A General Guide to Finding an Undergraduate Research Position

Begin here -- ***What can the research experience offer me?***

- *Learn where scientific "facts" originate*
- *Develop hands on skills with current tools and technologies*
- *Enhance science-based verbal and written skills*
- *Build critical thinking and data analysis abilities*
- *Explore and refine career directions*
- *Develop professional ties for future opportunities*

Some **practical questions** to ask at the beginning:

- Can I plan for **at least two semesters** of research?
- Do I have **at least 10 hours/week in 3 or 4 hour time periods to work in the lab?** Am I willing to be flexible?
- Do I have **enough time to handle both academics and research?**
- Can I be as **committed to my research** effort as my coursework?
- **Do I qualify for MCB 290?** (Read "Enrollment Procedures - MCB 290, MCB 492**")** http://www.mcb.uiuc.edu/academics/undergrad/research.html)

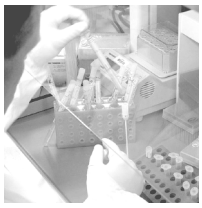
Ask yourself: If I were a research scientist, what would I look for in a student?

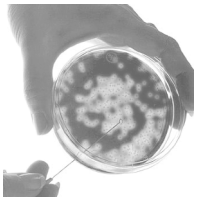
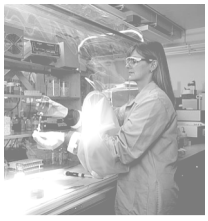
Overall, many MCB professors describe the successful student researcher as someone who is…

- keen to ask -- or *learn* how to ask -- questions in a research setting.
- eager to learn how to communicate their science with others in discussions and through writing.
- motivated to dig into research seriously enough to see if it is something s/he wants to continue doing!

<u>To get MCB 290 course credit for your research experience:</u>

- *You must be Biological Sciences (undeclared), MCB, MCB Honors or Biochemistry*
- *Your MCB 290 research may be conducted in any molecular, cellular, physiol. or biochem. research program* ***on campus.***
- *1 credit hour = 5 hours/ week in the lab; A letter grade is assigned for each semester you enroll in MCB 290*

<u>Steps to finding a research mentor and project:</u>

The professors are accustomed to being approached by students interested in joining their lab! Don't hesitate to speak with an instructor in one of your courses or who attends research seminars you're interested in or one with whom a friend may be working. If these approaches don't apply to you then:

1. ***Make a list of your areas of scientific interest*** *using the* ***MCB Faculty Interest*** *web page: http://www.mcb.uiuc.edu/faculty/by_research.*

2. Click on the links to individual ***MCB faculty websites*** *(or see separate handout for suggested colleges, schools and departments <u>outside</u> of MCB too) and read:*

   a. Descriptions of a professor's research and, perhaps,
   b. Recently published abstracts/ papers for those of interest.

3. ***List the faculty*** *whose research programs interest you, then:*

4. ***Get in touch with the research professors****…For example, to each professor on your list email a separate letter of inquiry that contains:**

   a. Your profile information: semester(s) requested, previous lab experience, etc.
   b. Description of your goals
   c. Justification for your interest in research

*** ***Note: Using the MCB 290 Profile Database is recommended! See attached handout.***

5. ***Send follow-up emails****: To express thanks, to set up an "interview" appointment with a professor or to provide additional information. If you don't receive replies from professors you've contacted, get back in touch in a week or so and persist with your request to speak with them about your interest in research!*

6. Meet with professors to discuss possible research opportunities in their programs.

When you meet with a professor:

1. ***Think in advance about what you're hoping for in a research position****: For example: Interested in research that has the potential for independent work? Or studies that might lead to a MCB 492 Senior Thesis and, perhaps, graduating with distinction? Or research that entails certain types of work – e.g. computer-based? Bench work? Some "field" work? Go prepared to talk about your goals and to explore how you can pursue them in the labs you wish to join.*
2. ***Be sure to understand the nature of the work and expectations for students working in their lab --and your own ability to participate in these ways****. How many hours/week? Will there be an established schedule? With whom will you be working? Are there lines of communication? What is the nature of the work – independent or more observational? Will it involve work with animals that you're comfortable with? Will you be expected to attend/ discuss data at lab meetings or read primary papers? Etc…*

How do I enroll for MCB 290 if I don't use the on line profile system?

Step 1: Download the MCB 290 application *(http://www.mcb.uiuc.edu/academics/undergrad/research.html#forms* ***OR pick up the form*** *in MCB Core Curriculum Office, 252 Davenport Hall OR the MCB Advising Program, 127 Burrill Hall*

Step 2: Ask your professor to complete and sign the form.

Step 3: File paperwork in 252 Davenport Hall *– you'll be given the professor's CRN that will allow you to register for MCB 290 for the specified semester.*

Step 4: If the research program in which you plan to work is outside of MCB*, submit the completed form to Melissa Michael in 252 Davenport Hall to confirm that the project is consistent with MCB guidelines for MCB 290 (call 244-1975 for appointment).*

FAQ's:

- ***When is the best time to begin undergraduate research?*** *This depends on your goals and ability to handle both a course load and research. Some students begin working in labs as freshmen, though many find that they are best prepared to begin with one or more of the MCB core classes completed – i.e. either spring of sophomore year or early junior. Try to not wait until senior year, when limited time may preclude your option of fully exploring the research experience. Some professors have preferences for where their students are in their academic training – they will inform you of this when you contact them.* ***It's never too early to explore if you're interested!***

- ***Is it possible to enroll for MCB 290 in the summer?*** *Yes, in fact the summer typically offers more hours in the lab and greater schedule flexibility that can translate into more rapid progress in your work.*

- ***What if I haven't found a lab position by the time I need to register for the semester when I want to begin research?*** *Go ahead and register for your classes, but reserve time in your M-F daytime schedule for research -- then continue to search for a mentor and lab. If necessary, you will be able to add MCB 290 after the new term starts by receiving permission in 252 Davenport Hall (when you file your paperwork).*

- ***Is there a limit to the number of hours of MCB 290 credit I can have?*** *There is no limit to the number of hours of MCB 290 you can enroll for, however* ***only 10 hours will apply towards your total hours needed (120 hours) for graduation.***

- ***Is it possible to be paid AND receive credit for my research?*** *No, not simultaneously for the same work.*

- ***Can I receive MCB 290 credit for my research at another institution?*** *No, but that experience may enhance your ability to find a research position at Illinois, make you more competitive for summer research fellowships and provide evidence of a richer, more varied research experience as an undergraduate!*

Questions? Email them to mcb290help@life.uiuc.edu or mcbadvising@life.uiuc.edu