JGI Divisional Scientist Research Integrity and Data Code of Conduct

Background

The Joint Genome Institute is a DOE User Facility whose primary purpose is to advance fundamental and applied genome science of its users related to energy and the environment.

As employees of Berkeley Lab, all JGI staff must comply with Berkeley Lab's Research Integrity and Conflicts of Interest policies and procedures which require, among other things, that "employees will adhere to the highest ethical standards in their publishing, including those detailed in the University's Statement of Ethical Values, especially in regards to the integrity and originality of work, and the recognition of the contributions of colleagues." The policies can be accessed here[1].

As a Berkeley Lab Division, JGI is required to review all publications prior to submission and to ensure that (1) a reasonable scientific process has been followed, (2) the publication requirements in the Scientific and Technical Publications Requirements policy have been met, and (3) any other requirements indicated by the Division Director have been met. This JGI Divisional Code of Conduct outlines the Divisional requirements of JGI scientists in the operations of JGI as a National User Facility under the Berkeley Lab Research Integrity and COI Policies.

Scientists at the JGI work closely with the JGI users to provide expertise and perform collaborative custom studies and analyses that go beyond standard JGI products, in order to maximize access of the JGI user base to the most cutting-edge methods and approaches currently available. JGI scientists often develop and apply conceptually novel approaches to harness sequence-based and complementary "omics" methods and solve the most pressing questions to move the field forward by publishing technological advances, as well as foundational biological insights.

All users, depending on their needs and interest, have the opportunity to engage in collaborative custom studies that go significantly beyond the JGI's core sequencing and analysis products. In many cases, these intellectual contributions by JGI staff are denoted by co-authorship on resulting publications. Furthermore, JGI staff often assume a lead role in organizing user communities around specific organisms, organism groups, scientific questions, or technologies. These efforts may result in lead and/or senior authorships of JGI staff on community papers and initiatives. Finally, some projects are entirely driven by JGI scientists and do not involve external collaborators. This is in particular the case for proof-of-principle studies introducing new tools, approaches and resources into the JGI capability portfolio. In many of the collaborative studies

with JGI users, JGI scientists are closely affiliated with primary data generation and production, and have broad and early access to such data.

The purpose of this JGI Divisional Code of Conduct is to ensure that under all of these different engagement modes, the intellectual and data contributions of JGI users, JGI scientists, and other collaborators are appropriately acknowledged and protected, that all participants understand how their respective data sets may be released and used, and that all participants receive appropriate credit in the form of authorships and citations.

JGI Divisional Data Code of Conduct

1. All JGI scientists, defined here as any JGI employee or affiliate who appears as a co-author with JGI affiliation on peer-reviewed scientific publications, are required to comply with the JGI's Policies, especially those that pertain to data release and data utilization. Compliance with this Data Code of Conduct is a mandatory prerequisite for appearing as a lead or contributing author on any publication the JGI is involved in.

2. JGI scientists are cognizant of the privileged position of being closely affiliated with the primary data production center for JGI user projects and will under no circumstances take unfair advantage of this position by accessing and using data in ways that are not aligned with the JGI's Data Release Policy[2] and Data Utilization Policy[3]. In particular, and in alignment with current Policies, JGI scientists will not publish analyses on unpublished data sets from ongoing user projects without informing the user or, where required, obtaining the user's consent per the process outlined below.

3. While the JGI's Data Release and Utilization Policies may change over time, JGI scientists at all times must strictly adhere to the Policies applicable to any given data at the time the data was generated.

