

The University of Arizona
Laboratory of Tree-Ring Research
Faculty/Student Guidelines and Responsibilities
August 2020 Version

All advisors and graduate students desire to have a productive, constructive, and enjoyable collaboration that supports a student's educational and career development within the framework of the faculty member's and departmental scholarly endeavors. This document outlines guidelines and responsibilities to foster effective communication and understanding of the individual and shared responsibilities towards these intertwined goals. Advisors and students should review this document together annually.

Policies & Guidelines. Advisors and students should be familiar with the appropriate policies and handbook(s). These include those for both the student's degree granting department and the Laboratory of Tree-Ring Research (LTRR), as well as those from the University more generally (<http://policy.arizona.edu/>). This document should be used in conjunction with other guidelines.

Graduate Committees. Working together, the advisor and student should identify the faculty members that will comprise the student's graduate committee for the purposes of oral and written exams, and as mentors for the student's scholarly activities, including the preparation and defense of the thesis or dissertation. Advisors and students may wish to consider practical issues such as faculty availability and the potential for collaboration, in addition to the research specialty of the potential committee member. In consultation with their advisor, the student should invite faculty members to join their committee and should communicate regularly with them if they agree to do so.

Program Requirements. The advisor and student (in consultation with the student's committee, as appropriate) should discuss requirements to satisfactorily complete the degree program. This should include what courses should be taken and when, examinations, departmental requirements, and the scope and metrics of original research contributions. This topic should be revisited periodically, meeting guidelines for the graduate college and the degree granting department, with foreseen coursework placed in the student's [Plan of Study](#). The advisor and student should also discuss LTRR-specific requirements to contribute to outreach activities, responsibly generate and archive tree-ring samples/data, and provide annual reports. Students meeting these expected standards will receive full consideration for departmental awards and other opportunities (e.g., university / national level nominations; letters of references, etc.) within the LTRR.

Research Planning. The advisor and student (in appropriate consultation with the student's committee) should discuss what research project(s) the student should undertake, including expectations of when and how that research will be conducted, and how to best balance the research with coursework and other obligations and opportunities. Planning for research may be e.g., during first summer, semesters when classes are in session, during subsequent summers, and so on. They should also discuss optional or required fieldwork (timing and duration), and the student's interests in experience & skills beyond those foreseen to be directly acquired during the course of the project(s).

Evaluation and Assessment. Advisors and students should discuss metrics of progress and timelines towards the degree and scholarly objectives. The advisor and student should review expectations aspects such as: 1) Publications, 2) participation in the LTRR/graduate community, 3) Plan of Study and academic progress, 4) LTRR outreach/service. Students should assume responsibility for regularly updating their advisor and their committee members on their scholarly activities and research progress. Regular feedback should be provided to the student about their progress, allowing students to proactively address concerns in a timely manner, and continue to uphold areas of high performance. Advisors and students may wish to create, and regularly update and review an Individual Development Plan (IDP) to assess the student's current skills, interests, and strengths, and to make a plan for further developing skills to meet academic and professional goals. A variety of templates are available online.

Financial Support. The advisor and student should discuss a long-term plan for financial support of the student's graduate training, and the expectations and requirements to sustain this support. Advisors should make best efforts to ensure students in good standing are fully funded during the graduate training through a combination of research assistantships, teaching assistantships, and fellowships. Students should seek out and apply to opportunities to help support themselves and their research endeavors from university, federal, and non-profit/foundation sources. Advisors should encourage and assist students in submitting competitive fellowship applications. Summer funding opportunities are scarce at the University -- a guaranteed stipend and tuition during the 9-month academic year does not imply summer funding. Thus, advisors and students should also discuss opportunities for summer support. Terms and potential limitations on funding should be explicitly communicated at the beginning of the student's employment, and updated as new opportunities or challenges are encountered. If a student has their own funding, the student still needs to have the advisor's permission and support to pursue the envisioned research program. The student and the advisor should discuss in advance how project costs (e.g., lab supplies and analyses) will be covered. Continued funding opportunities are often dependent on the student's progress and contributions to grant-funded research. Advisors are responsible for ensuring these requirements are clearly documented and understood. Students are responsible for ensuring their work meets these requirements.

Publication and Authorship. Peer-reviewed publications are among the most important products of a student's graduate training, and serve as contributions to the advancement of knowledge, research programs, and also are looked at by employers as evidence of skills and qualifications. Graduate students are expected to take the lead on the publication of their research in a rigorous and timely manner, and in consultation with their advisors and co-authors. Advisors should mentor students and support publication efforts. Advisors are expected to encourage and assist with publication of results, including guidance on the underlying scientific research as well as the publication process (appropriate journals; structure, length, and content of articles; appropriate analyses and graphics; appropriate responses to reviewers). Advisors and students should discuss authorship protocols (e.g., Who should be included as authors; When is a colleague an author vs. acknowledged? ; When is the student first author? ; Does co-authorship need to be approved by the advisor? ; What is the advisor's involvement in co-authorship outside the scope of primary project?) and scientific conduct (e.g., resolving conflict of interest; data ownership and record retention; fiscal responsibilities; etc.). Topics of co-authorship should be revisited during the course of a research project. Initially foreseen co-authors may not end up substantially contributing to the work, and conversely substantial contributions from new project members should be appropriately recognized. Students should recognize that they may not be first author on work that is not written up in a timely manner, and therefore advisors and students should ensure expectations for the timing of publication are clearly documented.

