UNIV - Open Rank Research Faculty - Public Health Sciences

FLSA: Salaried


Job Summary: The SmartState Center for Environmental and Biomedical Panomics (CEABP) is inviting applications for a tenure-track environmental data science and informatics Assistant/Associate Professor faculty position for a quantitative researcher interested in applications of data science to omics data generated from environmental and biomedical systems. The candidate will be affiliated with CEABP with primary academic appointment in the Department of Public Health Sciences (DPHS). The candidate will be primarily engaged with the division of Environmental Health and with the Biomedical Informatics Center (BMIC) and as necessary with other divisions at DPHS.

The CEABP leverages local, state, federal, and international partnerships for sustainable health and environment advancement through research, education, commercialization, and advocacy. The candidate must have a passion for applications of omics, data science, informatics, and other technologies for harmonizing anthroposphere. CEABP is a part of a unique Hollings Marine Lab (HML) partnership between academic (MUSC, College of Charleston), state (Department of Natural Resources), and federal (Department of Commerce: NOAA and NIST) agencies situated at Ft. Johnson on James Island on Charleston Harbor. The key resources for the partnership include office, meeting and laboratory space; access to instrumentation; biorepository; as well as unique complementary research expertise of the partners. CEABP is developing a robust panomic-based environmental and biomedical surveillance program aimed at delivering information and analytic products for quantification of factors affecting the health of South Carolina populations, as a model for other anthropospheric systems in the country and world-wide.

Job Duties: The candidate will be expected to develop/maintain a competitive extramurally funded research program; to teach in the DPHS graduate programs; and to participate in departmental and university-wide duties.

Preferred Experience & Additional Skills: Successful candidate qualifications include a PhD in Biomedical Informatics, Biostatistics, Bioinformatics, or a related quantitative field; or an MD degree with appropriate technical education and experience. Preferred qualifications include research experience, and a track record of publications and extramural funding competition. Mastery in practical translational applications of omics technologies (genomics, metagenomics, etc.) and their analyses is a must with additional expert knowledge in one or more areas below:

- Informatics: phenotyping, ontologies and terminologies
- Environmental health with strong emphasis on data analysis
- Data sciences: machine learning, artificial intelligence, multivariate analysis, spatial statistics
- Computing: bioinformatics and data science pipelines in Azure cloud
- Determinants of health and disparities
DPHS is home to a talented and diverse faculty with appointments in a range of public health specialties including: Biostatistics and Bioinformatics, Biomedical Informatics and Data Science, Social and Behavioral Sciences, Epidemiology, and Health Services Research. The department has two successful and long-standing masters and doctoral degree programs in biostatistics and epidemiology, and offers three MPH degrees in biostatistics, epidemiology, and health behavior and health promotion. The department also has a joint doctoral training program with Clemson University in Biomedical Data Science & Informatics. The candidate will have an opportunity and obligation to mentor students, teach courses and develop new curricula in these programs.

The Biomedical Informatics Center (BMIC), led by the MUSC Chief Research Information Officer and Assistant Provost for Data Science and Informatics, is focused on health system transformation via informatics and skills in both original and collaborative research. BMIC delivers a comprehensive portfolio of informatics and data science services for research including a clinical research data warehouse, and the Living BioBank system for procurement of phenotyped surplus clinical specimens for research. BMIC is a key player in a new clinical genomics initiative In Our DNA SC, which targets recruitment of 100,000 individuals over the next 4 years.

Founded in 1824, the Medical University of South Carolina is the state’s largest medical complex, has the state’s only National Cancer Institute-designated cancer center, and is the largest employer in the metropolitan Charleston area. MUSC ranks in the top quartile of domestic educational institutions in funding for research and is home to a Clinical and Translational Science Award. MUSC is located in Charleston, SC which is a vibrant and diverse community renowned for its music, arts and culinary scene, with ample opportunities for coastal outdoor activities.

Recognizing that environmental impacts are disproportionately affecting minority communities, applicants from under-represented backgrounds are encouraged to apply to this position.

Interested applicants are invited to submit a complete application including their curriculum vitae, statement of research and teaching philosophy, and names/addresses of three or more professional references to: Taneisha Simpson at simpst@musc.edu.

Applicants must also apply on the MUSC Job Site at: https://www.jobs.musc.edu/postings/search. MUSC is committed to increasing the diversity of its faculty and strongly encourages applications from individuals in groups that are underrepresented in the biomedical sciences. The posting will remain open until the position is filled.

*The Medical University of South Carolina is an Affirmative Action and Equal Opportunity Employer.*

For additional information or questions, please contact Taneisha Simpson at simpst@musc.edu.