**Barton Lab Expectations and Agreements**

Hello and welcome to the Barton Germ Cell lab! We are so excited you chose to join us in our quest to understand how sperm and oocytes, testes and ovaries develop. Trainees who enter a research laboratory have the potential to grow dramatically, from insecure novices to skilled young researchers who make important contributions to their laboratory and field. I enjoy helping trainees grow into scientists and recognize the importance of a successful mentoring relationship and intellectual exchange between myself and my trainees. For mentor/mentee relationships to be strong and successful, it is important that both the mentor and mentee have a clear understanding of one another’s expectations for the relationship. This document lays out these expectations both for you as part of our team and that you can have from this experience.

**LABORATORY QUICK FACTS:**

Principal Investigator (PI) and Research Mentor: Dr. Lacy J Barton

How to Address Me: Lacy

How and when to Contact me:

Email: [Lacy.Barton@utsa.edu](mailto:Lacy.Barton@utsa.edu)

Office Phone: 210-458-5765

Emergency cell phones: 608-844-1456

Slack: Barton Lab @ UTSA

Expected communication response time: Within one business day

**Laboratory Group Meetings**: Required- Weekly: Wednesdays 11:00-1:00 PM BSB 3.03.10

**Individual meetings with me:** Required- Weekly 30-60 minutes

**Lead Time Required:**

Recommendation Letter Request: one month

Abstract or manuscript review: two business days per page

Presentation Review: one week (with mandatory practice with lab)

**Laboratory Break, Holiday, and Summer Policies**: I require two-weeks notice for breaks lasting longer than three business days

