

**Postdoctoral Mentoring Plan  
Summer Training in Field Methods, 2015-17  
Clarence Gravlee, PI and Sarah Szurek, Co-PI**

This Postdoctoral Mentoring Plan establishes guidelines for work to be performed by a Postdoctoral Researcher in support of the NSF proposal, entitled "Summer Training in Field Methods, 2015-17." The Postdoctoral Researcher assigned to the project will work at the University of Florida under the supervision of Clarence Gravlee and will develop and maintain the Ethnographic Field School project in Tallahassee.

**1. Orientation** will include in-depth conversations between Gravlee and the Postdoctoral Researcher. Mutual expectations will be discussed and agreed upon in advance. Orientation topics will include (a) developing a regular meeting schedule to discuss short- and long-term goals, (b) a plan to introduce the Postdoc to the relevant partners in Tallahassee, (c) productivity, including the importance of securing additional funding for Years 2 and 3, as well as scientific publications, (d) work habits and travel to/from Tallahassee, and (e) documentation of work using an agreed-upon workflow so that the work can be continued by other researchers in the future. In addition, the Postdoctoral Researcher will be encouraged to become an active part of the Anthropology Department, and will be introduced to Gravlee's colleagues and graduate students.

**2. Career Counseling and Networking** will be directed at providing the Postdoctoral Researcher with the skills, knowledge, and experience needed to excel in his/her chosen career path. In addition to guidance provided by Gravlee, the Postdoctoral Researcher will be encouraged to discuss career options with other faculty, researchers, and Postdocs at the University of Florida. The Postdoc will be encouraged to join the National Postdoc Association as well as the local network of Postdocs at UF, as both provide professional and career development resources.

**3. Experience with Preparation of Grant Proposals** will be gained by direct involvement of the Postdoctoral Researcher in proposals prepared in collaboration with Gravlee. The Postdoctoral Researcher 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.

**4. Publications and Presentations** are expected to result from the work supported by the grant. These will be prepared under the direction of Gravlee and his academic-community collaborators, as appropriate. The Postdoctoral Researcher will receive guidance and training in the preparation of manuscripts for scientific journals and presentations at conferences. Opportunities to present works-in-progress will be expected at regular lab meetings within Gravlee's Medical Anthropology faculty-graduate student work lab.

**5. Teaching and Mentoring Skills** will be developed in the context of regular interaction with graduate students at UF and during the Ethnographic Field School.

**6. Instruction in Professional Practices** will be provided on a regular basis in the context of the research work in Tallahassee and will include fundamentals of conducting research within a framework of community-based participatory research (CBPR) and other standards of professional practice. In addition, the Postdoctoral Researcher will be encouraged to affiliate with one or more professional societies in his/her chosen field.

**7. Success of the Mentoring Plan** will be assessed by monitoring the personal progress of the Postdoctoral Researcher through a tracking of the Postdoctoral Researcher's progress toward his/her career goals after finishing the postdoctoral program.

## Postdoctoral Researcher Mentoring Plan

This plan establishes guidelines for work to be performed by a TBD Postdoctoral Associate in support of the NSF CAREER Project Awarded to Lisa S. Scott, entitled “CAREER: Perceptual Narrowing and Cortical Development in Infancy”. The post-doc will work in Dr. Scott’s Brain, Cognition, and Development Laboratory at the University of Florida and will contribute to the design, implementation, analysis, presentation, and publication of the research funded by Dr. Scott’s CAREER award.

### Research Summary:

With funding from the National Science Foundation, Dr. Scott is investigating how different perceptual experiences influence the development of underlying brain regions responsible for face/object perception and face processing biases. Dr. Scott hypothesizes that learning the names of faces or objects at the individual level rather than at the category level leads to qualitatively distinct brain representations and more discriminative behavioral responses. The results of this project are expected to lead to a better understanding of how infants tune their perceptual systems in an ever-changing world, and how specific early experiences influence later perceptual abilities. The outcome of this research is expected to have implications in the area of developmental disorders such as Autism, and in the understanding of social interactions and social biases. The results can be used to inform parents, educators, and policy makers about perceptual learning and the role of experience on the developing brain.

