URBAN ECOLOGY
lab norms
Joanna Coleman

introduction

In this lab, although we do not believe that *everything* is a collaborative effort, we do believe in the power of a team and that great culture is an underpinning of great teams that are built to last.

A team's culture is defined by more than its values, and its greatness is measured by how its members function—how people feel when everything is going right and in challenging times.

By building a strong culture, we become, individually and together, better able to weather even the strongest storms. And building it is an ongoing process because we recognise that nothing, including our lab culture, is perfect—everything is a work in progress.

Our end goal is to make everyone's time in this lab count—so past, current and prospective members know they belong to a culture that promotes fulfilling careers and the achievement of dreams. This culture should help each of us thrive and grow as a person and researcher via our individual and collaborative work and our relationships.

Key requirements include respecting ethical norms, embracing curiosity and change and being open-minded and adventurous. We crave learning. We dare to try new things. We see failures as valuable lessons. We push ourselves and each other to grow.

Our work is not just rewarding because of the carrot at the end of the stick—the master's degree, PhD title, grant, publication. The real reward lies in the process—the pursuit of personal growth and discovery in a safe, supportive environment composed of people who truly want to see each other succeed because we care about each other and share a common goal. We want to do research that tangibly contributes to mitigating (not just adapting to) the environmental crisis, so that current and future generations of all species might have a decent future.

norms & their manifestations (i.e., expectations)

In this lab, safety, health & wellbeing come first.

Always perform **risk assessments** for activities and **adhere to** all identified **controls**. This includes, getting **first-aid training** and **preparing for emergencies** before performing fieldwork.

As per CUNY-wide regulations, all lab members must **complete Initial Laboratory Safety Training** and obtain their **C-14 Certificate of Fitness** from the NYFD before being allowed to work in the physical lab space.

If we **see someone working in an unsafe manner**, we **speak up**.

Do not come to campus when physically unwell—get rest and medical attention as needed.

If **we are struggling or see our team member struggling** (physically, mentally or emotionally), we **speak up / offer** to **help**.

We **respect boundaries**. This includes not monopolising each other's time or infringing on personal space. All lab members have my mobile number. It should only be used in emergencies or when we are getting together and coordinating our meeting, etc. It should never be used in place of email.

We are **kind and compassionate**. Toward all beings, notably including our research subjects.

In this lab, we commit to justice, equity, diversity & inclusion (JEDI).

All people are welcome, no matter their intrinsic traits (age, citizenship, ethnicity, gender identity, mental illness, physical limitations, religion, sexuality, socioeconomic status, etc.).

We **recognise, respect and value each person's uniqueness**. We do not judge people based on their belonging to a perceived group or ask / expect any individual to 'represent' an entire group or 'community'.

We **recognise the legacy of colonialism**, including in science and discovery, and seek better ways forward. For example, in overseas fieldwork we: meaningfully involve locals in research; respect local culture and never remove samples or specimens unless absolutely necessary or without local permission. Crucially, **we gratefully acknowledge that our campus is on the traditional territory of the Matinecock, Lekawe and Munsee Lenape Nations**—a statement we do not just read and move on from or accept as a token gesture, but one we allow to disturb us so we may reflect on our role in the historical and ongoing trauma and in reparations.

Diverse perspectives are not just heard but valued. Abundant evidence shows that diversity enhances productivity, and the best ideas can come from anyone and anywhere.

We evaluate arguments based on content, not who is expressing them or how. This is especially important considering the inherent power imbalance between any PI and other lab members. Please do not be afraid to question me because of the perception that a PI knows best. Often, students are more aware of recent literature and thinking, and fresh perspectives are desirable (in line with the next norm).

I aim to **promote underrepresented groups in academia and leadership**. As such, please understand that equity does not mean giving everyone the same but rather trying to level the playing field and, therefore, sometimes giving more to those who need it.

We can **feel free to be ourselves** and share **without fear of judgement**.

We **expect all voices to speak up and hold each other accountable**.

In this lab, we seek continuous growth.

