**Postdoctoral Researcher Mentoring Plan**

The NSF Future Manufacturing program requests support for a postdoc who will be placed at University of North Texas and supervised by \_\_\_\_\_\_\_\_\_\_\_ who currently sponsors XX postdoctoral researchers and has mentored YY postdoctoral researchers over his faculty career. The following are the mentoring activities for postdoctoral researchers in the \_\_\_\_\_\_\_\_ program and activities. Career planning: Once the postdoc joins the group, the PI and postdoc communicate about his/her future career plans. The PIs encourage all postdocs to plan and focus future career goals as early as possible. Once the postdoc has a goal, it is easier for them and the mentor to stay more focused on the goal of finding a permanent position. UNT’s Postdoctoral Association will be introduced to the incumbent and resources pertinent to specific offices or programs geared towards the postdoc’s professional development and advancement will be introduced.

**Postdoc Mentoring**: Mentoring of the postdocs will follow the best practices developed at UNT and indeed the \_\_\_\_\_\_\_\_ postdoctoral fellows will be carrying out their research within the assigned PI group mostly. However, they will be encouraged to collaborate with other PIs within this grant activity for developing or strengthening their interdisciplinary skillset, fostering the cross-fertilization of ideas and methods providing them with an enriched set of experiences. In order to get maximum training value for each postdoctoral researcher, we will provide the postdoc with a mentoring committee that includes the primary lead advisor \_\_\_\_\_\_, PI \_\_\_\_\_, and Senior investigator \_\_\_\_\_\_. This mentoring committee will meet regularly with the postdoc. The assessment by this committee will be based on a form specifically developed by UNT for postdoc reviews, augmented to include assessment of research and academic activities, and mentoring of undergraduate and graduate students. As part of this annual review process, the postdoctoral researcher will prepare a report of their progress to their mentoring committee and primary lead advisor.

**Postdoc Training**: Initially, the post-doc will meet with his/her primary supervisor to discuss expectations and future career plans guided by a form containing standard topics and questions related to their research. They will also undergo a semi-annual review, similar to UNT’s staff performance review plan. A plan will be constructed that will provide the postdoc research and training experiences in working collaboratively, publishing, giving presentations, mentoring of undergraduate and graduate students, grant proposal preparation, and future faculty development. While in residence, the postdocs would be encouraged to take workshops on research, teaching, communication skills, interviewing skills, career planning and management, conflict management, and training in ethics and responsible conduct of research. In particular, the program PI’s will be responsible for training and mentoring the postdoc, and will be charged with helping to coordinate education, research, and outreach activities as well as ensuring that this postdoc achieves a proper balance between research, education, and outreach while moving forward with professional development priorities. The PI’s will strive to make the educational and training experiences sufficiently broad so that, in addition to a state-of-the-art research experience, the postdoctoral researcher will have a working understanding of the science and technology taking place in other areas throughout the \_\_\_\_\_ project, thus increasing their future career options.

**Publication/presentation training**: Postdocs are responsible for writing a first draft of their own research. The PIs and postdoc discuss the general nature of revisions needed for subsequent drafts leading to a submittable manuscript. At UNT, postdocs are also responsible for the electronic submission of their manuscript (including formulating a cover letter, highlights, table of content, graphics, etc.) and responding to suggestions/comments from manuscript reviewers. Postdocs generally give one research talk and one literature talk at group meetings each semester. The postdoc will be encouraged to attend international and national conferences of great prestige and to give talks at these meetings. \_\_\_\_\_\_Conferences are another excellent venue for postdocs to expand their professional networks.

**Teamwork/collaboration training**: The PIs encourage graduate students and postdocs to participate in each other's projects, so that they can learn from each other, and learn how to collaborate. The PIs expects and encourages postdocs to act as the main conduit for communication when the projects involve interdisciplinary groups within and beyond campus boundaries, thus developing communications skills across a broad sector of scientists with varied technical and geographical backgrounds.