Dear Prospective and Current Members of the Dolezal Lab,

What I describe below is a social contract that I would like to enter into with you and have you enter into with the other members of the lab. I am very proud of the community of scientists we have attracted to the research group. You have been selected to join the lab because Adam and the rest of the group think you're awesome. It is important to me that we maintain a supportive environment so that everyone can do their best science. Before the science, my goal is to create a collegial and inclusive educational environment where we can grow as people and scientists to achieve our long term scientific and career goals. Our goals are going to be different for each person and will evolve over time.

Undergraduate, graduate, and postdoctoral education are critical components for most careers in science where people value independence and upward mobility. I also care deeply about the development of professional staff in the lab and want to see their skills and interests grow over their tenure in the lab. Although we all differ in our backgrounds, expertise, goals, and interests, I seek to maintain a relatively flat organizational structure where each person can have as much access to me as they need. At the same time, I expect everyone in the group to demonstrate leadership by sharing their personal expertise to help advance the work of others. I have benefited immensely from collaborations in my career and I feel that the ability to work as a team and share expertise is extremely valuable .

You should have a list of things you would like to learn and apply to your research or keep in your back pocket. These can be as simple as improving time management to learning to use R. You will never develop these skills unless you engage in deliberate practice to develop them. Plan ahead at the scale of daily, weekly, monthly, and yearly for when and how you will develop these skills.

The transition to graduate school can be difficult for many because, for the first time, you have a significant amount of freedom to set your own schedule. You can avoid a lot of problems that still plague full professors by realizing this and taking control of your own time commitments. You can't do all of the things - so what will you do that advance your research and your career?

I have very high expectations of myself, members of my research group, and members of our scientific community. You are in the lab because we think you can exceed these expectations. You can do it. If you are struggling, I and other lab members (and department members) are here to help. You aren't in this alone – we are a team.

My expectations for each member of the research group is summarized here:

Your research, behavior, commitment, and citizenship reflect the Dolezal lab

Safety:

I care deeply about the physical and mental health of the people that work in and around my lab. Beyond your own safety, failure to follow proper laboratory and field practices could put the safety of other lab members and the viability of the lab as an entity into jeopardy. In addition to the normal laboratory safety protocols that are common to most labs, we must be even more diligent in our work with honey bees or other stinging insects. We have a duty to protect ourselves, each other, and members of the public when we are doing our work.

With this in mind…

- Familiarize yourself with the lab's chemical safety and biological safety training

- Follow the training

- If you need personal protective equipment (PPE) for any procedure, including honey bee work, let me (or for undergrads, the person you are working with) know. We have stocks of PPE but can also obtain more as necessary.

- If your health status changes (including pregnancy), tell me in private so that we can investigate how to best accommodate your needs. Some of our work could pose health hazards that are greater for some individuals, and its imperative that we find ways for everyone to work safely.

- If you see someone acting in an unsafe manner, simply remind them what they should be doing. We all make mistakes and forget. If you are reminded, be grateful instead of defensive.

General expectations for Dolezal lab members:

Lab behavior: .

My lab and the department have an expectation that we maintain a collegial and respectful environment. This doesn't mean everyone is best friends, but it does mean that we all respect each other, help each other, and work together to create an environment where everyone has the opportunity to pursue their goals.

- Be kinds to others. Listen respectfully to each other, learn from each other, and contribute as you can. We will all bring different life experiences to the research lab. You are expected to be respectful of those different experiences, learn from them when appropriate, and contribute when you can. Do not insult or put down people who share their experiences.

- Recognize that every person will bring strengths and weaknesses with them to our space. Highlight the strengths of each member of our group; help each other overcome our weaknesses. This includes me – I have strengths and weaknesses just like everyone else. I am always learning, and I expect to learn from members of the lab group. It's one of the best parts of the job.

- Self educate about: Microagressions, white supremacy, euro-centrism, racism, sexism, anti-LGBTQAI movements, and other exclusionary actions. Harassment, sexism, racism, or exclusionary comments are not appropriate and prevent people from participating in science.

