

2025 Description of Services

Dear Collaborators,

Once again, we will be happy to analyze the samples for you as it is one of the means by which we develop and improve techniques, discover new toxins and expand our repertory of experience. Our basic consideration is not to lose money on this so we must charge to recoup costs of solvent disposal, enzymes, LCMS time, etc. There are ways to minimize such charges such as subcontracts, package deals, etc, so I encourage you to call and talk with me if you expect to be doing a large number of samples. We have probably run about 10,000 samples by now and I will also steer you to the cheapest option that still gives high quality data. Payment is expected after you receive the written results. State agencies and health departments requesting *pro bono* work must contact me in advance.

Basic Description of Services and fee schedule for 2025

Basic handling charge: \$125

(includes data processing, sample filtration and preparation of extract, reports, voucher sample storage for 1 year and all our labor)

To the basic handling charge, please add the following supplements for individual analysis.

Services	Price	Price Details
Microcystin analysis by PPIA	\$call*	(activity-based enzyme assay)
Microcystin analysis by ELISA	\$75*	(antibody based structure assay)
Microcystin analysis by LCMS	\$25	(HPLC with UV and mass selective detection)
Microcystin analysis by LC-MS/MS	\$75	(HPLC analysis with tandem MS detection)
Tissue microcystins by MMPB	\$call*	(Bound microcystins in tissue by oxidation)
Anatoxin-a by HPLC-LC-MS/MS	\$50	(HPLC with mass selective detection)

Anatoxin-a by ELISA/Receptor binding	\$call	
PSP analysis by HPLC-PCRS	\$call*	(HPLC assay with post column oxidation)
PSP analysis by HPLC-LCMS	\$call*	(HPLC assay via LC-MS(/MS))
PSP analysis by ELISA	\$75*	(antibody-based structure assay)
Cylindrospermopsin by LC-MS/MS	\$50	(HPLC assay w/ uv and MS detection)
Cylindrospermopsin by ELISA	\$call*	(antibody-based structure assay)
Beta methyl amino alanine LC-MS/MS	\$50	(HPLC with mass selective detection)
Bound BMAA as above	\$call	Determination of protein bound BMAA
Anatoxin-a(s) by ACEI	\$call	(activity based enzyme inhibition assay)

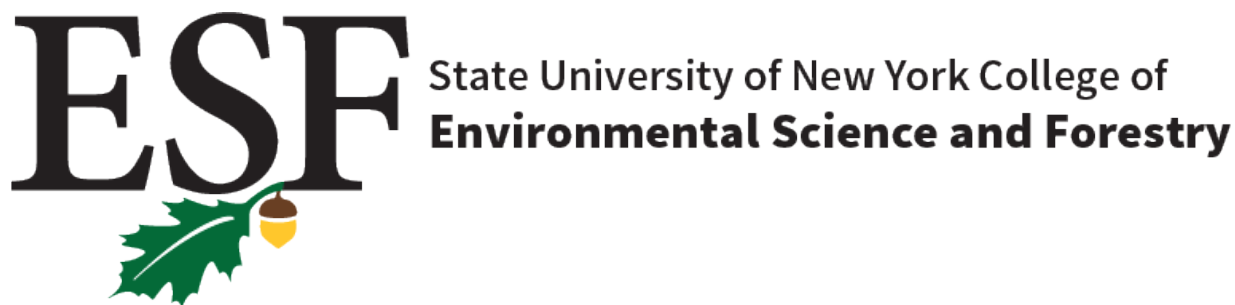
*Check for availability, these assays have been replaced by other techniques for routine monitoring)

Turnaround Times

Our normal policy is to incorporate outside samples into our normal work schedule. This means that the results from the analysis are generally available within **three-four weeks** by telephone or email, depending on the number of samples in queue, how many analysis need to be, and how much of our staff is out in the field as part of our own sampling. It is your responsibility to call or email us to request the sample results. Please be aware that we have extensive field work in the summer and that may slow down the laboratory. A written summary of all results, analytical information and billing information is automatically provided by the end of the year.