**GENERAL LAB EXPECTATIONS:**

1. **Maintain an inclusive, and professional lab culture**. It is critical that you and every member of the lab foster and maintain a safe, inclusive, welcoming environment centered on respect and consideration.
2. **Practice safety** The health and safety of you and all lab members is priority number one. I expect that you will follow all rules described during your official UTSA biosafety training modules, our Lab Manual, the SOPs included within, and as described by me. A general rule of thumb is that you should not use any chemical or piece of equipment that you have not been explicitly trained by a full time lab member to use.
3. **Work to communicate our expectations** of each other to build and grow a strong working relationship. This includes being honest about strengths, weaknesses, and personal circumstances that may influence how we approach our responsibilities.
4. **Act honestly and with integrity** I expect, and strive to foster, open and honest communication. This is especially important if mistakes were made. Mistakes are part of the scientific, experimental, and learning process. You will make them and that is ok. I just expect that you let me know as soon as you identify when a mistake might possibly have happened. We can fix almost anything, but we have to know what needs to be fixed.
5. **Be collegial** Scientists work in various teams. I expect that you will treat everyone with respect and you can expect the same. Further, common courtesy with the lab includes letting someone know when you are using one of the last plates, bottles, etc. of some laboratory item. Also, if you sign up to use a piece of equipment, use it during the time you signed up for, not earlier or later. If you need to use a piece of equipment for an unusually long time, please ask other members of the lab first to ensure they don’t need to use it during that time. Finally, I expect that you will clean up the workspace after you are done using it.
6. **Work within the team-based “apprenticeship” model used in laboratories.**For undergraduate researchers, I will not be your direct day-to-day research supervisor. I will absolutely support your development and meet with you regularly. Do not worry about a letter of recommendation; if you are performing well, usually a research supervisor drafts parts of it and I flesh it out and submit it. I expect you will first work on your research supervisor's project, with the potential for maturing into your own project or a sub-section of a larger project in the future. This progression is an established practice in science, and we will work things out so that you are still able to make presentations and submit an abstract to a student conference, early on. If you desire to complete an undergraduate or master’s thesis, we will identify a thesis project that you can complete using the foundational skills you have developed.
7. **Take notes when I or others in the lab are training you.** In labs, you are expected to learn and carry out techniques very quickly, even immediately after training with a little additional assistance and supervision. Taking notes helps you to remember and indicates to your trainer that you care about learning and honor their time.
8. **Ask lots of questions***.* Research itself is designed to answer questions, and you will only grow if you ask questions of yourself, your trainer and myself. In my laboratory, there are no stupid questions except for the ones that aren’t asked and result in failed experiments, or those that arise if you don’t take notes during training.
9. **Commit to goals** I expect that you commit toward the scientific and training goals we outline at the beginning of your position. I expect that your commitment to the laboratory will be sufficient to allow you to grow as a researcher. We are quite understanding that sometimes things happen in which you have to change your schedule at the last minute, but if last-minute cancellations are frequent, we will meet to reassess goals that better match what you can feasibly accomplish alongside your non-laboratory commitments. Please communicate with me about necessary jobs or changes in financial circumstances or responsibilities and we will adjust expectations. *At the end of the day, it is important to commit only to what you can actually do and put your best foot forward when training as a researcher in my laboratory.*
10. **Be responsible for driving your own scientific development,** I will assist you to reach your desired milestones and goals but you must advocate for yourself. Set up regular meetings with me to show me your progress, or additional meetings if you need help now. Ask about presenting at conferences that you desire to attend. Find additional professional workshops and attend them. Ask me if you can present your work at our laboratory meeting. Tell me when you have a conflicting training session with your training program and request a different time. Begin making a list of potential doctoral programs and ask for feedback. Have me review your CV. Loop me into assisting with personal statements and applications for summer programs, graduate programs, and fellowship applications. *Overall, take charge of your training, knowing that I will have your back and have the experience to make valuable contributions to your efforts.*
11. **Accept constructive critiques of your work and presentations.** Know that my intention and that of your direct supervisor is to benefit and help you grow. If any advice is unclear to you, please press me to clarify.
12. **Respectfully disagree with me, particularly as you mature as a researcher**. This is your life, career, training. If you disagree with a comment or suggestion I make, please feel free to communicate with me and be your own advocate. I have a lot of experience but am willing to learn. Also please understand that you will observe practices in scientific culture that may be confusing, especially early in your training. I and your teammates are happy to discuss things with you.
13. **Call to my attention if I say or do something that is insensitive to you or to others.** I am committed to treating all people with respect and dignity, but if I fail, commit a micro-aggression, or sound impatient or intolerant, please let me know. Similarly, please gently notify me of ways to improve my mentorship and training. Overall, I am not perfect, but wish to become a better person and mentor every day.
14. **Seek out additional mentors and mentoring experiences.** No mentor excels in every growth area. See a village of trusted individuals who will help you navigate the sometimes-complex pathway of developing as a young scientist. If any of the advice contradicts mine, concerns you, or discourages you, please come and we can talk about it.
15. **Tell me if something is happening in your life that may get in the way of your research work.** You can decide how much to share with me, but I will need to know the extent to which your life and your time for laboratory work is being impacted.
16. **Acquire laboratory and scientific knowledge** One big goal of your experience in the laboratory is to learn how academic research is done. You will accomplish this by actively listening, taking notes, and asking lots of questions. I expect that you will follow these basic guidelines as you gain new knowledge and laboratory skills. *On a practical note, I expect you to have a laboratory notebook. Our lab uses LabArchives as our electronic lab notebook system and we expect you to make dated entries in this notebook each time you are in the laboratory*. Please refer to the Barton Germ Cell Lab Manual for proper data documentation requirements and file naming requirements. *The beauty of research is that we never stop learning. We value your contribution and expect you to read at least one hour a week on topics related to our science and techniques and ask lots and lots of questions!*
17. **Participate in meetings** You are expected to attend and participate in the following meetings:
18. Weekly lab meetings These meetings last two hours and alternate between subgroup ‘research in progress’ presentations/discussions and journal clubs. For Research in Progress meetings, I expect that you present your research question, hypothesis, approach, and data by PowerPoint presentation. For Journal Clubs, I expect that you will come to the meeting having read the selected primary literature paper and be ready to discuss.
19. Individual meetings with me. These meetings will last approximately 30 minutes each week and is an opportunity to check in and to go over in fine detail experimental data and plans. Please come to this meeting having filled out our shared log of your research activities.
20. Biannual career development meetings You are encouraged to schedule 1:1 meetings every 6 months either with me or additional mentors to help advance your career goals. To facilitate this discussion, you are encouraged to use the questionnaires and tools provided by AAAS’s myIDP ahead of each meeting.
21. Annual committee meetings Graduate students are required to have annual committee meetings to discuss progress and goals. Post-bacs and postdocs are strongly encouraged to form a career development committee. These committees will not only provide you with broader perspectives on your science and career development, they help you form strong connections with other faculty, which will be useful when you need a letter of recommendation (which you will need).

