POSTING FOR A POST-DOCTORAL POSITION IN ZARRINPAR LAB:
INVESTIGATING THE ROLE OF SPECIFIC BACTERIAL FUNCTIONS ON HOST METABOLISM AND OTHER PHYSIOLOGICAL PROCESSES

GENERAL SUMMARY / OVERVIEW STATEMENT:

A Postdoctoral Fellow position is available in the laboratory of Amir Zarrinpar, MD, PhD, at University of California, San Diego in La Jolla, CA.

The lab is interested in the intersection of circadian biology, gut physiology, and the gut microbiome and how the three interact to cause obesity, diabetes, steatohepatitis, dyslipidemia, and other gut-mediated diseases. We investigate the development of pathology as a dynamic process in a basic science and translational setting.

Specifically, we are interested in the reciprocal interaction between the luminal environment (both the gut microbiome and the content) and the gut and how the two maintain physiological homeostasis and contribute to disease. Functional manipulation of the luminal environment is performed with a novel engineered bacteria platform that allows long-standing changes with a single treatment, essentially allowing us to "knock-in" genes into the gut microbiome to study their effects on host physiological processes. This research is performed primarily in animal models, with the potential to move into clinical populations. This position will focus on using the novel technology to elucidate novel pathways by which the gut microbiome affects host physiology and use this interaction to prevent or reverse various gut-mediated diseases.

Creativity, initiative, and persistence will be absolutely essential characteristics for the successful candidate. Additionally, we are looking for enthusiastic, self-motivated individuals who thrive in a fast-paced challenging _start-up_ research environment and can multitask and interact well with others as part of a cohesive team. If you have the desire to make a significant impact in patients' lives, the drive to work hard, and the ingenuity to work smart, you will succeed within this team.

PRINCIPAL DUTIES AND RESPONSIBILITIES:
1. Design, implement, and troubleshoot innovative methods for understanding the host-microbe interactions.
2. Record data and analyze results using industry standard application suites.
3. Maintain accurate and detailed records of experimental design and methods as well as experimental results.
4. Help to prepare presentations and written articles for publication.
5. Prepare laboratory reagents, chemicals, instruments, and maintain equipment.
6. Experience with or willingness to learn cross-discipline techniques such as biochemistry, bacteriology, bacterial genetics, bacterial ecology, animal handling, and/or bioinformatics is highly desired, although the primary focus will be gut microbiome and _in-vivo_ animal physiology expertise.

Qualifications and Requirements:
- Ph.D. or equivalent in relevant biological field.
- It is essential that the incumbent be experienced in one or two of the following:
  - the gut microbiome,
  - incretin/bile acid signaling,
  - metabolism/obesity/diabetes/cardiovascular disease,

AMIR ZARRINPAR, MD, PhD
UNIVERSITY OF CALIFORNIA, SAN DIEGO, DIVISION OF GASTROENTEROLOGY
9500 GILMAN DRIVE, MC 0983, LA JOLLA, CA 92093-0983
TEL: 858-246-1665; FAX: 858-657-5022; email: azarrinpar@ucsd.edu

- o circadian rhythms,
- o bacterial genetics/ecology,
- o bioinformatics/next generation sequencing.
- Experience with customizing and optimizing analysis of these biological systems is also required, as extensive customization will be needed.
- Ideal candidates will be self-motivated and have ambitions to further develop their scientific and career skills. They will have a desire to be challenged, to learn, and to create new scientific strategies. They will be aided in these efforts with co-mentorship by world-leading experts in the field.
- In addition to competitive compensation and benefits, candidates will have the opportunity to learn and develop research publications and presentations.
- Effective candidates are expected to develop independent projects over time.

SKILLS / ABILITIES / COMPETENCIES REQUIRED:
- Ability to work productively and develop **cohesive team relationships**
- Basic molecular biology experience
- Prior experience in experimentation in mouse models of disease or in human populations
- High degree of computer literacy in Mac/PC/Linux based OS environments
- Good oral and written communication skills
- Must be able to logically and effectively structure tasks and set priorities
- Must be able to respond effectively to constructive feedback
- Demonstrated ability to analyze data statistically and to present it logically
- Energy, enthusiasm, and a positive outlook