Peggy Myung, MD, PhD, is seeking a post-graduate student for a position in her laboratory in the Department of Dermatology, Yale School of Medicine. The ideal candidate has a strong background in Biological or Chemical Sciences but has not yet received a doctoral degree and is seeking advanced scientific training for a duration of two years. This student will learn and perform basic science research that explores the cellular and molecular dynamics that control skin and hair follicle development, adult hair follicle regeneration and hair follicle stem cell regulation, as well as skin tumorigenesis, using novel live imaging and genomic approaches coupled with classical genetic tools. In this lab, he/she will learn a broad range of techniques, including mouse genetics, multi-photon live imaging, molecular biology, single-cell RNA sequencing, in situ hybridization as well as others. Prior research experience using basic molecular biology or animal models is a plus but not required. The post-graduate student will also have opportunities to present his/her data at weekly lab meetings and at national/international conferences. The overall goal is to learn how to design and perform scientific experiments that can be used to develop his/her skills for a future career in science and/or medicine. In addition, the student will be given career development opportunities (e.g. scientific writing and public speaking skills) that are individually tailored to his/her long-term career goals. The ultimate goal is to create an experience that is rewarding and engaging for everyone in the lab and that fosters scientific and professional growth!

The student will have the opportunity to perform/participate in the following:

1. Assist with mouse colony management, husbandry and genotyping

2. Chemical, in situ hybridization and immunohistochemical stains of mouse or human tissue followed by visualization using various microscopy techniques including multiphoton microscopy, confocal microscopy, and basic immunofluorescence/brightfield microscopy

3. Basic molecular biology techniques such as quantitative PCR, and preparation of RNA for bulk and single-cell RNA sequencing

4. Basic tissue culture techniques using primary skin cells and cell lines

5. Administration of soluble compounds to mice to analyze genetic effects of specific genes

6. Use basic software/statistical tools such as Adobe Photoshop, illustrator, Fiji, etc.

7. Assist with data analysis, interpretation, and generation of figure quality data for publication and/or presentations

8. Attend intra-mural and extra-mural conferences where he/she can present research data and develop communication/presentation skills

9. Attend weekly dermatology and/or pathology research in progress conferences as well as weekly lab meetings
10. Attend one-on-one meetings with the PI to review scientific data/progress and goals and to provide reciprocal constructive feedback

Logistics of the position:
Salary: $35,700/year
Full time for 2 years
Location: Hunter Building, 6th Floor, Yale School of Medicine
Start Time: As soon as possible. Students graduating in May 2020 are welcome to apply.

Interested candidates should email a cover letter that briefly describes their personal and career goals as well as their research/scientific background, their CV, and at least 2 letters of reference to peggy.myung@yale.edu