

Guidelines for Mentors & Trainees
for the
Summer Research Training Programs

University of Maryland School of Medicine

2009



David Hall - 1812

The Summer Research Programs are co-sponsored by the

National Institutes of Health

Office of the Dean
University of Maryland School of Medicine,

Office of the President
The University of Maryland, Baltimore, and

University System of Maryland

OFFICE OF STUDENT RESEARCH
University of Maryland School of Medicine
Mentor Guidelines
2009

Recruitment of Potential Trainees

Applicants to the summer research programs may contact the OSR at any time. For most professional students at UMB, this usually occurs in the Fall. For others this may be after a recruitment visit to various high or undergraduate schools in and around Maryland, to various scientific meetings or after students visit the [OSR web site](#). After the initial contact, the research interests and goals of the potential trainee, the appropriate program, mentors and projects are identified and financial remuneration (if applicable) and program schedules are discussed.

High school students (16-years-old at start) and *undergraduates* usually make programmatic selections from a list of pre-approved mentors provided by the program director or by visiting the OSR website. *UMB professional students* generally select multiple potential mentors, examine their research narratives, converse by e-mail and often visit with the mentors to discuss projects and working arrangement. Prospective mentors are encouraged to provide resource material when contacted by students to allow them to become more familiar with the research before a decision about a mentor is reached. Subsequently, the students confer with the Director of the OSR to identify the faculty member with whom the application will be written and to ensure research support. All other students are matched with one of their selections from a list of pre-approved mentors.

Mentor Eligibility

All faculty at the level of Assistant Professor or above may serve as the primary mentor for students. The faculty member **must provide evidence of ongoing research activity and existing research support** (e.g., an NIH R01 research grant or its equivalent) to serve as a research mentor and **assure a productive summer**. All research must have a current animal or human protocol or a letter of exemption from the Institutional Review Board. In the event that a student is added to the research protocol, an amendment must be submitted indicating the changes, if any, to the protocol caused by the student's involvement.

Length of Traineeship

Summer research traineeships for undergraduate and medical students usually require 10 weeks (extensions on request to 12 weeks). The high school program is 8 weeks and the Volunteer Research Program can vary from 8-12 weeks. With the exception of the high school trainees, summer activities at UM begin the day after Memorial Day and run until the first Friday in August. The high school program usually begins on a Monday in Mid-June.

Since medical school begins the 2nd week of August, trainees in programs at UM that require housing must end before the second Friday in August. Students who do not require housing may remain with the permission of their research mentor and the Director of the OSR. The program includes an *Orientation* to the campus and program, a *Colloquium on Science*, and a *Student Research Forum*.

The summer schedule (see website for specific dates) is as follows:

<i>High School Program (8-week)</i>	mid-June (Monday) to 2 nd Friday in August
<i>Undergraduate Program (10-week)</i>	Day after Memorial Day to 1st Friday in August
<i>Med/Dent Student Program (10-week)</i>	Day after Memorial Day to 1st Friday in August
<i>Orientation Days*</i>	First two days after Memorial Day
<i>High School Orientation Day</i>	First two days of program (~June 16-17)
<i>Research Seminars</i>	Tuesdays & Thursdays, mid-June to late July
<i>Student Research Forum*</i>	1 st Friday in August
<i>High School Research Forum**</i>	2 nd Friday in August

*Applies to all but high school Program

** High school programs only

Work Week

Trainees are expected to work full time. Usually, this cannot be tied to a normal 40-hour work period. Before the starting, mentors and trainees should agree on an acceptable arrival and departure time. Thus, if the work requires a variation in a regular daily schedule (*i.e.*, evenings, weekends, *etc.*) this should be discussed in advance. The program does not provide sick days and work not accomplished must necessarily be made up. Paid vacation days are the Fourth of July. **If mentors experience a problem with attendance or tardiness, the office is to be notified immediately!**

Time Off

Trainees who wish to take substantial vacation time during the summer or who will be attending a scientific meeting must submit a leave request to the OSR. The research mentor and director must approve the request. Leave request are submitted as a simple letter to the Director and copied to the research mentor. Extended periods of absence will be made up by extending one's stay or starting early with permission.

The Mentor: Roles and Guidelines

The mentor is the key to a successful summer experience. The mentor must take an active role by clearly defining an appropriate research project with the medical student, providing guidance, training and support, and serving as a role model for the trainee. The mentor must be genuinely interested in the goals of the program, namely to: 1) encourage medical students to consider the possibility of a career in biomedical or clinical research and/or academic medicine, and 2) provide students with a realistic understanding of the biomedical research environment. The following description of the mentor's role and guidelines for serving in that role are offered to provide assistance:

What does a mentor do?

