FOR IMMEDIATE HIRE: Bennett Aerospace (www.BennettAerospace.com) is seeking a highly motivated **Senior Scientist**. The successful candidates will directly support the US Army Corps of Engineers, Engineer Research and Development Center (ERDC), Environmental Laboratory (EL), Environmental Processes Branch (EP-P) Genetic, Genomic, and Microbiology teams, located in Vicksburg, Mississippi.

The successful candidates will be responsible for satisfying the Army and DoD requirements by containing specific tasks which include a multi-disciplinary approach to basic and applied environmental research to study the effects of environmental contaminants for civil works, military projects, and environmental decision analysis.

Specifically, the Environmental Genomics and Systems Biology (EGSB) team is seeking individuals that can contribute immediately to a diverse suite of funded research in systems, synthetic and conservation biology, and demonstrate potential for continued expansion of the team's capabilities and research portfolio. The EGSB team is currently executing research in systems toxicology, biological networks (genetic, molecular and bio-inspired), synthetic biology, predictive toxicology, ecotoxicology, molecular / genomic / computational tools development for rapid hazard assessment, development of next-generation life cycle analysis, and framework / technical development of adverse outcome pathways. The primary drivers for this research program are to provide innovative solutions for protecting the warfighter, sustaining the Army mission and preserving environmental quality. Career opportunities are available for qualified candidates that can enhance the funded research and development efforts noted above while demonstrating promise for developing innovative new research proposals using expertise including (but not limited to): modeling biological networks, predictive modeling of chemical or stressor effects (toxicity) on animal systems, next-generation sequence assembly and annotation, in-depth analysis of genome re-sequencing and/or RNA-seq data, biomarker discovery for chemical exposures, computational modeling of biological systems, connecting molecular biology assays with individual, population and ecosystem-level effects, bio-inspired algorithm development and engineering bio-synthetic pathways.

In general, the Scientist will plan and direct one or more Research Assistants and/or Technicians in the performance of the research in the laboratories at the ERDC. Scientists may also conduct work in the field and in the laboratory depending on US Army requirements at any given time.

Responsibilities:

Primary Responsibilities include the planning, directing and/or participation in:

Field Data Collection (Biological, Chemical, Physical)

1) Develop, implement, and conduct field data collection.
2) Collect, preserve, record, store/transport samples and data.
3) Analyze samples and field data and prepare reports in connection with the above.

Laboratory Research

1) Plan, conduct and provide expertise for a variety of research with soil, sediment, plants, and animals including microbiological, toxicological, chemical, remediation and genomic studies and techniques.
2) Operate and maintain research laboratories and analytical facilities and equipment.
3) Operate and maintain instrumentation.
4) Plan, conduct, and provide expertise for computational and bioinformatics efforts using DNA/RNA sequence data processing, gene expression analysis, biological network analysis, and statistical analysis of systems biological data.
5) Plan, conduct and provide expertise for sample preparation for RNA/DNA extraction, qPCR, microarray analysis, and other genomic related work.
6) Perform statistical analyses on experimental data.
7) Compile electronic databases and prepare literature reviews.

Qualifications:

Required Knowledge, Skills, and Abilities:

• Must be able to meet deadlines on projects;
• Must have good English communication and analytical skills;
• Must be willing to work on-site at the US Army ERDC in Vicksburg, Mississippi for the duration of employment;
• Ability to travel and be mobile to conduct field work in harsh environments and hazardous terrain.

Desired Expertise, Experience, and Skills:

• Capable of programming using multiple languages such as (Bio)Perl, (Bio)Java, C++ and (Bio)Python;
• Familiar with existing open-source and commercial bioinformatics software (e.g., BLAST, Galaxy, MatLab, Blast2Go, GeneSpring and IPA), statistical tools (S, R, SAS and SPSS), and bioinformatic databases (Entrez, EMBL and KEGG);
• Experience in applying existing tools or developing new tools to solve novel biological problems.
• Demonstrated laboratory research experience or work on clinical studies to include data collection and analyses
• Demonstrate experience in fluid and electrolyte pharmacology/physiology;
• Demonstrate research experience in complex biomedical studies

Minimum Education/Training Requirements:

• PhD in Bioinformatics or Computational sciences with a focus on biological systems