"Orientation and expectations"

packet given by Naomi Chesler to new trainees in her group.

Contents:

WELCOME TO THE VTB LAB!

Our lab conducts research designed to better understand and prevent heart failure, preeclampsia and age-related cardiovascular disease. We use an integrated mechanobiological approach to understand these diseases, develop better diagnostic and prognostic indicators and design therapies. At any time, our lab group is composed of post-doctoral, graduate, and undergraduate researchers, clinical and basic science and engineering collaborators and academic staff – all important members of our research group.

EXPECTATIONS

As a research assistant, your position has many of the qualities of a professional position, including both its responsibilities and privileges. The Vascular Tissue Biomechanics (VTB) lab group is a collegial environment for the sharing of research ideas and accomplishments. This can only be maintained by everyone working under the same expectations in the pursuit of the same goals. The guidelines below define a professional standard of conduct intended to ensure this common direction in the activities of our research group.

Research Progress

You are expected to make steady progress towards your research goals at all times. Part of that process includes being active in setting short and medium term goals including milestone dates and deliverables. During the academic semester, performing well in your courses is certainly important, but should not cause a complete lack of productivity. This is your primary responsibility as a research assistant and the following guidelines are intended to support this responsibility.

Collaboration

All of our research is collaborative in nature. Whether you are collaborating with clinicians, scientists, engineers, other graduate students or undergraduate students, respectful and timely communications are key to productivity. Within the lab, being a team player is important and means being respectful of the workspace and efforts of everyone in the lab. You are expected to do your part to keep the lab functioning. The equipment that we have available are shared amongst many of you; we'll all have to do our best to make sure everyone is accommodated. Mistakes happen and equipment stops working. It's everyone's responsibility to notify me when something needs fixing.

Literature Review

An important part of being a successful researcher is understanding the work that has already been done in your field and finding a place for your research in that body of research. Learning to use the literature review tools to locate relevant articles and then reading those articles will not only provide you with valuable research skills, but will also guide your research to ensure it can be an original contribution. Finally, reading other people's published work will lead to improved writing skills. A goal of reading two publications per month is a good minimum standard.

Publications
Journal publications are the most important way to share your knowledge and creativity with the rest of the scientific community. Students pursuing a Masters degree will be expected to author or make major contributions to at least one journal paper submission. Students pursuing a doctoral degree will be expected to author at least three journal papers submissions.

Conference Submissions and Travel
You are encouraged to submit your work to technical conferences, especially BMES or the ASME Summer Bioengineering Conference. You will receive reasonable support to travel to at least one conference per year at which your work is accepted for presentation.

Professional Development
There are many individual skills and tools that are used to be a successful and efficient biomedical scientist/engineer. In most cases, the time investment to learn a new skill is quickly rewarded by an improvement in the quality or efficiency of your research. You are encouraged to use your research time to pursue new skills, biological, biomedical or otherwise, that will support your research progress.

Meeting attendance
In order to make productive contributions to the group you are required to attend and actively participate in all VTB meetings. These meetings are an important opportunity for all VTB members to learn about and identify new connections to other members' research. Furthermore, by being an active participant in the research group, you can share your experience and expertise to improve the quality of all the projects being pursued by the group.

Seminars
The Biomedical Engineering department conducts a regular seminar series with a wide range of topics from all the research areas of the department. These seminars are generally scheduled on Mondays at noon and you should receive notification from the department office. All graduate students in the BME department are expected to attend these seminars. While it may be tempting to dismiss some topics as unrelated to your work, this is an opportunity to learn about a wide variety of interesting research. More importantly, it is common to find connections to your own work, even if they are weak connections, and in so doing you will develop a deeper understanding of the work you are pursuing.

Office Hours
Choosing when you will spend time in the office as a professional is a matter of finding a balance between your personal work habits and being available to your advisor and colleagues for impromptu meetings and consultations. Please establish some regular work-day hours when you can generally be found in your office.

Vacation
Your research assistant appointment does not include any formal vacation, sick, holiday or other leave. That said, you are permitted to take a reasonable amount of time for all of these

purposes. Approximately two weeks of vacation per year is considered reasonable. As a professional, you should consider how much additional vacation time will interrupt your ability to make progress with your research.

Quarterly Review

A private meeting at the beginning and end of each academic semester will provide an opportunity to review your research progress and performance as a researcher under the guidelines described here. This will also provide you a time to provide feedback to me on my role as an advisor.

Duties of your Advisor

As a professor, I am expected to write grants and initiate research that will make tangible contributions to science, the academic community, and to society. It is also my job to serve my academic community through peer review of grants and journal articles, volunteer work for professional societies and outreach to K-12 and the general public. Finally, of course, I contribute to the next generation of leaders in biomedical engineering by teaching both in and out of the classroom. Advising you in your progress to become a productive, creative and independent researcher fulfills all three of these goals – teaching, research and service.

As your advisor, you can expect me to

- Maintain and support your research tools and environment to maximize your research progress,
- Provide timely review of your research products,
- Be frequently available to address questions and obstacles to your research,
- Provide constructive assessment of the quality and progress of your research,
- Be flexible in accommodating your individual circumstances,
- Promote you as a scientist/engineer and your work, and
- Provide opportunity for you to provide feedback on my role as an advisor.

At any time, please let me know if you have questions.

I look forward to working with you!

Naomi

Vascular Tissue Biomechanics Laboratory
NOTEBOOK FORMAT GUIDELINES
November 2010

Everyone must use a notebook with numbered pages.

For new notebooks: Leave several blank pages at the front for a table of contents.

Always use a pen. Never use a pencil. Never rip pages out. Never use staples. Always use tape to attach loose sheets, graphs, etc.

Each page must include:

DATE:

TITLE of EXPERIMENT:

PURPOSE:

SAMPLES: (all details: mouse ID, catalog no., lot no., etc.)

PROCEDURES:

RESULTS:
Include raw data, images, graphs, etc. Also, include observations.

NEXT STEPS:

Start each experiment on a new page.

For literature review, development of hypotheses:

DATE:

TITLE of ACTIVITY:
e.g., brainstorming research plan/hypotheses

PURPOSE:
e.g., goal of experiment

LITERATURE REVIEWED: (all citation details.)

LITERATURE FINDINGS:

RELEVANCE TO PROPOSED STUDY DESIGN/HYPOTHESES:
Include raw data, images, graphs, etc. from literature if useful

NEXT STEPS:
e.g., revised hypotheses/research plan

PERFORMANCE REVIEW FORM

Name: _____
Date: _____
Date Joined Group: _____

Part A: Review of Goals

I. Major accomplishments:

II. Goals for the next 6 months:

III. Long-term goals:

IV. Challenges in progress toward long-term goals:

Part B: Joint Feedback Meeting

I. Feedback on mentoring

II. Comments from mentor

III. Summary of discussion

Thought Stimulators for Self-Appraisal

1. What critical abilities does my job require? To what extent do I fulfill them?

2. What do I like the best about my job? Least?

3. What were my specific accomplishments during this performance review period?

4. What goals or standards did I fall short of meeting?

5. How could my supervisor(s) help me do a better job?

6. Is there anything that the organization or my supervisor(s) does that hinders my effectiveness?

7. What changes would improve my performance?

8. Does my present job make the best use of my capabilities? How could I become more productive?

9. What do I expect to be doing five years from now?

10. Do I need more experience or training in any aspect of my current job? How could it be accomplished?

11. What have I done since my last review to prepare myself for more responsibility?

12. What new goals and standards should be established for the next review period? What old ones need to be modified or deleted?