FINDING RESEARCH OPPORTUNITIES

ANSWERING THE WHAT, WHY, WHEN, HOW, AND WHERE for STEM Students

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WORKSHOP AGENDA

TOPICS TO BE DISCUSSED

- What is Research?
- Why Research?
- What are Types of Research Programs and Positions?
- What Do You Need to Apply?
- When Should You Apply?
- What Can You Do to Prepare for the Application Process?
- What are Some Application Tips?
- Where Can You Find Summer Research Program Opportunities?
- Where Do You Go for Assistance?

WHAT IS RESEARCH?

It is the exploration of a topic that ...

- Makes an original intellectual or creative contribution to a discipline
- Helps you understand or gain more knowledge of a topic
- Investigates a question you had but without a preconceived result

and can vary based on discipline and industry.





TYPES OF FORMAL RESEARCH PROGRAMS

ACADEMIC YEAR-ROUND RESEARCH

Opportunites to gain research experience during the fall and spring school year terms

SUMMER PROGRAMS

Typically 10 to 12-week programs held at other institutions/organizations during the summer

TYPES OF RESEARCH POSITIONS

VOLUNTEER

These allow for the greatest flexibility in time committment and experience level

FOR CREDIT

You can earn between 1 and 4 course credits through independent studies courses. Discuss with your department chair and academic counselor for more information.

PAID RESEARCH ASSISTANTSHIPS

At some institutions, you can be paid to work with faculty. They are competitive, may require prior experience, and ask you to commit a certain number of hours each week of the year, not just during the summer months.

FUNDED PROGRAMS/FELLOWSHIPS

Typically happens over the summer at various universities and/or research facilities. Most require full-time hours on a project under the guidance of a mentor in exchange for a stipend, housing, and/or transportation assistance.

WHAT DO YOU NEED TO APPLY?

TYPICAL APPLICATION MATERIALS

- Personal Statement/Interest Cover Letter
- Recommendation Letters/References
- Supplemental Application Questions
- Resume/CV
- Transcripts



WHEN SHOULD YOU APPLY?

Is your first year in college too early to start undergraduate research?

Absolutely not! You can apply to research opportunities catered to first year students, community college students, any undergraduate year level, etc.



When researching what opportunities to apply to, identify opportunities that meet your background, skills, interests, time commitment, GPA, EdPlan, career goals, personal plans, etc.



ACADEMIC YEAR-ROUND PROGRAM TIPS



IDENTIFY YOUR INTERESTS

Consider what type of research you are interested in pursuing. Create a list of subjects and topics that interest you and that you can commit time. Think about what courses you have taken, review some of the things you have read, brainstorm with a career counselor at the Career Services Center, etc.

LOOK INTERNALLY

Take advantage of SMC services. Ask your instructional faculty, fellow classmates, academic counselors, departments, programs, etc. if they are aware of any internal opportunities. Ask each department chair which faculty are teaching indepedent studies. Sometimes you can create your own opportunity or join in on an already established project.

TARGET RESEARCH OFF-CAMPUS

Check out local research institutions to see if they have research opportunities open to outside students/staff. Research their undergraduate research websites or indidivudal research labs for opportunities and express your interest. Try "Undergrad-Grad-PI' method to learn more info about the lab.

PITCH YOUR PASSION

Familiarize yourself with the professor/lab and the research area that interests you. Advocate for yourself. Explain your personal research interests, goals, how your research interests relate to the area of research, and what you can contribute to the research. Make sure to attach your resume/CV as well.





ACADEMIC YEAR-ROUND RESEARCH TIMELINE

When is the best time of the year to look for these types of opportunities?

If you're interested in starting a research opportunity during a fall, winter, or spring term, generally research positions become available just before the start of an academic term and/or at the start of the academic term. If you are hoping to start a research opportunity beginning summer, you will want to start applying the previous fall term. Positions starting during the summer can be more competitive as space is limited.





START EARLY

Start as early as possible. Many of the applications are due almost one year in advance and around the same time. They also can't be done in one night. (i.e. STEM research program applications are due between late October - early December, then the next round between January - early March.