### Detailed Plan:

**1. Orientation** will include in-depth conversations between Dr. Scott and the Postdoctoral Researcher. Mutual expectations will be discussed and agreed upon in advance. Orientation topics will include (a) the amount of independence the Postdoctoral Researcher requires, (b) interaction with coworkers, (c) productivity including the importance of scientific publications, (d) work habits, laboratory safety, and the responsible/ethical conduct of research and (e) documentation of research methodologies and experimental details so that the work can be continued by other researchers in the future.

**2. Career Counseling** will be directed at providing the post-doc with the skills, knowledge, and experience needed to excel in her chosen career path in academia. In addition to guidance provided by Dr. Scott, the post-doc will be encouraged to discuss career options with other faculty members and with Dr. Scott’s colleagues in the field and at the University of Florida. Dr. Scott has established several collaborative relationships with leading researchers in the field of cognitive neuroscience and she will foster the post-docs career development by introducing him/her to these colleagues and incorporating him/her in the collaborative efforts in her lab.

**3. Experience with Preparation of Grant Proposals** will be gained by direct involvement of the Postdoctoral Researcher in future grant and contract proposals prepared by Dr. Scott and her collaborators. The post-doc 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. The post-doc will be encouraged to attend on-campus seminars related to grant preparation and research development.

**4. Publications and Presentations** are expected to result from the work supported by the grant. These will be prepared under the direction of Dr. Scott. The post-doc will receive guidance and training in the preparation of manuscripts for scientific journals and presentations at conferences.

**5. Teaching and Mentoring Skills** will be developed in the context of regular laboratory meetings and everyday lab activities designed to a) introduce undergraduate, graduate, and the Postdoctoral Researcher to general scientific inquiry in cognitive neuroscience as well as methods used to study brain development; (b) assist aspiring young scientists in developing academic and career goals; (c) facilitate and encourage students to form mentoring relationships and networks; and (d) teach students about the importance of community outreach, education, and the responsible dissemination and communication of research findings. Within the regular laboratory meetings as well as within the Department of Psychology, the post-doctoral researcher will present his/her research. The lab group will assist each

other with solutions to challenging research problems and career development.

**6. Instruction in Professional Practices** will be provided on a regular basis in the context of the research work and will include fundamentals of the scientific method, laboratory safety, research ethics, and other standards of professional practice. In addition, the post-doc will be encouraged to affiliate with one or more professional societies in the fields of Psychology and Neuroscience and will help Dr. Scott review manuscripts for scientific journals

**8. Success of the Mentoring Plan** will be assessed by monitoring the personal progress toward his/her career goals after finishing the postdoctoral program. An entrance interview will be conducted to determine professional goals and expectations. At the end of each year of the appointment an interview will be conducted to determine whether or not these goals are being achieved and what changes could be made to improve training. An exit interview will be conducted to determine overall training satisfaction.

Postdoctoral/Supervisor agreement, dated October 16, 2014

Postdoctoral Scholar:

Dr. Jacklyn Quinlan  
Postdoctoral Research Associate  
University of Florida

Supervisor:

Dr. Connie Mulligan  
Professor  
University of Florida

Outcomes

Goals

- Develop research projects directly related to the goals of the grant that is funding my position (copies of the funded grant proposals provided to me).
  - Work with colleagues on Congo project to generate new epigenetic and genetic data to test hypotheses of epigenetic mechanisms to mediate the effects of maternal stress on maternal and newborn health.
  - Work with colleagues on Tallahassee project to analyze existing genetic and socio-cultural data for association with blood pressure phenotypes.
- Develop new research related to the funded project(s) that might develop into research I can take with me after my postdoctoral position ends.
- Produce a minimum of one first-authored manuscript per year during my postdoctoral appointment describing original research that is field and lab-based.
  - Collaborate on existing projects to bring them to completion and help produce publications on these projects in which I will be a middle author.
- Present research orally at:
  - One international conference per year (annual meeting of AAPA, ASHG, SMOE, or similar venue)
  - Mulligan lab meetings
  - Informal meetings with collaborators.
- Review my progress informally with my supervisor on a weekly basis.
- Review my progress formally in a written letter to my supervisor on an annual basis.
- Supervise and mentor undergraduate research assistants in the lab.
- Participate occasionally in lectures for undergraduate courses.
- Participate in weekly Mulligan lab meetings, except when traveling.
- Develop a plan for career development and explore the next steps that will move me towards my next position.

