

## Bioinformatics Shared Resource Policies

### 1. Authorship and acknowledgements

As a core facility, we strive to provide value to our collaborators research. One way in which this value is evident is in our authorship history. Proper acknowledgement of our contributions in papers and posters thus provides a straightforward means to i) demonstrate expertise and long-standing collaborations in support of grant applications, ii) retain and attract personnel with suitable skills and qualifications, and iii) document core utilization for internal university purposes (such as allocating analysis subsidies and providing compute resources). Funding sources are **not relevant** in determining authorship.

NIH guidelines on research conduct

([https://oir.nih.gov/sites/default/files/uploads/sourcebook/documents/ethical\\_conduct/guidelines-conduct\\_research.pdf](https://oir.nih.gov/sites/default/files/uploads/sourcebook/documents/ethical_conduct/guidelines-conduct_research.pdf)) state that “authorship should be based on a significant contribution to the conceptualization, design, execution, or interpretation of the research, as well as to the drafting or substantively reviewing or revising the research article.” The meaning of this statement or similar definitions depends heavily on the interpretation of what is considered “significant”, so the NIH Committee on Scientific Conduct and Ethics (CSCE) wrote additional guidelines to help determine authorship

([https://oir.nih.gov/sites/default/files/uploads/sourcebook/documents/ethical\\_conduct/guidelines-authorship\\_contributions.pdf](https://oir.nih.gov/sites/default/files/uploads/sourcebook/documents/ethical_conduct/guidelines-authorship_contributions.pdf)).

As a core facility, our contributions are likely to fall within five main areas: design, technical data acquisition, data analysis, data interpretation, and paper writing. Activities of any substance within any of these areas are likely to justify authorship under the CSCE criteria, as we are fulfilling a “specific role, e.g. statistics, imaging etc.”, and analyses are not “very basic (t-tests e.g.)”. We use our expertise and knowledge of potentially relevant methods to evaluate their merits for each project, creating novel combinations of techniques as appropriate.

As a general rule (cases will be judged individually) the following table can be used to assess typically appropriate authorships:

<b>Work done</b>	<b>Authorship / Acknowledgement</b>
Fastq generation, file transfer	Acknowledgement
Regular data analysis with report (e.g. differential expression analysis, microarray analysis)	Middle authorship of primary analyst
Data interpretation	

Generate figures	
Highly customized data analysis (e.g. developing full custom pipeline)	Middle to first authorship of primary analyst individual plus their supervisor

Acknowledgement should be of a similar form to the following:

“The sequence analysis was performed by members of the University of Vermont Bioinformatics Shared Resource and was supported by the University of Vermont Robert Larner, M.D. College of Medicine.”

## 2. Data retention and transfer

Data are generally processed using the Vermont Advanced Computing Center (VACC) cluster, so will be made available from there. It is therefore in your interest to obtain an account if you do not have one already, in advance of data being made available (it can take a few weeks to obtain valid credentials to log in). VACC account request information is available [here](#).

Data will be available for download for at least 1 month from notification of data being available for pickup, after which they may be removed. Subsequent access would require retrieval from archive, for which there would be a charge. By request, small datasets may be transferred using UVM File Transfer service, or put onto a USB drive; in these cases charges may apply.

Archiving of data is an unofficial service that is not guaranteed and should not be relied upon. The archive drive is managed by Enterprise Technology Services (ETS) and provides indefinite backup against drive failure, however if data were deleted from the archive somehow it would become permanent after 1 month. It is the responsibility of individual users to obtain an appropriate long-term storage and/or backup solution.

NIH guidelines on data storage requirements as reported by the Office of Research Integrity ([https://ori.hhs.gov/education/products/rcradmin/topics/data/tutorial\\_11.shtml](https://ori.hhs.gov/education/products/rcradmin/topics/data/tutorial_11.shtml)) state that an investigator must store data NIH funded data for three years after the final financial report is submitted or three years after any subsequent special report is filled.

## 3. Payment policies and subsidies

Charge strings are required for UVM clients within iLabs when creating new projects. When a service request is received, an estimate will be generated and the client will be notified to find it in their account. Services will not proceed until the client digitally agrees to the charges provided on the estimate.

The client will be billed for a service, or in some cases related set of services, as completed, not in bulk at the end of the project. Invoices should be paid within 30 days of receipt of output. Invoices outstanding beyond 90 days will result in a hold on work performed for that group, invoices outstanding beyond 120 days will result in a hold on work performed for the relevant department (or institution if external), until resolved.

Subsidies are available currently only to members of the University; internal clients are charged at a reduced rate compared to external clients. Members of VCIID are eligible for an additional subsidy from the COBRE grant, which should be acknowledged in publications.