**POSITION-SPECIFIC EXPECTATIONS**

**Undergraduate Volunteer**

* Time commitment per week: 2-5 hrs
* Percent Effort: 33% helping with lab tasks, 33% participating in meetings, 33% learning
* Position-specific requirements:
  + Only be in lab when a graduate student or full-time lab member is present
  + Only use laboratory equipment and supplies with direct supervision by a graduate or full-time lab member

**Independent Study Student**

* Time commitment hrs per week: 6-12 hrs
* Percent Effort: 66% preparing, doing, documenting and interpreting experiments, 33% learning, reading, and participating in meetings
* Position-specific requirements:
  + Write a one-page proposal for a 3-month independent study project within first two weeks of semester
  + Prepare a PowerPoint presentation summarizing findings within one week of completing the Independent Study semester and present this power point to the group at a weekly lab meeting

**Undergraduate Work-Study without research interest (or Undergrad Research Assistant)**

* Time commitment per week: 10-19 hrs
* Percent Effort: 85% helping with lab tasks, 15% learning, reading, and participating in meetings

**Undergraduate Work-Study with Research Interest (or Undergrad Research Assistant)**

* Time commitment per week: 10-19 hrs
* Percent Effort: 33% helping with lab tasks, 33% preparing, doing, documenting and interpreting experiments, 33% learning, reading and meetings
* Position-specific requirements:
  + Present your work at a local conference once per year

**Research Assistant I (full time, salaried, without research focus)**

* Time commitment per week: 40 hrs
* Percent Effort: 70% lab support, 20% training or delegating tasks to undergraduate team members, 10% learning, reading, and meetings,
* Position-specific requirements:
  + Monitor inventory, collect product orders and track shipments accordingly to ensure the lab has everything needed to run experiments
  + Track and log hours every week that you were in the lab doing work under the categories listed in ‘Percent Effort’

**Research Assistant I (part or full time, with research focus)**

* Time commitment per week: 15-19 hrs for part-time
* Percent Effort: 40% helping with lab tasks, 40% preparing, doing, documenting and interpreting experiments, 20% learning, reading and meetings
* Position-specific requirements:
  + Track and log hours every week that you were in the lab doing work under the categories listed in ‘Percent Effort’
  + Present your work at a local conference once per year

**Masters-level Graduate Research Assistant (GRA)**

* Time commitment per week: 19 hrs
* Percent Effort: 60% preparing, doing, documenting, interpreting experiments, 20% learning, reading, and participating meetings, 10% help with lab maintenance and student training, 10% writing
* Position-specific requirements:
  + Help supervise undergraduates as needed or wanted
  + Write two paragraphs (of master’s thesis, a conference abstract, or manuscript Materials/Methods) every week
  + Write the first draft of the Materials & Methods, Figure Legends, and Results for any manuscript for which you are the lead researcher. You will get guidance and training on how to do this.
  + Present your findings at least one regional/national/international conference by the end of your master’s training

