

NMB LAB POLICY

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The objective of this report is to outline some of the policies that I believe are essential to the development and maintenance of a productive and successful research laboratory. These policies reflect my experience about how effective graduate students and research groups function.

ADVISOR COMMITMENT

My goal is to support the development of your professional and personal goals through strategic questioning, goal setting, and planning. To do this, I will do my best to:

- Stay accessible, committed, and engaged during the length of the program.
- Give feedback about your goals, situations, plans, and ideas. Encourage with genuine, positive reinforcement and provide frank (and kind) corrective feedback if necessary.
- Serve as a positive role model.
- Respect your time and resources.
- Share funding contract information
- Inform and support your career aspirations to the best of my ability and/or share available resources

STUDENT COMMITMENT

With an open line of communication, we can work together to achieve your personal and professional objectives. I encourage you to:

- Be open and honest about your goals, expectations, challenges and concerns. Give feedback to me on what is working or not working in the mentoring relationship.
- Assume responsibility for acquiring or improving skills and knowledge. Seek advice, opinion, feedback, and direction from me. Be open to constructive criticism/feedback.
- Keep me informed of your activities and progress. Come to meetings prepared with a clear idea of what topics or issues you want to address.
- Respect my time and resources.

LEARNING OBJECTIVES

You are here to learn how to do research effectively. This includes the development of relevant laboratory skills, core research competencies, and project deliverables. When you graduate, you will be evaluated by potential employers (and by me) based on the following:

- Experimental and computational results
- Command of research (depth) and project ownership
- Breadth of understanding of research field
- Communication skills / professional demeanor
- Ability to work productively in a team
- Ability to independently define and solve research questions
- Publications (suggested: 1 paper for MS, 3 papers for PhD)
- Presentations (suggested: 1 local for MS, 2 global for PhD)
- Coursework

WORK EXPECTATIONS

To acquire these results and skills, the successful research scientist does the following:

- Spends substantial amount of time in laboratory (RAs are paid for 20 hours/week on assigned project and expected to work an additional 20 hours/week on courses or thesis)
- Makes intent toward progress each day (collect data, analyze, write, read, program, etc.)
- Is familiar with lab protocols
- Follows all safety procedures

- Is respectful of subjects and labmates
- Conducts research with integrity
- Contributes to the group / department / research community

VACATION

- 2 weeks per year (+ University holidays). Any additional vacation will need to be approved by JSH. See UD [policy](#).

COMMUNICATION

- Refer to emergency protocols in the lab manual (INSERT LINK) as needed
- I typically use email for 1:1 correspondence and lab announcements. Please notify me if your request is time-sensitive and/or follow up if I have not responded within 2 working days.
- I can be reached by cell phone (INSERT) for urgent or social issues only
- Data can be stored on Teams shared server (INSERT)
- Brief weekly progress reports are requested. These are typically due on Friday by noon.
- Lab meetings are typically scheduled once per week for 1-1.5 hours. You are expected to attend.
- Individual meetings vary based on student and project (typically once every 1-2 weeks for 0.5-1 hour).
- You may also be invited to participate in team meetings if we are involved in collaborative projects

LABORATORY EQUIPMENT & INSTRUMENTATION

- All lab maintenance details and emergency procedures are described in the lab manual (LINK). It is your responsibility to know this material and update the manual if revisions are needed.
- Keep your workspace and shared laboratory neat and clean – including counter tops, desktops, computers, equipment
- Treat all equipment with great care – it is state-of-the-art, specialized, expensive
- Before using an instrument for the first time, read the lab manual AND ask for help from someone who uses it regularly
- Leave instrumentation in its proper condition when you are finished
- If you find an instrumentation problem, let me know immediately. I may ask you to follow up with the appropriate contact person.
- If anyone outside of our group wants to use our equipment, please check with me first.
- Let me know when something needs to be ordered / replaced as far in advance as possible.
- Keep raw and processed data organized on shared server with notes as needed for use by future students.

ORDERING SUPPLIES FOR THE LAB

- Students should ask me before making any large purchases.
- One or multiple students will manage the purchasing card for the lab. If that is you, you will be responsible for purchasing small items (exp. Alcohol swabs, tape, student conference registration and travel etc.) and managing the allocations of payments using Concur. Other students should provide justification for their purchase and ask the student card manager for assistance with ordering supplies. Keep electronic copies of all receipts.
- When allocating funds in Concur always verify with JSH for the appropriate purpose code
- Student cards cannot be used for orders greater than \$1200, so you must discuss those with JSH, get quotes, and I will need to make these purchases
- Let the student(s) responsible for ordering supplies know with plenty of time when supplies are running out so they can replenish supplies in advance of when they are needed for an experiment.

DATA SAFETY & LAB NOTEBOOKS

- Keep a lab notebook (bound or digital). Make entries every time you are working in the lab (incl. dates) – summarize day's work. Staple attachments in the notebook as necessary. This will help you stay organized, troubleshoot as needed, replicate experiments, and will facilitate writing manuscripts and abstracts.
- Outline the objectives and procedures for new experiments before you do them. Refer to the approved IRB protocols when appropriate.
- Students are responsible for backing up their own data. I maintain a lab data server (INSERT) which is backed up regularly. You can also use cloud services or drop box. Similarly be careful with version control of matlab programs and other code. It may be useful to retain previously working versions when making revisions.