At heart, a growth culture **values curiosity, humility and openness**. We must each be self-aware and willing to say "I don't know (how to do) this *yet*," but bold and determined enough to keep challenging ourselves and others to grow.

Instead of settling for the status quo, we **embrace change and seek to improve** how we do things.

We **challenge ourselves and each other to take (calculated) risks**. This may result in failure, but failure is the best teacher. So, **if / when we fail or make mistakes**, we **own them**. But we do not make the same mistake repeatedly or let others off the hook when they do so.

We **give and seek constructive feedback**. This means critiquing ideas or even behaviours, but not the person. Be open to being proven wrong and recognise criticism as the engine of good research. Lab meetings are ideal venues for feedback. The earlier someone points out the potential flaws in our work, the better. Even critiques we disagree with can reveal how others might perceive our ideas.

Let evidence (data, logic), rather than influence or emotion, **guide decision-making and problem solving**. But we do not *always* need data to decide—sometimes vision and experimentation are preferable to endless theorising about the ideal solution. And of course, it makes no sense to reinvent the wheel—what has worked in the past often works now—ask for help or guidance when needed.

In this lab, we seek mutually beneficial relationships.

Personality and fun in the lab and in the field? Yes please!

We form friendships but do not let them hinder work or growth.

Conflict is not always a negative. It **has value** because strong disagreements can lead to new (and sometimes better) ways of thinking, doing and being.

We **recognise a PI's responsibility to their students and students' role** (and the currency of grants & publications) **in the PI's tenure case**. Students are responsible for doing quality research safely and ethically, seeking and using funds responsibly and publishing their results promptly. Students' intellectual property (IP), especially IP generated during graduate work, is a resource shared by all who contributed, notably including a PI (more details below).

In this lab, we do good research and are productive.

Without disregarding individual motivations and aspirations, good researchers put **truth and rigour ahead of personal gain**. As such, we are **uncompromising** when it comes to **research ethics and academic honesty**.

We **never engage in or tolerate any form of research misconduct**, e.g., plagiarism, falsification / fabrication / manipulation of data—any of which can sink a career. If we **see evidence of it**, we **speak up**. Seek guidance on avoiding plagiarism from mentors (I ran an academic honesty workshop for years and will gladly help).

All **research involving human or non-human subjects** is only done **after securing necessary permits** (e.g., Animal Care Committee, Institutional Review Board, government permits) and **completing the requisite training**. And research activities never deviate from those stipulated by permits (i.e., all modifications are approved first).

We are present. Notwithstanding emergencies (e.g., pandemic) that limit lab access and make working remotely the default and except during field seasons, we **show up in person** to work **most weekdays**.

We **set clear research goals with deadlines and advance them**. But we do not settle for just reaching goals. Instead, we **aim to deliver meaningful outcomes**. This may mean exceeding goals and adaptive pivoting when we realise our goals are inappropriate, or setting smaller, more realistic goals when self-imposed deadlines are consistently not being met.

We **prioritise writing**, even over talking (details in "Secrets to success").

We are communicative. Emails should be answered within seven days, even if just to say "Sorry, I need more time". Use an autoreply when on leave or without Internet access. Email monthly reports (more details below).

We meet at least once a month. At certain crucial phases of a project / degree programme (e.g., startup, final analysis, writing), meetings are more frequent (weekly or every two weeks). But during data collection, monthly chats (at mutually convenient times) to touch base normally suffice.

what we are not about

Competitiveness. While working toward our individual goals, we do not compete. By helping each other, we win individually and collectively. It may happen that two or more lab mates apply for the same grant but only one gets it. Naturally, these rejections sting, but we still celebrate our colleague's success—after all, it has come at no cost to us.

Perfectionism. The pursuit of perfection is a rabbit hole that can stifle boldness & creativity and prevent us seeing value in (or even owning) our failures. Sometimes "good enough" really is good enough.

Ego. We are open-minded and committed to personal growth.

Short-sightedness. Research and grad school take grit and endurance. While attacking short-term **goals**, we recognise them as **pieces of a big picture** and consider the long-term effects of our actions.