MAXIMIZE YOUR CHANCES

You should apply to several programs that fit your goals and interests. Most program sites provide offers in late March to June, well past the application deadlines for most, if not all, opportunities.

REVIEW THE APPLICATION PROCESS

Go through the application and program website thoroughly. For example, some applications will not provide the necessary forms/links to your references until you submit your application. Do your research and don't be afraid to email the program contact and get your questions answered.

GIVE REFERENCES ENOUGH TIME

Provide your references with several weeks to submit their recommendation. References should speak on your work ethic, communication ability, intellectual curiosity, technical competence, etc. Your recommendation letter should also be targeted to the specific opportunity rather than a produced generic letter.

SUMMER RESEARCH PROGRAM TIMELINE

SEPT

- Review your resume with a career advisor (this can take several sessions)
- Block time to identify and/or apply to opportunities
- Update your spreadsheet of research opportunities with programs that fit your major/career goals and note any deadlines and requirements
- Start applying for opportunities. Some applications open as early as September.
- Identify and contact several people who can serve as your reference and/or write a letter of recommendation for you. Ideally, choose a college instructional faculty/ supervisor related to the research opportunity.

CSC APPOINTMENT LINK



- Continue updating your spreadsheet of research opportunities
- Continue working on application materials and submitting your applications. Each application is different and may require you to submit paragraph length responses to questions, personal statement essays, samples of your work, recommendation letters sent directly from your reference, etc.
- Ask your career advisor, career counselor, academic counselor, instructional faculty, etc. to review your application materials

NOV -MAR

- Continue updating your spreadsheet of research opportunities
- Continue working on application materials and submitting your applications.

RESEARCH OPPORTUNITIES AND MORE

GEARED TOWARD COMMUNITY COLLEGE STUDENTS

- Base 11
- Cal Poly Pomona Cal-Bridge Summer Program
- Cal State LA Response of Hydrological Systems in Urban Areas REU
- Cal State LA Department of Chemistry and Biochemistry REU
- <u>Charles Drew University/UCLA Undergraduate Cancer Research Training Program</u>
- <u>Department of Energy Community College Internship (CCI)</u>
- <u>East Carolina University Biomedical Engineering in Simulations, Imaging, and Modeling (BME-SIM) Research Experiences for Undergraduates</u>
- Kansas State University Summer Undergraduate Mathematics Research

SUMMER RESEARCH OPPORTUNITIES

GEARED TOWARD COMMUNITY COLLEGE STUDENTS

- <u>UC Berkeley Transfer-to-Excellence (TTE) REU</u>
- <u>UC Santa Cruz Lamat REU Program</u>
- UCLA Bruins in Genomics (BIG) Summer Research Program
- <u>UCLA Community College Field Biology Alliance Program</u>
- <u>UCLA Cultivating Interest in Research Careers (CIRC)</u>
- <u>USC Diversity, Inclusion, Access (DIA) Jumpstart</u>
- USC Viterbi Summer Undergraduate Research Experience (SURE)

HOW DO I CONTACT THE CAREER CENTER FOR MORE INFORMATION?









APPOINTMENTS
WITH THE
CAREER CENTER

CAREER CENTER
CONTACT INFO

CAREER CENTER
SOCIAL MEDIA

CAREER CENTER
WORKSHOP
RECORDINGS

CAMPUS RESOURCES



CAREER CENTER

Assist with major/career exploration and employment related resources

ENGLISH 1E ONLINE WRITING CONSULTATION

Noncredit, free, online course that offers students feedback on rough drafts

COUNSELING DEPARTMENT

23 unique programs available to provide counseling support services

STEM/MAS PROGRAM

Program specifically geared to support your STEM goals

INSTRUCTIONAL FACULTY

Ask faculty you are familiar with to review your application

WRITING AND HUMANITIES TUTORING CENTER (WHTC)

Writing support in any subject and at any stage in the writing process



CONTACT INFO

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