Rush order: \$50-\$200 per sample surcharge (Advance arrangements only)

We recognize that certain results need to be obtained quickly. In those cases, we try to get at a partial oral report back within 10 days followed by an email confirmation. Unless



specifically requested, the formal written reports again generally follow at the end of the season. If you need your results quickly, I strongly encourage you to call us about 2-3 days after submitting the sample to see where we are in the process. Not all assays take the same amount of time and we may be able to give you an oral report on those that are completed before writing up the full paperwork. Again, realize if we have no one in the lab due to field commitments, we simply may not be able to provide results in the requested time. There are a number of private laboratories specifically geared to this type of response. Feel free to contact us for reference/suggestions.

Duplicate, whole animal and tissue samples:

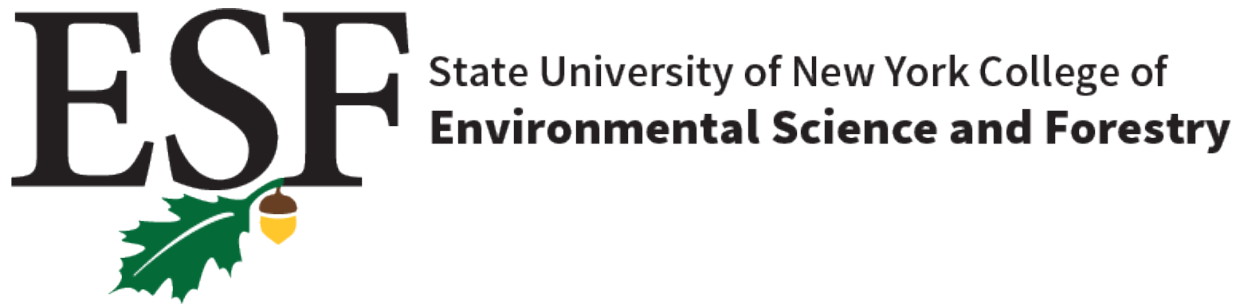
Tissue surcharge: \$50- \$200 per sample. (Advance notice only)

Duplicate extraction surcharge: \$25 - \$50 per sample

Tissue samples, livers, blood plasma, gut contents, etc. represent a special problem and often require additional clean-up steps, etc. In some cases we may have to synthesize an internal standard and extract the identical samples with and without this added. While we will send you quantitative results in terms of ug per g tissue, per ml, or per g protein, you should realize that there are tremendous matrix effects. Each tissue behaves differently and so each analysis often becomes a custom experiment. Currently – most tissue results are really qualitative (presence or absence) rather than quantitative due to lack of internal standards to measure extraction efficiency. We do not accept whole animals; hence you need someone else to do the tissue removal. Tissue samples can be very slow so plan on additional time.

Package Prices and Bulk Discounts:

If you have no idea what you are looking at - then we suggest you just send the samples and let us decide what you need. We will try to minimize your costs and not run unnecessary tests. Usually we run microcystin by LC-MS and use LC-MS/MS determination of anatoxin-a and cylindrospermopsin for about \$200 per sample. In practice, this usually works out to be the least expensive and easiest for everyone. For budgetary purposes, you should plan on about ~\$250 per sample, but it may be significantly more if you are interested in tissue analysis or multiple toxins. If you know you are going to have >50 or more similar samples over the course of a year, you may



wish to investigate setting up a fixed dollar account. Usually, some payment up front is needed to cover our purchases, but it works out cheaper for you in the long run. Rush orders always incur an additional charge.

Shipping:

It is best to send the samples cold by overnight carrier on a Monday or Tuesday. This avoids them being held at the loading dock over the weekend. We can accept and will filter liquid samples (1-liter bottles), but it may be cheaper for you to filter the sample on site and simply ship us the filter itself. If so, we must also know information like filter type, volume filtered, etc. I realize that much of our methodology and abbreviations may be cryptic to you so feel free to call for an explanation. We can provide full method details, discuss the advantages and disadvantages of any given technique, and provide any needed QA/QC information. You must include a request for sample analysis form available from the www.merhab-LGL.org website along with the samples themselves as email correspondence with me does not always get associated with a particular sample arriving in the lab. If you can't reach me in my office - talk with anyone in the lab (315)-470-6844. Most there can handle all the details on shipping, receiving and analysis.

Greg Boyer | email: glboyer@esf.edu | voice:(315) 470-6825
339 Jahn Lab
SUNY College of Environmental Science and Forestry
Syracuse NY 13210 (315) 470-6856 (fax),