- If you find that you have created a negative environment, listen, offer a genuine apology, and commit to learning and doing better. Everyone can make mistakes, but it's critical to learn from them and avoid them in the future.

Animal care:

While we are fortunate to have an excellent full-time bee lab manager that provides beekeeping resources for multiple labs, I expect everyone in my lab to contribute to care and maintenance of the research organisms we use. This does not mean taking care into your own hands without consultation. Plans for work needs to be discussed with me and/or the bee lab manager.

- Different lab members, projects, and personal circumstances will affect how this contribution occurs, but no lab members should expect all practical beekeeping to be done for them.

- We work hard to keep our colonies healthy for our experiments and maintain our shared bee lab as the amazing resource it is. Performing this work can be time consuming, but spreading it among lab members, under the direction of the bee lab manager, makes this do-able.

- While dependent on project, I also feel that working with bees in a practical context is valuable experience for those wanting to do bee work later in their career. I also think it is a very useful place to gain new ideas and figure out new ways to approaching questions in the system.

Effort

Your success won't be dictated by working N number of hours. It is more important to be efficient and organized than spin your wheels. In addition, your mental health and work-life balance a important. Read this blog post by Pat Schloss about Your Personal Effort Report (http://www.academichermit.com/2018/03/12/Effort-distribution.html). Making your pie chart bigger isn't necessarily the best option (i.e. working more hours), perhaps it would be better to adjust your effort distribution

- Seek to improve yourself without feeling the need to compete against your colleagues. Others' success will not prevent yours. This is something many of us struggle with. It's not a zero sum game.

- Be your own worst critic

- If you are not passionate about what you are doing, bring it up toand let's find something that gets you excited

- Being present N hours isn't the same as working N hours

Research

- Plagiarism and data fabrication are unacceptable. If you are struggling and these seem like appealing alternatives to rigorous science, talk to me immediately. We can discuss your progress in an open and non-judgmental way and identify an ethical path forward. We can never compromise on the quality of our work in this way.

- Update me on your project's progress regularly during our one-on-one meetings. The frequency of these meetings will be tailored to your mentoring needs. With very few exceptions, you are never bothering me if you ask to meet about your project.

- Present at a regional or national meeting each year (see below)

- Apply for any and all funding that is available for research and travel. This includes departmental options that I know are not always taken advantage of.

Reading

Always have a paper that you can read during any gaps in your day. Although no one can stay on top of the literature, the best scientists I have interacted with are constantly looking for ways to build off of the work they are reading. While I originally did not like it, I've had good success always having a paper to read open on my phone that I can read during down time.

- Read broadly and within your special area

- Sign up for literature alerts; google scholar and PubMed have services that will deliver papers that match search queries to your email on a regular basis

Writing

It is very challenging to find consistent, large blocks of time to write and so we go a few weeks without writing. Writing is a skill that must be practiced and critiqued. Always have some sort of writing project going on, whether it's for a course or your research. This could be a review paper, a grant proposal, or an outreach article. If you are having trouble motivating yourself, talk to me and we can work on something together.

Citizenship

- Provide support to colleagues in the lab by reading drafts, engaging in discussions, and being a positive influence

- Care about each other - develop empathy

- Acknowledge and build off the work of others in the lab

- Share your "life hacks" with other members of the lab

- Give information about career development opportunities as you learn of them

Lab meetings

Our weekly lab meeting is a training activity that includes top-down (me to you) and peer-to-peer (you to everyone else) instruction and feedback. Regardless of whether you are in the "instructor" or "learner" role at any given moment, we will benefit from these activities proportional to the effort that

you put into them

- There is significant latitude for how you approach leading your segment of a lab meeting - feel free to experiment

- If you are presenting a paper, it should be announced three business days before your lab meeting presentation

- Everyone is expected to read the paper before lab meeting

- Be respectful of other's comments and do not prevent others from sharing their opinions

Departmental seminars

As you can see from the SIB seminar alert that comes out each week, there are a lot of seminars to sit in on and learn from each week (Entomology, PEEC, IGB, Neuroscience, Crop Science, NRES, etc).