- Assists the student in developing the research project consistent with the trainee background and experience.
- Prepares for the trainee's arrival by clarifying the trainee's research with other personnel in the laboratory or other work area.
- Supervises trainee in research alone or in combination with other colleagues, senior

technicians or fellows.

- Schedules regular meetings with the trainee to monitor his or her progress and acclimatization to the work setting.
- Provides a range of appropriate experiences for the trainee: laboratory meetings, departmental seminars, *etc.*
- Participates in the *Colloquium* and *Forum* and provides expectation/evaluation reports on the student and program.
- Encourages trainees participation by
 - urging attendance at all program offerings
 - attending some of the offerings with the trainee
 - scheduling conflicts ahead of time
 - developing a strong research focus through discussion of the research and seminars and by encouraging the trainee to write the *Forum* abstract; planning the oral or poster presentation, and discussing the format of the subsequent paper summarizing the summer's work
 - encourages journal keeping

The following may assist a mentor and trainee in getting the most from your association. Use them as a baseline to “spark” your own ideas that can be shared with others and us.

- Provide access to e-mail and the internet. All medical students have a laptop computer and could benefit from your assistance with understanding the web, databases and any educational programs you utilize.
- If something interesting is going on “next door” make sure your trainee knows about it.
- Arrange for photographs to be taken of you and your trainee (we can assist)
- Plan to follow up the trainee's progress on the research and professional development

The Trainee: Roles and Guidelines

What does a trainee do?

- Conducts research as articulated in the application for a summer traineeship
- Actively seeks opportunities to share and learn about other trainee's research projects
- Maintains a journal
- Develops a research focus that captures the essence of the summer's work; writes an abstract, plans an oral or poster presentation, and writes a scientific summary of the research
- Maintains contact with the program office, submitting all required paper work
- Prepares an evaluation of the program
- Participates in follow-up programs, *e.g.*, *Student Research Forum* and *Medical Student Research Day*

Guidelines for trainees

The following ideas are shared with you to help you get the most out of the summer experience and of benefiting others.

- Be aware of where you are: make sure that you know your way around the site where you are going to be working; introduce yourself to everyone at the site.
- Let your mentor know you would like access to the internet with your laptop if possible

- Discuss expectations (e.g., publications), summer schedules and deadlines before or during the first week.
- Set a weekly meeting time with your mentor to summarize your research and plan for the next week.
- Share with your mentor your ideas and goals as well as your insight about the working environment.
- Meet with other students, fellows and technicians in your work area.
 - Act as a role model for other students and for science and mathematics teachers who may be working near you and/or attending the *Colloquium* and *Forum*.
 - Find out how research might impact your future; ask your mentor and others how they combine a research, teaching and clinical career; find out if an advanced research degree (*i.e.*, masters or doctorate) can facilitate your goals.
 - Learn about outreach programs sponsored by the University (e.g., speakers bureau, mentorships, conduct tours).
 - Learn about recruitment and informational materials that you could share with students from your undergraduate school.
 - Be conscientious and professional - in completing tasks and in interacting with others. Learn about safety, both personal and in the workplace; be sure that you attend the required personal, laboratory and chemical safety training sessions.

Share the Traineeship Experience

- Let other trainees and prospective applicants know about your summer experience.
- Document your summer experience; take pictures and plan outings : relationships you form now may last a lifetime.

Important Dates

Mentors are invited you to join us for lunch during Orientation. A full complement of research seminars (*Colloquium on Science*) will take place throughout the summer at various times (usually on Tuesdays and Thursdays) from mid-June through late July.

Orientation: all training programs includes Ethical and Responsible Conduct of Research; first two days after Memorial Day except for high school which falls in mid-June

Colloquium on Science: weekly faculty research seminars (specifics to follow along with an invitation) mid-June to late July

Mid-Summer Chalk-Talk Retreat: All trainees will gather for lunch and an afternoon of progress reports on their research in mid-July

Student Research Forums: The trainees in our programs present their research to the scientific community and visitors on the first Friday of August (medical and other students) and 2nd Friday of August (High School only).

Please contact us at any time with any questions you have about your traineeship. Questions, observations, and suggestions are welcome and contribute to an ongoing improvement of the program. Keep in touch in person, in writing, by e-mail or by phone.

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