Center of Microbiome Science Bioinformatics Support Award Application

Standard microbiome analysis pipelines available through the Microbiome Platform are listed <u>here</u> and include: 16S rRNA analysis pipelines and shotgun metagenomic analysis pipelines for bacteria, dsDNA viruses, and eukaryotes. "Custom analyses" are defined as any type of analyses outside of the currently available standard microbiome analysis pipelines. If you are requesting a customized bioinformatic analysis that you believe may have broad appeal and applicability across microbiome data sets, you may apply for a "Center of Microbiome Science (CoMS) Bioinformatics Support Award" to help cover all or part of the costs of the customized pipeline development. For example, if you would like to employ a tool or analysis to study antimicrobial resistance within a microbial community, developing or implementing these tools or analyses may have broad appeal, as researchers in environmental science, veterinary medicine, human medicine and agriculture may also be interested in these same microbiome tools / analyses.

Before submitting your application: Obtain a quote from <u>IDI-GEMS</u> (email: <u>idigenomics@osu.edu</u>) for your custom analysis. Then submit your quote along with your CoMS Bioinformatics Support Award Application.

If awarded: Up to 50 hours of your bioinformatic analysis time (roughly equivalent to \$5000) will be covered by the Center of Microbiome Science (CoMS). Specifically, this will be time spent developing and / or optimizing the pipeline for your custom analyses. Additional hours of support can be considered with approval from the CoMS Executive Advisory Committee.

Eligibility: You must be affiliated with The Ohio State University or Nationwide Children's Hospital AND a member of the Center of Microbiome Science. (You can join <u>here</u>.)

Submission requirements: Please submit the following information in a single document or PDF to <u>hale.502@osu.edu</u> email:

- Your quote from IDI-GEMS
- Your name, position, affiliation, and email
- Indicate that you are submitting a "CoMS Bioinformatics Support Award Application"
- In ~500 words max. please describe:
 - The custom analysis you are requesting
 - What is the context in which you plan to apply this analysis or tool? (e.g., Sample type, scientific question you intend to answer)
 - Does your custom analysis require published tools not currently employed by the standard pipelines? If so, please list the tool(s) and provide examples of published studies that utilize these tools.
 - Why will this type of analysis have broad appeal / applicability across the microbiome science community?
 - Please provide specific examples of other investigators or types of projects that may employ this type of analysis if it were made available

Next steps: Within 2 weeks of your submission, it will be assessed by <u>the Center of Microbiome Science Executive</u> Advisory Committee (EAC) for scope and relevance to the OSU CoMS research community.

- Proposals that receive unanimous approval from the EAC will receive a Center of Microbiome Science Bioinformatics Support Award covering a specified portion of your quote (development and optimization) for your customized analysis.
- If a proposal receives a mixed vote or more information is requested, either or both of the following may occur: 1) You will receive an email asking for more information to inform a second round of voting by the EAC and/or 2) Your presence (or a representative) will be requested to attend the next CoMS Executive Advisory Committee meeting to further explain your proposal (CoMS EAC meeting are held virtually, 1 pm on the 3rd Monday of the month).
- If your proposal is not approved for a Center of Microbiome Science Bioinformatics Support Award, you will be notified by email with a brief explanation. You will still be able to proceed with a custom analysis under the standard hourly payment model through IDI-GEMS.