

Work Flow for Submitting CFG Requests

Step 1

To Initiate a Request:

1. Follow this link to our website: <https://www.functionalglycomics.org/fg/index.shtml>
2. To the left on the menu, open “Consortium for Functional Glycomics (CFG)”, and click on Policies in the drop down menu to read about:
 1. Plan For Data And Material Sharing, And Intellectual Property
 2. Data And Material Sharing
 3. Intellectual Property Rights
3. **To proceed to making a request**, click on the link on the left entitled “*CFG Resources.*”
4. Under CFG Resources, click the first category, “*Glycan Array Screening*” or click on the picture of the glycan array on the right of the screen.
 1. Read a brief description of the CFG’s Protein-Glycan Interaction Core (formerly Core H), and below this description, at the bottom of the page, select “*Request Glycan Array Screening*” to make an online request.
 2. Complete the form:
5. **Resource Request Form**
 1. Fill in your personal information under **Investigator Information**.
 - i. NOTE: You are not required to be a member to use Consortium resources; however, you may want to investigate the advantages of becoming a Member.
 2. Indicate date request was initiated if different from today.
 3. Specify your institution.
 4. Provide a shipping address and phone number if you plan to receive materials from the CFG (usually not necessary for Glycan Array Analyses).
 5. Under **Comment**: please provide general statement on the focus of your laboratory or research group in the area provided. Please limit this to no more than 200 words.
 6. Under **Resources Requested** on the same page, Choose “*Glycan array screening*” from drop down list. This will automatically select the type of resource as MicroArray
 7. Questions regarding materials requested are commonly not relevant to a Glycan array screening request, but can be used when requesting a glycan from Core D.
 8. You may provide an estimate of the date your samples will be ready for analysis
 9. **Purpose of Request (This is a very important part of the Request)**: If this portion of the request does not provide sufficient information for the Steering Committee (SC) to understand what protein(s) you plan to submit, where they come from, why you want to assay them, and how your request is consistent with the objectives of the CFG, your request will not be forwarded to the SC, and you will be instructed to re-submit a new request.
 - i. Thus, in the “Purpose of Request” area you should write in 1-2 paragraphs (300 words or less):
 1. A **brief** background or rationale for your Request

2. Indicate the significance of your request and identify one or two of the Consortium's specific aims or objectives that your request will address.
3. If your specific aims are consistent with the Aims of the Consortium, select "Yes." See below where you are asked to select at least one of the Consortium's Specific Aims that is being addressed by your request.
4. Indicate that the person responsible for depositing data to the Consortium Data Base (DB) is Rick Cummings, Core Director and Jamie Heimborg-Molinari, Project Coordinator.

10. Additional Information (very important)

- i. In this section, please provide the following:
 1. How many Glycan Binding Protein(s) are being addressed: give name(s) of your protein(s) (or organism) and be sure to indicate the method for detecting your GBP or organism on the Array using a fluorescence scanner. *Each request is limited to 10 samples/10 arrays.
 2. If your protein is an antibody, indicate the how it was produced, what the immunogen was, and the evidence for analyzing it as an anti-glycan antibody.
 3. Provide any evidence that your Glycan Binding Protein actually binds glycans.
 4. Specific aims being addressed: Be sure to at least check #1.

11. Submit

6. Our Administrative team will acknowledge your Request by automated email and give your request a Request ID#. **Please use this ID # in the subject line of any and all correspondence with the Core.**
 1. NOTE: Our Steering Committee typically meets every two weeks, and they will approve, deny, or defer requests if additional information is required. Upon approval, the Core Director/Administrative team will contact you and initiate your project.

Step 2

Once the steering committee has come to a decision about your specific request, you will receive an email as outlined below.

1. If deferred, please provide more information as soon as possible, as noted in the email.
2. If approved, there is now a fee associated with our services
 1. This resource is available on a fee-for-service basis
 2. The Academic Institution fee at BIDMC for processing one CFG glycan microarray slide with 2 concentrations of one sample is \$400, which includes the cost of the slide (\$150), and the sample handling, analyses, report of results, and administrative fees (\$250). *Note: this fee will be increasing soon, due to the increase in the cost of slides; the new cost will be around \$450-500.
 - i. There may be additional costs associated with requests that require unique reagents or special handling. If additional assays are required

- on new slides (ex. lower dilutions, requests for different buffers, etc.), a new quote will be provided.
- ii. Please note that the fees will be charged regardless of the results of the analysis.
3. Within the approval email, there will be attached a Quote for the requested services based on the number of samples you are planning to submit together with any expected additional charges depending on the complexity of the assay, which may include additional technical support or unique reagents.
 4. Once we receive a Purchase Order from your institution for these services, we will send you instructions for uploading the sample information and providing the assay information that we will need to process the request.
 5. After this information is received and the assay is designed, we will send you instructions for shipping your sample(s), and we will schedule your analyses.
 1. Please note that we will assay at both 5 µg/ml and 50 µg/ml, or two other concentrations around that range.
 2. We require about 75 µl of each concentration to run the assay
 3. Binding needs to be detected via direct fluorophore labelling of the sample, or via tags that can be detected with a secondary fluorescent reagent.

Step 3

Data Analysis:

1. Data will be emailed to you after we obtain and review it, which we expect will be about a 2-3 week turnaround time. Data is supplied in an Excel spreadsheet with the relative fluorescent units (RFU) provided for each glycan compound. Interpretation and links to helpful resources will be provided.
2. When the request is complete, these data will be uploaded to the glycan microarray database, which will be maintained by the CFG and the NCFG (<http://ncfg.hms.harvard.edu/>) and will be available under confidentiality to members of the CFG. The data will become public when you notify us that it has been accepted for publication or 1 year after it is uploaded, whichever comes first.

The process for requesting **NCFG-specific arrays** is very similar, except that a request is submitted through the NCFG website:

<https://ncfg.hms.harvard.edu/service-collaboration-request>

The project will be discussed with the user, and a quote for services will be supplied. The user will be required to provide all of the necessary assay and sample details for the experiment to be adequately designed.

Note: For some NCFG arrays, a larger sample volume will be required- 100-150 µl.

We will provide data analysis as above, and ensure that the users questions are answered. We will also be able to post data publicly for NCFG arrays upon publication.