Postdoctoral Position with Drs. Robert Jenq, Kim-Anh Do, and Christine Peterson

**Area:** Statistical methodology and computational statistics with applications in relating clinical microbiome data to cancer treatment outcomes

**Duties and responsibilities:** The postdoctoral fellow will work under the supervision of Dr. Robert Jenq in the Departments of Genomic Medicine and Stem Cell Transplantation Cellular Therapy, with co-mentoring by Dr. Kim-Anh Do and Dr. Christine Peterson in the Department of Biostatistics. The primary research focus will be on applying and assessing newly reported statistical and computational methods for the analysis of microbiome data collected from cancer patients, as well as development of novel approaches. Data sets include large already-collected data from patients undergoing treatment for a variety of cancers, as well as future data collected via ongoing banking and analysis efforts. This will leverage the important advantages of having high patient volume at a large cancer center such as MD Anderson, and will also involve several established collaborations with other centers. High priority questions will include: 1) For a particular clinical setting, can we quantify the degree of impact the microbiome has on outcomes? 2) What features of microbiome data are most strongly associated with outcomes? and 3) Can we generate testable hypotheses regarding important bacterial populations or genetic pathways that could be mediating these associations?

**Position qualifications:** We seek a highly motivated individual with a Ph.D. in statistics/biostatistics or a related quantitative field. Must have strong training in statistics and strong programming skills, in particular R/Matlab/Python and preferably one lower level computer language such as C or Fortran; and interest in the application of state-of-the-art statistical methods to complex data. Interest or background in Bayesian computation, bioinformatics, and genomics is a plus. Expertise or skills in any of the following areas are desirable: analysis of high-dimensional data, data mining, and machine learning.

**Application:** Interested applicants should send a cover letter and resume (with three references) to:

Do_Jenq_Peterson_postdoc@mdanderson.org
(subject line: Do-Jenq-Peterson-postdoc)

**Application deadline:** Consideration of applications will begin immediately and continue until the position is filled.

**Salary:** $65,000 USD/year
Benefits for postdoctoral fellows can be found on the MD Anderson Postdoctoral Research Programs web page (http://www.mdanderson.org/education-and-research/education-and-training/schools-and-programs/research-training/programs-and-courses/postdoctoral-research-programs/benefits/index.html)

Website: https://www.mdanderson.org/research/departments-labs-institutes/departments-divisions/biostatistics.html

It is the policy of The University of Texas MD Anderson Cancer Center to provide equal employment opportunity without regard to race, color, religion, age, national origin, sex, sexual orientation, gender identity/expression, disability, veteran status, genetic information or any other basis protected by MD Anderson policy or by federal, state or local laws, unless such distinction is required by law. All positions at MD Anderson Cancer Center are security sensitive and subject to examination of criminal history record information. MD Anderson Cancer Center provides a smoke-free and drug-free environment.