PUBLICATIONS AND AUTHORSHIP

- To meet the suggested publication goals above, I will encourage you to communicate your research results in conference abstracts and journal publications. We will include specific deliverables in IDP discussions.
- Who should be included as author(s)? My rule of thumb is two of out five roles: ideation, design of experiment, data collection, processing/synthesis, and writing. (Note that all authors are responsible for all published work.)
- To avoid conflict in authorship, author contributions should be clarified early and revised as needed through discussion with JSH.
- Expect multiple revisions of papers, presentations and abstracts
- Abstracts and presentations should be shared with co-authors at least 1 week in advance of due date. Co-authors may need more time to review journal publications prior to submission.
- Expect that it will take me 2 days to review a single page, and 1-2 weeks to review a manuscript or thesis chapter.

CONFERENCE PARTICIPATION

- Our research will be shared at campus, regional, national and international conferences. We will identify preferred conferences during IDP discussions. Last minute submissions will be discouraged.
- Each student is responsible for their own travel arrangements which can be coordinated with peers. If your abstract is accepted for presentation at the conference, I will do my best to pay your travel expenses, but this needs to be discussed prior to each submission. Students may need to apply for a purchasing card in some circumstances.
- Application for travel funding is expected when available (through professional society and UD Graduate College)

OUTSIDE EMPLOYMENT & INTERSHIPS

- According to current UD policy, students are allowed to pursue additional employment beyond their contract. Graduate students on contract are always encouraged to discuss additional employment with their advisors to avoid any situation that might impede their academic progress. The total amount of contract and additional paid work must be less than 29.5 hours per week.
- Internship for credit or pay is also allowable with advisor approval in advance (consider benefits and disadvantages). It is expected that this experience should not interfere with degree progress (talk with advisor if financial concerns).
- Be sure to check immigration regulations with [ISSS](#) (International Student & Scholar Services)

NETWORK!

It is recommended that you build a community of mentors! This can include peers, staff, professors, colleagues from inside and outside UD. There are many opportunities to learn from each other in an academic institution. Our work is collaborative and interdisciplinary and you will meet many potential mentors. Please let me know if I can facilitate an introduction.

DEPARTMENT CITIZENSHIP

- Lab members will behave in a professional manner in the lab, on campus, and when dealing with the public in your capacity as a scientist (e.g. experimental participants, patients, visiting speakers, community outreach etc.). Be polite, friendly, thoughtful and collegial. If you have a committee meeting, thesis defense, etc., dress for the occasion
- Respect each other. We do not tolerate harassment, belittlement, bullying, or discrimination of any kind.
- If something is bothering you about something I have done or said, or not done or not said, please feel comfortable bringing it to me. A major goal for me is to have a healthy working relationship with my students—if there is anything I can do to help facilitate, please let me know.
- Participation in student organizations is optional provided that this does not interfere with your degree progress. Attendance at department events is recommended to build community with your peers and professors. You are a representative of our programs and will be encouraged to participate in lab tours and recruitment events; participation in moderation is encouraged.

COURSEWORK & SEMINARS

- Go to class and learn something new! If you are struggling in a course, talk to your advisor before drop/fail – there may be other options!
- Seek advisor approval for elective courses
- Go to department and interdisciplinary seminars, here's why:
 - Networking opportunity
 - See and meet experts
 - Learn about good/bad presentation styles (slides, voice, scope)
 - Learn new things (value of interdisciplinary and translational research)
 - Interact with local UD community
 - Often these are special events or guest speakers with an inspiring vision for the field (speakers chosen for a reason- collaborators, cool topics, future/current UD area)
 - Identify which schools/programs are good in which fields
 - Makes department look good to speaker (important for recruitment to/from UD)
 - Learn to ask good questions
 - Support one another and speaker
 - Free food and drink ☺

INDIVIDUALIZED DEVELOPMENT PLAN

I would like each of you to strive to meet and exceed these goals. Getting a graduate degree and being viewed as a successful scientist requires a lot of hard work, but I am certain that every one of you is more than capable of doing it successfully. I am here to help. year, we will conduct an individualized development plan ([samples](#)) to provide an evaluation of your performance and ask for feedback from you about my role as your advisor. These are shared with the department chair.

ONBOARDING

As you join the lab there are several first steps to complete before work can begin:

- Contact me to be added to the lab calendar and I will direct you to the lab representative who will add you. This will allow you to see and add new calendar events so you can schedule the lab and make sure you are not entering the lab while a study is being conducted. This is very important since we share a lab space.
- To get access to the office space and the lab you must apply for a key fob (LINK).
- Prior to conducting human subjects research you must [complete CITI training](#). You must complete the Human Subjects Protections-Biomedical Focus, Human Subjects Protections- Social-Behavioral-Educational Focus, and Good Clinical Practice Course. When you have completed each course email me your certificate for my records.
- If you are planning to work from STAR you will need a desk space. Speak with the current students to help determine what desks are available.
- Lab training must be completed prior to using the instrumentation on your own. Please review the lab manual and let me know when you are ready for the competency exam so that we and you are confident about the procedures prior to you conducting a study on your own.

HELPFUL RESOURCES

- [Title IX](#)
- [COE Office of Graduate Affairs](#)
- [UD Graduate College](#)
- ASB student chapter (coming soon)

CONSEQUENCES

There may be consequences of not having respectful and productive behavior (e.g. your assistantship may not be renewed, lab dismissal, program dismissal). Also, there are potential long-term consequences: (i) it will take you much longer to graduate, (ii) you will not have a productive record for your resume (e.g. publications and presentations), (iii) assessments of your productivity, effort, project leadership, and lab citizenship / cooperation will be included in your letters of recommendation. Employers want to know if potential employees are productive, organized, able to define new project directions, cooperative, and positive. These are important skills to learn which will be useful to the corporate bottom line, clinical population, or scientific research area.

To address any concerns, we will use a Performance Improvement Plan to document expectations, progress, and timeline. If insufficient performance persists, the Graduate Program Director will be informed, and contracts may be discontinued. If dismissal from the program is warranted, see UD [Dismissal](#) policy.