So you want to do research as an undergraduate student?

There are many ways to get involved with undergraduate research. Some recommended steps to get started:

1. Identify your interest areas (this could be a department on campus, a research question you’d like to answer, or a new type of technology you’d like to learn more about).
2. Explore some Mines faculty pages online, or read through open projects on the Mines Undergraduate Research Fellowship website (see QR code), to identify faculty who are doing research that is interesting to you.
3. Reach out to faculty mentors of interest to introduce yourself, either via email or in person. You might mention:
   - What about their research interests you and how you see it connecting to your academic or career goals.
   - What relevant skills or experiences you would bring to a research experience in their lab.
   - What number of hours you’d be available to research in their lab weekly.
4. Decide if you’d like to conduct research for credit, for pay, or as a volunteer. Consult the flowchart below. Register for credit or apply to fellowships by deadlines, as relevant.
5. If at first you don’t succeed, try again! Not every faculty member will respond to your outreach, and some might not have the capacity to take you on in their lab. It’s important to persist through these obstacles, and keep trying!
6. Still struggling to find research opportunities? Reach out for support to Undergraduate Research Scholars at ugresearch@mines.edu or to an Undergraduate Research Ambassador on our website https://www.mines.edu/undergraduate-research/

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**Research Opportunities**

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<td>Research for Credit, Field Session, Capstone</td>
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Projects funded through faculty-led labs

- Makerspace, Clubs and Professional Organizations
- Emerging Scholars Seminar Series/SURF Professional Dev. Workshops

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FIRST: First-year Innovator Research Scholar Training
MURF: Mines Undergraduate Research Fellowship
SURF: Summer Undergraduate Research Fellowship
*And other external summer research opportunities
Finding a Potential Research Mentor

1. Identifying Potential Research Mentors
   a. Determine what most interests you in your discipline
   b. Search websites to identify mentors working in your area of interest (department websites, undergraduate research websites). Don’t be afraid to think broadly and explore areas outside your academic department.
   c. Read the research description and generate a ranked list of at least five mentors. Note one or more aspects about each person’s research that is interesting to you. Contact mentors and do not get discouraged or give up if you don’t get a response.

2. Contacting Potential Research Mentors
   a. Research mentors are very busy people, so keep it short and to the point
   b. Address the email using the mentor’s official title (e.g. Professor, Dr.)
   c. Specifically refer to the mentor’s research, and what you find interesting about it. Be sure to use your own words and not to copy text from the research description on their web site.
   d. Be clear that you are looking for a research experience (vs. a dishwashing job) and what your main goal will be (e.g. shadowing someone in the lab to get exposed to research vs. doing an honors thesis research project).
   e. Highlight what you have to offer; what distinguishes you from other students (e.g. hard worker, experience, eager to learn, willing to stay more than one semester, persistent, specific courses you’ve completed that are relevant to the research).
   f. Give an estimate of the number of hours/credits you can be available to do research, and when you would like to begin, but leave room for negotiation.
   g. Show enthusiasm for learning how to do research!

3. Interviewing with Potential Research Mentors
   a. Be on time, not early or late.
   b. Be yourself. Be enthusiastic and motivated. Smile!
   c. Be ready to discuss why you want to do research (career goals etc.), and why you want to do research with this mentor specifically?
   d. Read about the research BEFORE you go to the interview.
   e. Ask about the expectations of undergraduate trainees in the group.
   f. Have a plan for the time you will be available during normal business hours.

4. Remember:
   a. It can be challenging to connect with research mentors, so be persistent, yet polite. Give mentors a week to respond before you follow up.
   b. Research groups have limited space, so it may be difficult to find a group that is looking for, or willing to take another student. Do not take it personally if they decline your request. You may go through all 10 mentors before finding a match. Stick with it!
   c. Remember that the principles of research are same and generally independent of the particular field of research. Gaining experience in one field will almost certainly translate to other fields.