**PhD-level Graduate Research Assistant**

* Time commitment per week: 40 hrs (includes time in courses, seminars, and program training)
* Percent Effort: 60% preparing, doing, documenting and interpreting experiments, 20% learning, reading, and meetings, 10% help with lab maintenance and student supervision, 10% writing
* Position-specific requirements:
  + Help supervise undergraduates as needed or wanted
  + Write three paragraphs (of a fellowship proposal, a manuscript, a conference abstract, or your thesis) every week (I highly recommend writing 30 minutes every workday as a great habit to start early)
  + Write the first draft of all components of any manuscript for which you are the lead researcher. You will get guidance and training on how to do this.
  + Prepare and submit at least one external fellowship application, ideally within the first two years of joining the lab.
  + Present your findings at least one regional/national/international conference each year of your PhD

**Postdoctoral Research Fellow**

* Time commitment per week: 40 hrs
* Percent Effort: 60% preparing, doing, documenting and interpreting experiments, 20% learning, reading, and meetings, 10% help with lab maintenance and student supervision, 10% writing
* Requirements:
  + Help supervise undergraduates and junior graduate students as needed or wanted
  + Write four paragraphs (of a fellowship proposal, a manuscript, a conference abstract, or your thesis) every week (I highly recommend writing 30 minutes every workday as a great habit to start early)
  + Write the first draft of all components of any manuscript for which you are the lead researcher. You will get guidance and training on how to do this.
  + Prepare and submit at least one external fellowship application, ideally within the first two years of joining the lab.
  + Work with substantial independence to move your current projects to completion and develop new lines of research.
  + Have a strategic plan for your career development and review it annually. This is critical for postdoctoral researchers.
  + Present your findings at least one regional/national/international conference each year

I have read and agree to follow the above rules and expectations as a member of the Barton Germ Cell Lab:

Teammate Signature: \_\_\_Krystal Goyins\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_8/20/2024\_\_\_\_\_\_\_\_\_\_

Supervisor Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

PI/Lab Head Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**What you can expect from this lab:**

1. **I will help you grow as a scientist.** We will work together to develop the products of science, and to navigate research. I will work with you to develop and refine your Strategic Plan and Individual Development Plan (IDP) that leads to tangible products (conference presentations and peer-reviewed publications) and skills that will help you with your next stage. Although research outcomes are unpredictable and timing is uncertain, I hope you will have at least one co-authorship from the projects you completed in my laboratory.

Please write your top three scientific training goals that you’d like to accomplish:

Publish some papers! I want the experience of putting together and writing a manuscript from start to finish (but I think I’m currently on my way to doing that).

Collaborate. A collaboration with a colleague outside of the lab would be good for networking, and if it happens to land me on a paper, that’s cool too.

Learn some bioinformatics. I was thinking about techniques that would make my skillset more marketable, and I’ve sadly come to the realization that bioinformatics would probably be more helpful for that.

1. **That you, your voice, and your input is valued** This lab functions as a team. While final decisions might be made by one person, every person’s voice is valued. Please share and let me know if you feel your thoughts and opinions are not being heard or valued.
2. **I will spend time with you and for you, as well as give feedback for career advancement.** You can expect to regularly meet one-on-one with me, and graduate/postdoctoral supervisor if applicable, as agreed upon in above for your specific position. If meetings are canceled due to travel, you can expect them to be rescheduled within the next week. I commit to being honest about my impressions of the strengths and weaknesses about your work, project, or growth as a researcher. Though painful, honest, and direct feedback prevents surprises when recommendations are needed and can also spur growth. With appropriate notice, you can expect timely feedback from me on your projects, writing and presentations. For written documents, you can expect feedback within the time described on page 1 of this document.

Please write here any non-lab related documents you may want me or other teammates to look at during your time in the lab:

Personal statements, CV, cover letters, etc.