- While I do not expect you to attend *every* seminar I do expect you will attend at least one of these a week – for graduate students, this will be the program in which you are trained. I.e., Entomology students are required by the program to attend the Ento colloquium; PEEC students must attend the PEEC seminar.

- The seminars provide an opportunity to see cutting-edge science and bring people to campus that are of interest to you. Contact me ahead of time if there is a faculty member you'd like to bring to campus to give a talk. Programs have opportunities for 'student-invited' speakers, but I can also try to bring someone to campus outside of this.

- Do your best to invite POC and women.

Vacation

- It is frequently helpful to step away from the lab and reset. I will not police the number of days of vacation you take each year, I will depend on you to keep track of your needs and available vacation days. It is critical, though, that you accurately track and use your vacation days and report them in our HR system. Failing to do so will create significant problems.

- Please do let me know in advance, so we can ensure that the lab picks up the slack. I have some responsibility for your safety and that's hard to do if I don't know where you are. Most importantly – I want you to succeed as a scientist while having a work life balance.. Using vacation time is part of this.

Personal well-being

You are important to me and this includes your physical and mental health. I am not a physician or therapist but I can help you to find resources and we can work together to accommodate your needs.

- I know many people who have had personal, physical, and/or psychological issue while they worked in a research lab, including myself. I *expect* that you will too. If I can, I want to help you, but I cannot read minds and bodies.

- If you are sick physically or mentally, I need to know. If you are pregnant, I need to know (and congrats!)

- We can work out leaves of absence, reduced hours, new projects, altered expectations, etc.

- Respect and uphold all relevant University policies regarding professional conduct.

Family and other commitments

Many students and postdocs have other commitments outside the lab, including caring for children, parents, or others. No matter what the case, everyone is entitled to a family life and disparagement for seeing to these commitments is unacceptable and won't be tolerated.

- Many researchers, especially students, have experienced negative perceptions if they have children during the early stages of their career. These issues have disproportionally affected women and can contribute to their departure from the field. Fathers, too, face negative perceptions, particularly those that expect them not to take parental leave (i.e., 'leave childcare to the mother').

- Those who do not have these types are family commitments are not, however, expected to pick up and 'slack' for lab mates. Again, everyone is entitled to their own work-life balance. While those who are caregivers may have more difficulties in balancing their time, they must work out (with me if necessary) how to accomplish their goals without leaning unduly on other lab members.

Social media

Twitter, Facebook, and Slack are tools that we use in the lab to advance our research

- Be aware of how others may view your comments and how those might reflect on the group. If you have a problem with someone in the group, resolve the issue with them personally or through a third party.

- Personal attacks and backbiting will not be tolerated on any of these venues.

- Slack is not an appropriate forum for important interactions and conversations
- Political and other divisive commentary should likely be left out of conversations on Slack.

Specific expectations for each rank of Dolezal lab member

Me:

- I promise to give a damn
- Anything personal you tell me will be held in confidence - I will not discuss you with other members of the lab. I may seek mentoring advice from people I respect and will always do so with your best interest in mind. I will, however, share information pertinent to research with other lab members if I think it will be beneficial to you.
- I will fight like hell to keep funding. When I started graduate school, I didn't really understand that this is a major component of a PI's job. When I seem really busy, but you aren't seeing me in the lab, its often because I am writing and researching and organizing to keep funding for the program.
- I will do everything I can to mentor graduate students to receive a PhD in 6 years after joining my lab
- I will consult the lab when new people will potentially join us
- I will review drafts within two weeks of receiving them, but may tell you that more extensive time is needed to go over revisions. This will often be shorter, though.
- I will make room on my schedule to meet with you within 3 days of request and will make room for more regularly scheduled meetings if needed.
- I will give information about career development and funding opportunities as I learn of them
- I will be your biggest advocate - you should never fear that I will provide a negative letter of recommendation
- I will nominate you for awards as appropriate
- I will do my best to support you to attend one conference per year assuming you have a poster or a talk to present
- I will do my best to direct you along a project that is capable of generating 3 papers that belong together in a thesis (graduate students), 1 paper a year (postdocs), and liberally offer authorship to

research staff. Co-authorship will also be liberally awarded to members of the lab in consultation with the lead author

