
<td>First week of the semester</td>
<td>Early November</td>
<td>Middle of January</td>
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<td>Applications Due</td>
<td>Second week of classes</td>
<td>Around Thanksgiving Break</td>
<td>Middle of February</td>
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Research positions are limited and can be very competitive. For example, the total number of positions varies by semester, and the average placement is 75%. Your chances of obtaining a position are greatly enhanced if you (1) are genuinely interested in a research topic and can communicate that interest to a potential faculty mentor, and (2) can show you are a strong candidate with solid grades in your science classes. Sometimes paid research positions are difficult to come by, in which case consider volunteering in a lab or working for credit.

Important dates for paid research positions at other institutions

Although deadlines do vary, most summer internship programs at other research institutions have deadlines in January and February. For a partial list of research positions at other institutions, see the Undergraduate Research webpage. [http://www.gonzaga.edu/undergradresearch](http://www.gonzaga.edu/undergradresearch)

Presenting your research

Summer research students and those supported by HHMI funds are expected to participate in the GSRP Fall Family Weekend Poster Session. In addition, Research Option students must present their research at a venue outside of Gonzaga. Conferences and meetings are a great way to meet others in your field of study, and will often help you decide how and where to take your career once you graduate from Gonzaga. Some of the most commonly attended conferences are listed below.

- The Murdock College Science Research Conference is held each year in early November at a university in the Pacific Northwest. Typically, approximately 30 Gonzaga students and faculty travel to the conference together. Contact Dr. Glass for more information.
- The Spokane Intercollegiate Research Conference is held each April at a Spokane-area university. Contact Angie Hinz or talk with your mentor for more information.
- Additional presentation options include other regional undergraduate research conferences as well as the national meetings of professional societies. Travel grants of approximately $500 are available to assist students attending these regional and national conferences. For more information on how to apply for travel funds, please contact Angie Hinz.

K-12 Science Outreach

Participation in science education outreach can be incredibly fulfilling. Our outreach program focuses on bringing engaging, interesting, and age-appropriate science into K-12 classrooms in the Spokane Public Schools. Each GU student is required to do science education outreach through *Science in Action!* or a similar program, for a total of 16 hours in a single semester. Participation in these programs fulfills the Gonzaga Service Learning requirement for some classes. For details and scheduling information, contact Rachel Zack.

People to Know

- Dr. Nancy Staub – Director of the Research Option Program
  - Office: HU207, Phone: 313-6336, Email: staub@gonzaga.edu
- Angie Hinz – Research Coordinator
  - Office: HU241, Phone: 313-5889, Email: hinz@gonzaga.edu
- Rachel Zack – Outreach Coordinator
  - Office: HU007, Phone: 313-6642, Email: zack@gonzaga.edu
- Dr. Howard Glass – Director of NNRRC and the GSRP
  - Office: HU119, Phone: 313-3888, Email: glassh@gonzaga.edu
- Your Research Mentor