**NSF Mentoring Plan Template:** *This is an example of information that could be included in a Mentoring Plan.* Delete the blue instructions and text that isn’t being used. If you’ve completed the edits in certain sections, change the font color to black.

* **NSF Requirement:** if Graduate Student or Postdoctoral support is included in the budget, a single comprehensive mentoring plan must be prepared.
* **Limited to 1 page.** Must follow PAPPG guidelines for font and margins.
* **For Collaborative Proposals**, only the lead submits a Mentoring Plan and it should include mentoring information for all organizations in the collaboration supporting GRAs or postdocs.
* **Template:** Edit or delete as applicable for your project and the needs and goals of the GRAs, postdocs and your department. **This document should be narrative** – if you are using the bullet point suggestions below, reword them to be narrative instead of a list.
* For additional guidance, see **NSF’s PAPPG** [**Mentoring Plan**](https://new.nsf.gov/policies/pappg/24-1/ch-2-proposal-preparation#ch2D2i-i) and [**CU RIO’s mentoring plan page**](https://www.colorado.edu/postdoctoralaffairs/faculty-mentors)
* The National Postdoctoral Association identifies [core competencies](https://www.nationalpostdoc.org/page/CoreCompetencies) which can be included in this document if appropriate. Corp competencies from the NPA that can be generalized for both postdocs and GRAs include: discipline-specific conceptual knowledge, research skill development, communication skills, professionalism, leadership and management skills, Responsible and Ethical Conduct of Research (RCER).

**Mentoring Plan**

X postdoctoral researcher(s) and X graduate research assistant(s) will receive training and mentoring at CU Boulder, (insert department if desired, as well as other collaborating institutions if there are mentees at other organizations) which will be integrated into the activities of this project. The postdoc/GRA will conduct research on (insert brief description of the trainees’ research and research responsibilities/roles on this project).

**Mentor/Trainee Expectations:** Describe expectations for both the mentor and the trainees. Such as:

* Expectations to create a healthy and productive work environment; Any documentation that will outline and define these expectations; Describe frequency of planned mentor meetings with trainees.
* Description of the mentoring team that the trainee will have access to.
* Preparation of an Individual Development Plan to identify professional development and career goals. Include frequency of review and list of what the IDP will cover (goals, milestones, publication plans). IDP templates and guidelines for Postdocs and Mentors are on [RIO’s Postdoctoral Affairs website](https://www.colorado.edu/postdoctoralaffairs/current-postdocs/professional-development/individual-development-plan-idp). IDPs are required by NSF for postdocs and GRAs.
* Language for the discussion of IDP or any other documentation could include: This document is intended to increase communication and makes explicit the expectations of both parties to ensure the scholar will receive appropriate credit for their work and that any challenges can be addressed promptly.

**Conceptual Knowledge:** Describe training the mentee will receive that is specific in their current capacity and future career. This could include:

* Description of research development skills offered to the trainee, which might include experiment design, knowledge acquisition, interpretation and management of data, research and lab safety, evaluation of literature.
* Description of how the training will aid the mentee in diversifying their research portfolio.
* Interdisciplinary work and how that will aid in future research.
* Specific skills that the project will help the trainee to attain (e.g., field-based methods of data collection, computer-based simulations, training on specific equipment).

**Career Counseling and General Training:** The trainee will be encouraged to take advantage of (edit as appropriate) the University’s Career Services office, Postdoctoral Association of Colorado Boulder, the Graduate School Services and Resources, and to participate in activities organized by the Research and Innovation Office’s National Center for Faculty Development & Diversity and Office of Postdoctoral Affairs. These activities could include seminars on writing, course design, inclusive mentoring, and preparing for job searches.

Additionally, describe career counseling and training that the trainee will receive. This could include:

* Development of their Biosketch/CV.
* Assistance in locating and applying for job opportunities that meet their career aspirations.
* Facilitating professional networking skills; Encouraging affiliation with professional societies.
* Participating in the peer review process for journals, technical committees, or *ad hoc* grant reviews.
* Encouraging them to discuss career options and research with others; list other departments or organizations the trainee will have access to.

**Communication Skills:**

Describe guidance the trainee will receive in teaching and mentoring. Such as:

* Guest lectures in classes the PI or other departmental collaborators are teaching;
* Regularly presenting their results during lab group meetings where members will provide feedback on research.
* Assigning student workers to assist them with their research; Co-advising students along with the PI.
* Encouraging community outreach.
* Accessing services of [Center for Teaching & Learning](https://www.colorado.edu/center/teaching-learning/) or [Center for Stem Learning](https://www.colorado.edu/csl/).
* A&S trainees only: [Arts and Sciences Support of Education Through Technology](http://www.colorado.edu/assett/) (ASSETT) provides support for integrating technology with pedagogy to promote impactful learning for all instructional personnel in the College of Arts & Sciences.

Describe training that the trainee will receive in publication authorship, presentations, and grant writing.

* Learning best practices in proposal preparation including development of research questions, definition of objectives, description of approach, construction of a work plan, timeline, and budget.
* Include the trainee in PI’s writings to encourage best practices;
* Training in written and oral skills, and time management.
* Planned conference attendance for the trainee to share their research.

**Project Management Training:** Describe project management training that the trainee will receive.

* Budget management; Data management; Report preparation.

**Responsible and Ethical Conduct of Research Training:** The goal of RECR education at CU Boulder is to inform all individuals engaged in the research process about the key issues, current standards and best ethical practices including mentor-trainee interactions and responsibilities, data acquisition, management, sharing and ownership, safe laboratory practices, publication practices and authorship, peer review, conflicts of interest, collaborative science, research misconduct, human subjects, animal welfare, and the scientist in society.

Describe any additional responsible conduct of research training that the trainee will receive.

* Have the trainee download and review NSF’s publication “[On Being a Scientist](https://nap.nationalacademies.org/catalog/12192/on-being-a-scientist-a-guide-to-responsible-conduct-in)”.
* Lab meetings dedicated to discussions of responsible conduct in research.
* Any lab-specific documentation that detail ways to provide feedback to the PI.

**Technology Transfer:** If appropriate to the PI and trainee’s work, describe the training they will receive in technology transfer. This could include:

* Becoming familiar with the university-industry relationship.
* Preparation of invention disclosure applications.
* Working directly with the University’s technology transfer office.