Community Science Institute www.communityscience.org
Volunteer Monitoring Watershed Science Risk Communication

Laboratory Analyst

The Community Science Institute (CSI) (communityscience.org), is a 501(c)3 not-for-profit organization founded in 2000 and located in Ithaca, NY. Our NELAC-certified water quality testing lab (New York State Department of Health – Environmental Laboratory Approval Program (NYSDOH-ELAP) ID# 11790) seeks an individual who is interested in wet chemistry and in using their skills to support the sustainable management of water resources in New York's Finger Lakes region.

CSI's Mission: We foster and coordinate water quality monitoring in partnership with community volunteer groups. Our goal is to provide the general public as well as local, state and federal government agencies with a better understanding of shared water resources and, most importantly, with regulatory-quality data that informs water resource management for protection and sustainability.

What CSI Does: We partner with over three dozen volunteer groups in our region, coordinating their collection of stream samples from early spring to late fall. Volunteers transport samples to our certified lab with chain of custody documentation for analysis of nutrients, salt, suspended solids, pathogenic bacteria, and other parameters. Results are disseminated online and may be accessed free of charge on our public database (database.communityscience.org).

We conduct biological monitoring of streams based on benthic macroinvertebrates (BMI), partnering with volunteers of all skill levels and posting the results on our website to provide an indication of the health of stream ecosystems.

Each summer we train and coordinate over 90 "HABs Harrier" volunteers participating in our Cayuga Lake Harmful Algal Bloom (HABs) Monitoring Program to patrol the Cayuga Lake shoreline for HABs. Suspicious bloom samples are collected by volunteers and immediately transported to our lab with chain of custody documentation. If we confirm the presence of cyanobacteria microscopically, we determine the concentration of chlorophyll a and microcystin toxin by certified EPA Method 546 and post results on our website within 24 to 96 hours of sample collection.

We offer fee-based, certified drinking water testing services for the Cayuga Lake region and count the Tompkins County Health Department and Cornell University as well as dozens of businesses and hundreds of private homeowners among our clients. In this way we provide a valuable service to our community while earning fees that help support our nonprofit mission.

Responsibilities and Opportunities of the Position: The CSI lab is certified and regulated by the New York State Department of Health using NELAC (National Environmental Laboratory Accreditation Conference) guidelines. The quality of our

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Certified Water Testing NYSDOH-ELAP #11790 EPA Lab Code NY01518
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results is on par with certified data produced by EPA, NYSDEC, and their contract labs. CSI's Certificates of Approval list over 30 manual methods, including colorimetric methods for phosphorus and nitrogen nutrients, gravimetric methods for suspended and dissolved solids, titrimetric methods for chloride and other mineral parameters, and EPA Method 546 for microcystin toxin produced by blue-green algae (cyanobacteria). The successful applicant will be expected to perform many of these manual methods to standards described in Standard Operating Procedures (SOPs) as required by NYSDOH-ELAP, including controls for bias and precision. Our analysts take pride in the quality of their workmanship and the larger goal of ecological sustainability that they support with their skill at the lab bench.

CSI has a staff of six. Each staff member has specific responsibilities but is also expected to share certain core organizational tasks, for example, technical support for our volunteers and customer service for our drinking water clients. There are also opportunities for contributing articles to our "Water Bulletin" newsletters, assisting with the analysis of datasets in our online database, and helping with our 4-H2O youth outreach and education program.

Minimum qualifications: Bachelor's degree in chemistry, biochemistry, molecular biology, or related discipline including four semesters of lab work. Experience with wet chemistry procedures, for example, uv-vis spectrophotometry, titration, gravimetry, and enzyme-linked immunosorbent assays (ELISAs). Problem-solving skills, ability to work independently, and painstaking attention to detail. Comfortable working in a small team environment. Good oral and written communication. Individuals with advanced degrees who have a strong interest in science as public service are welcome to apply.

Enhancing qualifications: Background in statistics, GIS, environmental education, business administration, or regulatory science. Commitment to stay for at least two years.

Hours, compensation, and benefits: Full-time, 40 hours/week. Hourly rate $18.00–$21.00, depending on qualifications. Time-and-a-half for overtime. Seven paid federal holidays and ten paid free/vacation days per year. Vacation time is flexible and may include both paid and unpaid leave, depending on availability of other staff to cover the workload. Health insurance and pension plan are available.

Application: Please email your resume, a cover letter stating why you are interested in the position, and three questions you would ask about the Community Science Institute if you were invited for an interview to: Dr. Stephen Penningroth, Executive Director, Community Science Institute, info@communityscience.org. **Please note: A cover letter and three questions are required as part of this application process.** Deadline for receipt of applications is March 21. Interviews will be scheduled with the goal of an April start date or early May at the latest.

Inclusion statement: We encourage qualified applicants from historically underrepresented groups in the sciences to apply. We will fully consider all qualified applicants without regard to race, culture, ethnicity, national origin, gender, gender identity or expression, sexual orientation, age, religion, lifestyle, marital status, or veteran status.

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