

Project Title:

Metagenomics Analysis

Name:

○Naveen Kumar (1), Wataru Suda(1)

Laboratory at RIKEN:

(1) RIKEN Center for Integrative Medical Sciences, Laboratory for Microbiome Sciences

1. Background and purpose of the project, relationship of the project with other projects

During this fiscal year, as in the previous fiscal year, we obtained and analyzed a large amount of publicly available metagenomic data.

2. Specific usage status of the system and calculation method

We have used 3,727,462 CPU core hours during this fiscal year.

3. Result

We obtained and analyzed more than 1,000 metagenomic data on the gut microbiome reported from different countries for diseases such as COVID19 multiple sclerosis, IBD, colorectal cancer and so on.

4. Conclusion

In particular, we performed analyses that required close examination of quality, assembly and large-scale computation, such as gene prediction and gene annotation. We also performed assembly annotation of whole genome shotgun sequencing data from novel bacterial strains.

5. Schedule and prospect for the future

The database is currently under development. These results are currently being written up and will be published in the next fiscal year.

6. If no job was executed, specify the reason.