

**Georgia Institute of Technology**  
**Postdoctoral Fellow in Omics**  
**School of Chemistry and Biochemistry**

**ROLE OF CORAL MICROBIOME IN HEALTH AND DISEASE:**

Time resolved multi-omic approaches to determine the dynamics and response of algal endosymbionts and the microbiome to stony coral tissue loss disease during lesion initiation or progression.

The Garg laboratory in the School of Chemistry and Biochemistry at Georgia Institute of Technology is seeking applicants for a full-time postdoctoral research associate position to participate in our research on metabolomics of host-microbe, host-symbiont, and microbe-microbe interactions in the coral holobiont. Garg lab (<http://www.garglab-microbiomegt.com/>) employs multi-omics methods including cutting-edge mass spectrometry-based metabolomics, spatial metabolomics, imaging mass spectrometry, sequencing, genome mining, and microbiology to interrogate microbe-microbe, and microbe-host interactions by delineating small molecules underlying these interactions. The successful candidate will gain hands-on expertise in algal culturing, acquisition and analyses of mass spectrometry data including high-resolution tandem mass spectrometry, imaging mass spectrometry, data analyses using bioinformatics infrastructures such as GNPS, metaboanalyst, XCMS Online, CANOPUS, MS2LDA, PLS-Toolbox and many others. Access to time resolved multiomic dataset via collaborations with Smithsonian Marine Station, USDA, University of Florida, and Florida Fish and Wildlife Conservation Commission will present the opportunity for multiomic integration. The Garg lab also investigates human diseases through multiomics. Thus, applicant will also participate in research across disciplines.

The rank and salary will be commensurate with NIH scale. Salary will include the full benefits package. The position is open, and review of applications will begin immediately. The available position is a fully funded multi-year position through NSF CAREER award to the PI Garg. However, we will encourage, actively help, and share preliminary data for postdoctoral funding applications. We will help you build a portfolio that matches your career goals, including but not limited to pedagogical training.

**Qualifications:** Experience with mass spectrometry-based data generation for untargeted metabolomics and analysis. Experience in integration of multi-omic data and microbiology is not required.

**Required Application Materials:** Curriculum vitae, cover letter, and list of at least three references.

To apply, please e-mail Neha Garg (mail: [neha.garg@chemistry.gatech.edu](mailto:neha.garg@chemistry.gatech.edu)) with (i) a curriculum vitae (CV), (ii) a one-page statement of how your research experience and interests fit this position and (iii) contact information for 3 references. Applications will be considered until position is filled.

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