Skills

- Project Development
  - Understand how to implement a project from beginning to end. Build the skill set necessary to ask interesting ecological questions, develop novel ideas and testable hypothesis, gather meaningful data to address these questions and hypotheses, analyze the data, and communicate the results in published papers.
- Statistics
  - Improve skills in statistical analysis; specifically the use of multiple regression models, network analyses, principal component analyses, etc. This will include developing proficiency in R.

- Written and Oral Communication
  - Enhance my ability to communicate scientific research effectively and confidently.
- Teaching/Supervising
  - Gain experience in supervising student projects.
  - If desired, teaching opportunities can be created, i.e. guest lectures in Mulligan's courses or other departmental courses.
- Coordination of project field and lab work
  - Gain project management skills for field and lab work. This includes communicating with project personnel outside of UF, providing oversight for the integrity of sample and data collection, and helping to ensure that all project participants are communicating effectively.
  - Help to manage the lab by monitoring supplies, entering supply orders in myUFMarket, and overseeing student activities.
- Coordination of interactions with project/grant collaborators
  - Develop positive and responsive working relationship with project collaborators.
- Grant writing
  - Gain experience in grant writing by assisting with a research proposal or by writing my own fellowship proposal.

### Principles

- Authorship
  - I will be the primary author on all publications directly resulting from my postdoctoral work in which I also do the bulk of the writing. I expect my supervisor to provide guidance on these publications and in doing so will be either the second or last author, depending on the type of publication. Failure to publish my results in a timely manner (e.g. within three years of study completion) will relinquish my right to primary authorship and result in being a co-author. I expect to be a co-author on all manuscripts in which I am not primarily involved but that make use of my data.
- Data
  - I agree to share my data with my supervisor and other collaborators on the projects that fund my research. All sequence data will be submitted to GenBank or the appropriate public database.
- Academic Integrity
  - My supervisor and I will comply with the University of Florida's academic honesty pledge; this includes matters of appropriate credit, plagiarism, and research misconduct.

### Accountability

- Postdoctoral scholar
  - Complete the goals (outlined above).
  - Communicate to my supervisor regularly in an open, honest, and professional manner.
  - Ensure my supervisor and collaborators have ample time to review my work, including abstracts, presentations and manuscripts.
  - Responsible for all aspects of preparing and executing lab and field work.
  - Think constructively about my next career step and career goals.

- Supervisor
  - Communicate in an open, honest, and professional manner.
  - Review work in a timely manner.
  - Provide direction, support and advice for all aspects of preparing and executing field and lab work.
  - Think constructively about the postdoc's next career step and career goals.
  - Provide constructive feedback, guidance, and mentoring regarding my work until all important papers are published.

### Resources

- People
  - I expect that my supervisor and collaborators will provide guidance throughout my postdoctoral tenure. I expect regular meetings with my supervisor in order to exchange ideas and provide feedback of my work. I expect my collaborators to provide guidance and support. I expect both my supervisor and collaborators to provide constructive feedback on talks and manuscripts.
- Technical
  - The University will supply full access to library services.
  - The Department of Anthropology will provide a suitable workspace for the duration of my position.
  - The lab will supply me with a computer and the department will support software and network needs.
  - The lab will supply all of the equipment and supplies deemed necessary for me to carry out my project.
- Career
  - The UF Office of Postdoctoral Affairs will provide information on issues relevant to my postdoctoral position.
  - Lab meetings will provide me with a venue for group discussions of career topics.
  - My postdoctoral advisor will facilitate networking by introducing me to people who might advance my career.