Drama, gossip, finger-pointing, shifting responsibility to someone else, **one-upmanship**

Expectations for the PI

Besides respecting all the above-mentioned norms and related manifestations, you can **expect me to help all lab members achieve their career goals to the best of my ability**. This entails:

Giving **prompt feedback** on ideas and manuscripts.

Assisting with all aspects of a research project, including seeking useful collaborations to complement my expertise.

Helping members network.

Discussing lab members' professional development.

Writing reference letters. I will do this perpetually with the understanding that I (1) need sufficient notice, (2) will not write lukewarm or unfavourable letters, which will only be harmful. So, if I cannot write a good one, I will say so.

intellectual property & publication/authorship

Lab members must regularly **back up and share their work** (to the cloud & on an external HD that stays in the lab after they leave). This includes:

1 **Raw data**, unmodified, as entered in a spreadsheet. Note: when working in the field, document observations on paper (in pencil) and, as cumbersome as it sounds, never throw these papers away—they may prove useful in future (they have in my case).

2 **Analyses**. This refers to R script (annotated), spo files (if using SPSS), etc. Note: never modify raw data during analyses. Instead, use an R script or SPSS (or other analytical software) to clean the data, or create new Excel versions. More details in "Secrets to Success".

3 **Documented methods**. Procedures should be documented ASAP and in enough detail for anyone to replicate the work. This saves time (and frustration) at the writing stage. It also serves our lab culture by saving future lab members from having to reinvent the wheel. For example, leave instructions for improvised, handy field equipment (e.g., the now legendary twin-hooks 3.0, Barbie insect box, crucifix trap or crazy pole-mounted mirror).

Get consent for all co- and sole authorships. Discuss authorship expectations with potential co-authors before starting a project and get consent before naming any co-author on any output. Get consent on final drafts and revisions too. Tackling solo writing projects is fine (time permitting), but work in this lab and that yields a publication, especially work under my supervision, should name me as supporting author. Authorship dilemmas and conflicts happen to all researchers. Please discuss any problems encountered (whether they involve me or not) so I can *try* to help navigate them.

Analyse data promptly. Sometimes people working on collaborative projects collect data but then let them stagnate, thus holding up others who need the results. So, I reserve the right to have someone else take the lead on analysis for a project if it is not progressing six months past the end of data collection. This shift can change the order of authorship.

Write and publish promptly. Sometimes people analyse data but then never write up. So, I reserve the right to have someone else take the lead on writing, if there is no outline or draft six months after analyses are complete. This can change author order. And if a thesis / dissertation chapter has not been submitted for publication one year after submission to the university (and progress on this is insufficient), I reserve the right to take the lead in revising and submitting the manuscript.

what now?

Please print this page as a pdf and type the following text in the box below (should work in Adobe Acrobat).

"I [TYPE YOUR NAME] agree to these expectations."

Then, please save or print the document to pdf and email it to me with the subject heading "Lab contract".

_____   _____
Signature   Date

ACKNOWLEDGEMENTS

Sir Isaac Newton famously said "If I have seen further it is by standing on the shoulders of Giants." But although this quote is most often attributed to him, it really dates back to the 12th century. It references the fact that discovery only happens by building on the work of those who have gone before us. And in this lab, we hold this concept sacred, as manifested in our expectations around academic honesty. As such, I gratefully acknowledge two sources that inspired this document and the "Secrets to Success".

First, my friend and colleague, Prof Gerald Carter, whose ground-breaking work studying the social lives of vampire bats continues to delight and inspire me. He graciously shared his lab manual with me in 2021, after I shared with him some of my trials and tribulations of undergrad and masters supervision and my desire to make lab norms more concrete.

Second, the Conscious.org playbook. I chanced upon it and found its principles (and articulation of these) resonated with me. The target audience is the corporate sector, but I saw many values and practices that are almost universally applicable when building a team. I also like the playbook's structure.

As such, I borrowed (extensively and often with few to no changes) and remixed aspects from both sources to create both documents. Maybe one day, when you are starting up your own lab, you will remix the info in these document with other info. If so, then I hope you will acknowledge both these sources.