

## Postdoctoral Fellow Mentoring Plan

**This Postdoctoral Fellow Mentoring Plan** continues efforts in place at the National Institute for Mathematical and Biological Synthesis (NIMBioS). The Plan establishes guidelines to support and facilitate the scientific and professional development of the postdocs.

**1. Orientation** will include an initial in-depth conversation with the Director, Associate Director for Postdoctoral Activities, and key staff. Mutual expectations will be discussed and agreed upon including specific research and professional development goals which will be set within the first six months of arrival.

**2. Career Counseling** will be directed at providing the postdoc with the skills, knowledge, and experience needed to excel in his/her chosen career path. In addition to guidance provided by mentors, opportunities at the University level and elsewhere will be advertised to all postdocs. Postdocs will be offered opportunities to attend appropriate professional development conferences.

**3. Experience with Preparation of Grant Proposals** will be gained by direct involvement with their mentors, others at the University, and potentially collaborators from outside the University. The postdocs will have an opportunity to learn best practices in proposal preparation including identification of key research questions, definition of objectives, description of approach and rationale, and construction of a work plan, timeline, and budget. If it is found beneficial for a postdoc to develop a grant proposal, they will be given the opportunity to do so, including in the role of principal investigator. University funds will be provided for postdoc release time from NIMBioS responsibilities if a postdoc is preparing a funding proposal to an external agency.

**4. Publications and Presentations** are expected to result from the work supported by NIMBioS. As independent researchers, the postdocs will be responsible for the preparation of manuscripts and presentations in collaboration with mentors, other colleagues, the NIMBioS leadership team and staff, as appropriate. As appropriate to their circumstances, postdocs will receive guidance and training in the preparation of manuscripts for scientific journals and presentations at conferences. As one component of cross-cultural mentoring at NIMBioS, postdocs will be expected to visit a Minority-Serving Institution Partner to share their research.

**5. Teaching and Mentoring Skills** will be developed through regular meetings with mentors. Ongoing seminars will provide opportunities for postdocs to interact with graduate students and other postdocs to describe their work and assist each other with solutions to challenging research problems. Classroom teaching opportunities will be offered to those specifically interested. Opportunities to mentor students in the NIMBioS Research Experience for Undergraduates summer program will also be available as well as opportunities to participate in NIMBioS K-12 outreach activities.

**6. Instruction in Professional Practices** will be provided on a regular basis and will include fundamentals of the scientific method, protocols for managing personnel, and other standards of professional practice and ethics.

**7. Technology Transfer** activities will include regular contact with researchers at The University of Tennessee and periodic contact with scientists at the Oak Ridge National Laboratory, as well as NIMBioS staff with specific expertise in this area.

**8. Success of the Mentoring Plan** will be assessed by monitoring the progress of the postdoc based on annual goals for scientific and career development, and through a procedure including an exit interview and anonymous evaluation by the NIMBioS Evaluation Manager.