- I will include you in ancillary papers as your availability permits

- I will invite you to work on side projects - it is up to you to say yes or no. But once you say "yes", you cannot quit

- I will be enthusiastic about everyone's project and will tell you if you are taking it in a direction that I am not enthusiastic about

- I will do my best to maintain a team of scientists that is demographically and scientifically diverse

- If you think that I have broken these promises, then you have the right to call me out on it.

Undergraduate students

- Your priority should be your other coursework. We expect that you will need time off around tests, but you will need to tell us. We don't expect you to work all the time, but we do expect you won't flake and just not show up without telling anyone.

- The biggest hurdle I have seen undergrads face is dedicating enough time to have a meaningful research experience. Be realistic about what you want to get out of it.

- You won't be doing the most exciting/complicated stuff first – research has a lot of tedium and we all do it. That said, communicate about the skills and experiences you want to get out of the lab. If you can't get those with us, it's better to know that sooner than later.

- You should never do anything dangerous in the lab alone, whether this is bee work or lab work

- You will work under the direction of another member of the research group and need to establish and keep a consistent schedule

- Please ask questions, especially if there is something in a protocol that you do not understand. If something weird happens or you deviate from the protocol, tell someone.

- If asked, I will write letters of recommendation for you. I will seek input from your immediate mentor

- I am always happy to talk about your educational and career development plans.

- If you would like to work over the summer, please let your mentor or me know so we can plan and try to get funding for you.

Graduate students

• Meet the program required grades needed by your program.

• Pass preliminary exams

• Develop the concepts for your research proposal with me, but make it your own. You are becoming the expert in the topic.

• Investigate and apply for appropriate funding opportunities with discussion and advice from me

• Submit at least two accepted peer-reviewed papers before you defend. If your project precludes this, we can discuss, but publication is critical to your success and mine.

• As a senior graduate student, look for opportunities to mentor undergraduates

• By the time you defend, you should be the smartest person in the room on your topic

• Communicate your career goals to me as they develop .

Postdocs

• Finish papers from your PhD in a timely manner, preferably outside of normal business hours. In theory, the work on these papers should be done in documented vacation time. In reality, I want you to be successful and want to facilitate the publication of your doctoral work while making progress on the project you've been hired for here. Don't be shy in discussing this with me.

• Talk with me about pursuing funding opportunities

• Work with me to find a project, even though you have been hired on for something specific (i.e., a funded project).

• Own and drive your project

• Look to me more for suggests than direct orders.

• Create a plan to average publishing at least one paper per year

• Look for opportunities to mentor undergraduates

• Contracts are renewed each year depending on progress towards these goals

• My goal will be to give you three months notice if funding is short or I think it is time for you to move on

• When you start, you should have a good sense of where your career is going, communicate those to me so that I can help you to work towards them. UIUC has many resources and you might not know about them all. Ask me and others in the lab.

Everyone

I want you to succeed. My career is still very much in development - just as your career development is dependent on me, I am dependent on you. I love working with developing scientists and enjoy the camaraderie, fresh ideas, and enthusiasm. If you think anything is missing from this social contract, please let me know. Know that I am willing to take more personal criticism than most PIs and look forward to growing with you.

Want something to change on there?

Talk to me about it!

Sincerely,

Adam Dolezal

Adapted from Drs. Irene Newton, Pat Schloss and Kat Milligan-Myhre; Adaptations reflect lab and university specific changes, but the original source documents provide such amazing advice and information that much is taken directly. I am immensely grateful that these were made publicly available.