Deep Subsurface Molecular Microbiology and Geomicrobiology

The Carl R. Woese Institute for Genomic Biology at the University of Illinois Urbana-Champaign invites applications for a highly interdisciplinary postdoctoral research position in the frontier field of oil field geomicrobiology and the deep subsurface biosphere. The position will be part of an active research group of faculty, postdocs and graduate students working on the use of molecular tools and omics-based approaches to understand the composition and activity of sulfate reducing bacteria in the Earth's crust. Results will be applied to better understand subsurface ecology and evolution, as well as mediate the effects of biosouring. We are looking for a highly motivated candidate with strong research interest and expertise in understanding the fundamental interactions between microbial ecology, biogeochemistry and geology in the deep subsurface. Experimentation will include use of the GeoBioCell, a next-generation microfluidic testbed in which subsurface formation waters and microbes are fluxed through actual subsurface reservoir rock. Results will be compared with column experiments and comprehensively modeled across multiple length scales. Applicants should have demonstrated experience in characterizing microbial eco-physiology using integrated Omics approaches for understanding microbial diversity and function in microbial ecosystems. Candidates must have a completed Ph.D. degree at the time of hiring. Candidates must also have excellent skills in spoken and written English, and interpersonal skills conducive to team work and group research efforts. Strong computer and basic bioinformatics skills are also necessary. The positions may also require some fieldwork. To apply, email a PDF file containing a detailed CV with contact information (phone number and email), reprints of 1 to 2 important publications, and the names and contact information for 3 references, to Professor Bruce W. Fouke (fouke@illinois.edu). To ensure full consideration, applications must be received no later than November 1, 2018. The position is available starting immediately and will remain open until the position is filled. Competitive salaries will be provided under the guidelines of University of Illinois at Urbana-Champaign, which is an Affirmative Action, Equal Opportunity Employer.