Internships

Spring and Summer 2022 Positions Open

Biostatistics

The Division of Biostatistics in the Department of Preventive Medicine at the University of Tennessee Health Science Center in Memphis, Tennessee invites applications for interns in biostatistics. While all applicants must have work authorization and reside in the US, candidates need not be physically located in Memphis, TN for the internship. We expect to have one position for spring 2022, and at least two positions for summer 2022.

Interns will work with one or more of our faculty members on a statistical project of mutual interest. The work is expected to lead to a tangible research product such as software package or methodological paper. Interested individuals must have strong programming skills in at least one language (e.g., R, Python, Julia, C/C++, SAS), possess basic data analysis skills, and have a willingness to learn biomedical science. Applicants should possess a relevant (e.g., statistics, mathematics, computer science) bachelor’s or master’s degree; undergraduate students must be rising juniors or seniors.

Most internships are 20-40 hours per week for 10 weeks, but total hours are negotiable. Internships may be paid or for credit at the student's home institution depending on institutional policies, student and faculty mentor preference.

Please send a cover letter with a resume/cv to biostatintern22@uthsc.edu. In your cover letter please explain your training goals, research interests, statistical training, and computer programming experience. Applications will be accepted on a rolling basis. We expect all applications for Spring 2022 to be reviewed by December 15th, 2021 and applications for summer 2022 to be reviewed starting March 1, 2022.

Since 2016, the division has hosted the following interns:

- **2016 Emily Hanson** (undergraduate student, Rhodes College; mentor: Saunak Sen) developed the R/lcest package for analysis of bivariate left-censored data
- **2017 Alemayehu Wolde** (PhD student, University of Memphis, 2018; mentor: Mehmet Kocak) developed statistical methods for growth curve modeling in the early years of life
- **2018 Courtney Gale** (recent graduate of Furman University, 2018; mentor: Saunak Sen) worked on statistical methods for activity and weight loss data.
- **2019 Luhang Han** (PhD student, University of Memphis; mentor: Chi-Yang Chiu) developed a pipeline for analyzing NIH dbGaP data.
- **2019 Yunusa Olufadi** (PhD student, University of Memphis; mentor: Fridtjof Thomas) developing a model of kidney failure.
- **2020 (Internship paused due to COVID-19)**
- **2021 Nadeesha Thewarapperuma** (PhD student, University of Kansas Medical Center; mentors: Xiaoyu Liang and Chi-Yang Chiu) performed an epigenome-wide association study for identifying oral and pharyngeal carcinoma-related CpGs by utilizing functional data analysis techniques. **Winston Miller** (MS student, University of Memphis; mentors Mehmet Kocak and Fridtjof Thomas) developed an R package bigBERD for generating automated biostatistic report templates. **Ye Eun Bae** (Phd student, Florida State University; mentor Saunak Sen) developed a statistical method for genetic analysis of allotetraploid species using data from switchgrass, a grass species native to North America used as biofuel. **Zifan Yu** (PhD student University of Washington; mentors: Saunak Sen and Tom Juenger of UT Austin) developed a fast computational algorithm in the Julia programming language for modeling large data matrices common in high-throughput biological experiments.

About Memphis
Memphis is a mid-sized city with a distinctive cultural identity, mild climate, and affordable cost of living. It is the home of blues music, Elvis Presley, and barbecue. It offers the amenities of city life (zoo, museums, concerts, parks, restaurants) in a laid-back environment. The UTHSC campus is about 5 minutes from downtown and the popular Midtown neighborhood; there are many affordable apartments nearby. Most desirable residential neighborhoods within the city and suburbs are less than 40 minutes away.