



Procedures and Guidelines for Trainee Internships

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Goals:

Internships can provide opportunities to:

- apply scientific knowledge to real-world problem-solving
- build an understanding of how scientific knowledge is used in decision-making
- integrate science into practice and policy
- hone communication skills through interactions with stakeholders and practitioners
- produce written documents for non-science audiences
- build analytic and computational skills
- gain skills and knowledge to improve outcomes from graduate research projects
- develop innovative solutions to food-energy-water challenges

Individual internships do not need to meet all of these goals.

Requirements:

Internships need to meet the needs of both the trainee and the host organization, which can be government agencies, research labs, non-profits, private businesses, and more. Internships must be cross-sector (i.e., clearly combining at least two of the three water, energy, food sectors). Internships that are interdisciplinary in nature (i.e., at least partially outside the student's primary discipline) are also encouraged. Ph.D. trainees need to complete at least 120 hours of internship work with a single partner. M.S. trainees need to complete at least 80 hours of internship work with a single partner. Internships with international partners will also satisfy the international experience requirement for Ph.D. students. The internship should challenge the trainee. The internship can support or be related to a student's research, but should not be identical to their research. The UM BRIDGES Program Coordinator will work with trainees and their advisors to identify potential host organizations and with partners to develop internship projects as requested/necessary.

Timeline:

| Task | MS Student | PhD Student |
|---|---------------------------------------|----------------------------------|
| Begin talking with advisor and UM BRIDGES Program Coordinator about internship ideas | Fall of first year of traineeship | During first year of traineeship |
| Contact potential host organizations | January of first year of traineeship | Fall of second academic year |
| Draft learning agreement submitted to Program Coordinator | March 15 of first year of traineeship | March 15 of second academic year |
| Final learning agreement, signed by trainee, advisor, and internship host, submitted to Program Coordinator | April 15 of first year of traineeship | April 15 of third academic year |
| Internship announcement report | During internship | |
| Internship completed | End of third semester of traineeship | End of third academic year |
| Final internship report | Within 60 days of completion | |

Learning Agreements:

Trainees will work in collaboration with their advisor to develop a draft learning agreement. Eventually, the trainee will develop a final learning agreement in collaboration with their advisor, internship supervisor, and the UM BRIDGES Program Coordinator. Final learning agreements will be signed by all four parties. Learning agreements will contain the following:

- Names: name of the trainee and their primary advisor
- Organization: name, title, address, and email of the proposed internship host and organization
- Schedule and Location: dates and location when and where the internship will be completed
- Project Description and Goals: project description and project goals that clearly indicates INFEWS-relevant work
- Learning Objectives: specific learning objectives and justification of how these will challenge the trainee beyond existing skills and studies
- Workplan: a workplan that outlines expectations of the trainees and milestones, if necessary
- Communications: plans for communication before, during, and after the internship
- Intellectual Property: statement of to whom intellectual property arising from internship will belong
- Evaluation: plans for internship supervisors to provide written and oral evaluations and feedback to trainees
- Budget: if internship is not locally-based, a rough budget of costs associated with trainee's completion of internship and planned sources of funding
- Expectations that internship supervisors will complete UM BRIDGES online surveys

Example Internships:

- A trainee focused on tribal water rights might intern with the Confederated Salish and Kootenai Tribes to assist with negotiations between water users as the tribe develops a management plan for the newly acquired SKQ Dam. Through this internship experience, the trainee would develop communication skills, conflict resolution skills, cultural competencies, and a deeper understanding of tribal water rights in action.
- A trainee focused on hydropower in the developing world might intern with the Ugyen Wangchuck Institute for Conservation and Environment in Bhutan to help with writing or revising proposals and policy development, as well as developing monitoring schemes related to the impacts of microhydro development on water use and accessibility, and on energy availability and the health impacts of switching from fuelwood to electrical cooking. Through this internship experience, the trainee would link science to policy and management, develop skills related to describing and monitoring for specific outcomes, and deepen proposal writing skills.
- A trainee focused on tradeoffs between energy production and livestock production on western rangelands might intern with the Montana Stockgrowers Association to develop a rancher education campaign focused on the opportunities and costs associated with energy development on private ranchlands, including information about impacts to rangeland productivity and farm income. Through this internship, the trainee would develop skills in translating scientific knowledge into information useful for agricultural producers.

Funding:

Master's trainees may apply for up to \$1,750 and PhD trainees may apply for up to \$2,500 to support travel and costs related to their required internship. PhD trainees may request up to an additional \$3,500 in funds for an internationally-based internship. Eligible costs include airfare (or other means of travel such as rental car or mileage reimbursement), parking, daily transportation costs, lodging/housing, and per-diem. Awards will be competitive and may not be the full requested amount depending on number of applicants and funds

available. Monies may not be used for wages or salaries. Applicants should allow 4 weeks for review and should submit *at least* 6 weeks prior to planned departure, longer for international travel. All travel must be coordinated with the UM BRIDGES Program Assistant. Please see the documents BRIDGES Procedure for Trainee Grants and Supplemental Funding on the website for more details.

Reporting:

- During the internship, all trainees are required to announce their internship by either:
 - posting one photo and an engaging statement regarding their internship to their Twitter account with the following handles and hash tags: @WEFnexusUM #UMBRIDGES #INFEWS OR;
 - writing a “story” for the BRIDGES website, which includes a horizontal photo, title, and 1-3 paragraphs about their internship and why it is related to the nexus and interesting. The title should be something like “BRIDGES Trainee First Last works with Organization to learn this interesting thing”. This story should be sent to BRIDGES Program Assistant for posting on the web. Your name will be the byline.
- At the completion of the internship, all trainees will send the following report, via email, to the Program Coordinator, and cc their advisor:
 - Trainee’s name
 - Internship organization
 - Internship supervisor’s name and email address
 - Total hours internship completed
 - An interesting title that sums up the internship, which should follow the format “BRIDGES Trainee First Last hook here that makes me want to read the story”
 - A 1-2 paragraph well-written summary of the internship, including what work was done, what was achieved, how the internship benefitted the organization, how the internship benefitted/stretched the trainee, one interesting fact about the internship/organization, and how the internship related to the nexus – this will be posted to the UM BRIDGES website with your name on the byline
 - “Fun Facts” about the internship (something interesting)
 - One high quality photo, horizontally arranged, that reflects the internship (different than the one(s) provided during the internship)