Scientific Meetings. Participation in scientific meetings, workshops, and seminars should be encouraged and sought, particularly as the student's research progresses. Advisor(s) should facilitate participation in scientific venues, with support potentially including jointly writing and submitting abstracts, selecting specific meetings and sessions, covering reasonable travel costs, and catalyzing networking with colleagues and program managers. The advisor should be explicit in the amount (partial or full) of funding available for conference travel. For their part, students should aim to minimize conference attendance costs (e.g., through early registration, early flight booking, shared accommodations, etc.) and actively seek out travel funding to offset their costs. There are many funding opportunities for both international and domestic academic travel offered by University of Arizona departments, programs, and clubs. See <https://gpsc.arizona.edu/travel-grants> and also information from the home academic department.

Professional and Career Development. Students and advisors should discuss potentially evolving career goals on a regular basis. Advisors can offer advice to students on postdoctoral and job opportunities, and encourage students to think broadly about their career. This may include professional development offered through the University of Arizona, or attendance at relevant academic conferences and training sessions. There are also workshops specific to the field of dendrochronology (i.e., wood anatomy, isotopes) or science communication, which the student may benefit from attending. An Individual Development Plan (IDP), again, can be a framework for planning and achieving related goals.

Commitment to Graduate Program. Graduate students are expected to be fully committed to their training, education, and the research, whilst also meeting individual and family needs and obligations. Students should expect work at least 40 hours a week. Full-time Graduate Research and Teaching Assistants (and students on Fellowships and Scholarships as well) are expected to devote 20 hours per week on average (or 10 hours/week for quarter-time

assistantship) to work on the grant/contract or teaching responsibilities. The advisor and student (and also course instructor as relevant for TAs) should agree upon specifics of how e.g., a 20-hour per week obligation is met. An understanding of the balance between contractual obligations, and academic and personal research commitments, with consideration of work-life balance should be achieved.

Timeliness, Communication & Deadlines. Advisors and students should strive to uphold timely communication, feedback, and meeting established deadlines. Students should send proposals, manuscripts, theses, or dissertations to advisors and committee members as agreed. Likewise, advisors should provide timely feedback (e.g., within a week or two and/or as agreed) as students write up proposals, manuscripts, theses, or dissertations. Sufficient time is required for corrections and feedback by advisors (and committee members) to be made and then incorporated in advance of external deadlines (e.g., abstract, registration, proposal, defense timelines). Students should discuss and receive advanced approval of their vacation schedule from their advisor. Both advisors and students should communicate to each other, with as much notice as possible, regarding upcoming changes in availability, e.g., during sabbaticals (faculty), vacations (faculty & students), fieldwork (faculty & students), or personal matters such as illness or family commitments (faculty & students). A plan should be developed and agreed upon to allow mentoring and other activities to continue during these periods of time, with possibilities including phone or video conferencing, co-supervision, or less frequent contact. Beyond the general program requirements, advisors should make clear to the student expectations for participation in individual and group meetings, including how frequently the advisor and student will meet to discuss research, scholarship, and progress toward the degree. Likewise, the student should feel comfortable communicating with the advisor regarding the frequency of meetings.

Potential Conflicts and Conflict Resolution. It is not expected that advisors and students will always agree. Yet, it is expected that advisors and students will work to understand and resolve points of disagreement in a communicative, respectful, and constructive manner. In the specific case when a graduate student has a concern or disagreement with an advisor, the student should bring this to the advisor's attention. If a student is not comfortable in speaking directly to the advisor, the LTRR Director or other UA administrator should be approached. Advisors who have concerns about the progress or conduct of the student should likewise address these directly with the student in a constructive manner. Should conflicts or disagreements not be jointly resolved, the graduate student and/or advisor are encouraged to contact the LTRR Director or another department head to facilitate resolution, and/or to point the student and/or faculty member to other on-campus resources. The University offers a wide variety of resources supportive for all UA members, including an Ombuds Program (<https://ombuds.arizona.edu/>), which provides informal, impartial, and independent conflict resolution services. Similarly, Human Resources (<https://lifework.arizona.edu/>) offers a wide variety of services and information to the UA community. Serious efforts should be made to resolve concerns as suggested above before initiating a formal grievance procedure.

Inclusive Work Environment & Non-discriminatory Conduct. Advisors and graduate students are expected to treat each other, undergraduates, other graduate students and faculty, and staff with equal respect, and to uphold a scholarly atmosphere that is constructive, trustworthy, inclusive and supportive for all. All university community members are expected to uphold standards for appropriate conduct and should be familiar with both UA policies and guidelines from professional societies, and take advantage of available (or even required) research ethics training opportunities (to inform yourself see <https://rgw.arizona.edu/research-compliance/rcr>). The University of Arizona prohibits discrimination, harassment, and retaliation based on race, color, religion, sex, national origin, age, disability, veteran status, sexual orientation, gender identity, or genetic information (<https://equity.arizona.edu/>). Students and advisors are expected to be familiar with, and follow, these obligations under University policy.

Advisors and Students should initial each section above and sign below, and retain copies for their records.

Advisor: _____ Date: _____

Student: _____ Date: _____

These guidelines have been adapted from the MIT/WHOI Joint Program student/advisor responsibilities checklist, and were refined and developed jointly by LTRR students, faculty, and research staff.