Please note letters you may want during or after your time in the lab and when they’d be due:

Rec letters, but that would probably be far into the future

1. **I will evolve my expectations and treatment of you as you mature in the laboratory.**I will work with you to make any needed changes to your IDP and research plan. I will also provide you with additional responsibilities, opportunities to mentor and teach, and greater autonomy as you grow as a young scientist. Please ask about these things if I do not bring them up myself.
2. **I will help you develop time management skills and work/life balance.** I will assist you during midterms and finals by working with you to temporarily change your hours / time in the laboratory as needed. I also need you to let me know if you are experiencing academic difficulties, since schoolwork is critical for doctoral program admission.
3. **Mentorship** You can expect quality mentorship from this lab. *I do not expect you to be just like me and recognize that you may have very different strengths and motivations*. I will be pleased whatever career path you choose in the future. I am happy to discuss career goals and help outline individual training plan to help you accomplish those goals. To help facilitate this process and ensure you have quality mentorship from the start, please fill out the ‘How I want to be Mentored in the Barton Germ Cell Lab’ worksheet below (adapted from Serge McGraw): Information on this document will be kept confidential.

1. In a word, one thing I most need from a coach/mentor is:

·Guidance Explain: A lot of the time I don’t feel like I know what I’m doing, so its good for me to have someone to tell me that I’m on the right track or not. And if not, help guide me back to something productive.

2. Many things motivate me, but my personal top three are:

When I enjoy what I’m working on, acknowledgement of the work I’ve done, learning something new

3. I try to be easy to get along with, but like most people, I have a few "*triggers* " - if they get pushed, I tend to push back. Very briefly, my personal top three "triggers" are:

I’m not sure that I necessarily have any “triggers”, but some things that set me off tend to be when people don’t adhere to reservation times on the calendar and when things go missing from my bench.

4. If you have the pleasure of coaching me, you can realistically expect me to:

Discuss with you what I’m planning to do to make sure I’m on the right path. I’ll most likely tell you about how its going along the way. If I have one big important thing, I’ll work relentlessly towards that one goal, but I’ve noticed this causes other smaller goals to be neglected.

5. The following personal/professional goals are important to me:

· This semester: Outline paper and book chapter, finish the majority of experiments for Aim 1

· This year: Get that JH in gonad dev paper out

· 3-year: Graduate and figure out what I want to do with my life

· Career: I’m not sure – research scientist or something?

6. I have the following personal/professional strengths to help me achieve my goals:

Technical skills. I’m pretty confident in my bench skills, which will help towards collecting data for papers.

Mentoring/Communication. I enjoy mentoring undergraduates and other junior lab members, which is great for having other people delegate work to when things get busy.

7. I could use mentorship to improve the following personal/professional skills to further help me achieve my goals:

Planning. I’m not very good at planning out my time. I tend to just take things a week at a time, and when things get really busy I begin forgetting about some things I need to do.

Stats/Bioinformatics. These are two skills I really want to learn to help me become a more independent researcher. The workshop with Brian did help with the stats part.

8. Coaches (and teammates) can support my work performance as well as my progress toward personal/professional goals in the following ways:

Giving me pointers for experimental design, writing and presentations.

Helping me conduct some experiments that I need help with or don’t have time for (those smaller experiments that can be delegated).

9. If one thing could be improved in my work environment, it would be:

My biggest complaints are the noise of the incubators and how cramped the desk spaces are (though I’m not sure that either of those can really be fixed). Other than that, I’m happy with the work environment.

10. If I could have a second mentor, I would like to have someone with these specific skills:

Very well versed in single cell sequencing and bioinformatics

11. Lastly, I think you ought to know that:

While I like the idea of planning out my days/weeks/months, I often don’t bother because I’ve never been able to stick to them anyway. Either because I decide to go off script or because things never happen the way I plan them out. So instead, I tend to just make checklists of things that need to get done within a week or two and start going down the list.

Writing burns me out, but bench work heals me. Just know that I’m trying.

Please write below any additional expectations that you would like met during your time in the Barton Lab:

I, Lacy Barton, have read and value the above insights and agree to use them to provide a quality training and mentorship experience for you as a member of the Barton Lab:

PI/Lab Head Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_