

Postdoctoral Position

(Microbial Electrochemistry, Environmental Microbiology, Extracellular Electron Transfer)

A postdoctoral position is available in the El-Naggar Physical Biology Laboratory (<http://www.elnaggarlab.org>) to investigate the extent and mechanisms of extracellular electron transfer (EET) from representative culturable and genetically-tractable microorganisms. This project is part of a broader [NSF DIMENSIONS](#) collaborative survey of the extent of EET across all three domains of life (Bacteria, Archaea, and Eukarya), going beyond the traditionally well-characterized *Shewanella* and *Geobacter* species. More information on the broader project can be found [here](#).

A PhD and prior background involving microbial electrochemistry and/or environmental microbiology is necessary. While working on microbial electrochemistry and extracellular electron transfer pathways at USC, the successful candidate will also be part of a larger team including microbiologists and engineers from Harvard (Girguis lab), University of Minnesota (Gralnick and Bond labs), and the J. Craig Venter Institute (Bretscher lab) – all focused on the overarching goal of comprehensively assessing and relating the phylogenetic diversity, genetic/genomic diversity, and functional diversity of microorganisms engaged in EET across all three domains of life. The successful candidate will interact with these collaborators on linking the observed electron transfer mechanisms to the genomic and biochemical mechanisms underlying the process in different environments. At USC, the successful candidate will also synergize with the [NASA Astrobiology Institute's 'Life Underground' team](#) at USC, currently developing electrochemical and biophysical tools for studying life and electron/energy flow in the deep subsurface. Exciting opportunities to participate in broader educational and outreach activities (curriculum development and public exhibits) are also available as part of the project.

A Ph.D., a strong publication record, and proficiency in English are required. The position is available immediately. Please send a single PDF file containing the following to Prof. Moh El-Naggar mnaggar@usc.edu

- A cover letter detailing your research interests and anticipated availability
- A current CV, including a list of publications and presentations
- The names and contact information of three references

