

Liyuan (Joanna) Hou

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**2026 Peak Undergraduate Research
Mentor of the Year Award Nominee**

**College of Engineering | Biological
Engineering**



Dr. Liyuan (Joanna) Hou is an Assistant Professor of Biological Engineering at Utah State University. Her research focuses on environmental microbiology, harmful algal bloom (HAB) monitoring, antibiotic resistance, and microplastics, with an emphasis on integrating molecular tools, water quality data, and emerging modeling approaches to protect public and environmental health. Dr. Hou leads multiple federally and industry funded projects in collaboration with agencies such as the U.S. Geological Survey and the Utah Department of Environmental Quality, and she is deeply committed to mentoring undergraduate and graduate researchers through hands-on, publication-driven research experiences.