4. For any manuscript or preprint on which a JGI scientist is a first or co-first author, a corresponding or co-corresponding author, or on which a JGI scientist was responsible for substantial data mining or analysis efforts, the JGI scientist is required to document compliance with the current Data Release Policy and Data Utilization Policy by entering the study into the electronic tracking system[4] PRIOR to submitting a preprint or full manuscript. To avoid delays, it is strongly recommended to contact primary data producers well in advance of submitting a manuscript, typically at the time a robust draft manuscript with a tentative author list is being assembled. If the JGI scientist is not the submitting author of a manuscript, it is the JGI scientist's responsibility to alert the corresponding author(s) about this requirement and the JGI scientist must not agree to appear as a co-author on the submission until they have received written (e-mail) verification of compliance with applicable policies from a corresponding author. If a JGI scientist is uncertain whether their contribution constitutes a substantial data mining or

analysis effort, they are required to request clarification from the JGI Deputy of Science or the JGI Director.

5. All manuscripts and preprints listed in the [JGI Pending Publications](#) spreadsheet must be reviewed and approved by the JGI Director prior to submission to a journal or preprint server (e.g. bioRxiv). This requirement applies to initial submission of new manuscripts and pre-prints, as well as resubmissions that involve substantial changes to the manuscript, in particular the addition of new data to which data use policies apply. Revised version with minor changes, or resubmission of previously approved versions to a different journal do not require the JGI Director's approval.

6. For any manuscript on which a JGI scientist is a first or co-first author, a corresponding or co-corresponding author, or on which a JGI scientist was responsible for substantial data mining or analysis efforts, the following flow chart must be consulted prior to submission of a study:

Decision Flow Chart

A. Secondary Data Analysis [y/n]: Does the study include computational analysis of sequence data sets generated by JGI users who are not co-authors, regardless of publication status and age of data?
NO: Go ahead with analysis, but request final approval from JGI Director prior to submission (Step E.)
YES: Go to B

B. Use of Unpublished Data [y/n]: If the answer to A is yes, does ANY of the following apply to ANY of those data sets:
1. No primary report (peer-reviewed paper) describing this data set has been published by the original PIs generating the data
2. A peer-reviewed paper describing the data set has been published by the original PIs, but you are uncertain whether this is a "definitive" initial description or a "preliminary" report (e.g. genome reports)
3. You could not positively establish that the data has been described in a peer-reviewed publication by the original PIs generating the data
NO: Go ahead with analysis, but request final approval from JGI Director prior to submission (Step E.)
YES: Go to C

C. Data Producers Notified [y/n]: If the answer to B is yes, have ALL original producers of data to which B applies been notified about the intent to perform and publish the proposed analyses and have been given at least 7 calendar days to raise any concerns about the use of their data?
NO: Not acceptable, please do so immediately
YES: Go to D

D. Unresolved Objections by Any Data Producer [y/n]: Were any objections or concerns by any original data producer within 7 days and could NOT be resolved in a mutually agreeable way?

NO: Go ahead with analysis, but request final approval from JGI Director prior to submission (Step E.). *Note: In this case, it is the JGI scientist's responsibility to save the written correspondence confirming that notifications were sent and no response was received. If concerns were raised and discussed, the JGI scientist must save any correspondence documenting the original data producer's agreement to the specific proposed use of data, as well as any agreed upon authorship/publication arrangements.*

YES: Go to E

E. JGI Leadership Approval [y/n - only JGI Director can enter!]: Prior to submission, any manuscript required to be listed in this table must be reviewed and approved by the JGI Director. Submit a PDF of the full manuscript via e-mail to the JGI Director, including any supplemental materials that are required to verify compliance with data use policies. Manuscripts will generally be approved or returned with comments within 72 hours. The JGI Director will make the final decision, enter the decision in column L, and inform the authors via e-mail.

NO: You cannot proceed/submit

YES: Go ahead with analysis/submission.

7. Any study that does not have explicit permission to proceed with submission based on the flow chart above must not be submitted for posting to any preprint server or publication in a peer-reviewed journal. This includes informal pre-submission manuscript inquiries with editors.

8. Failure to comply with this JGI Data Code of Conduct or Berkeley Lab's Research Integrity or COI policies may result in discipline, up to and including demotion, suspension or dismissal.

Links

[1] LBNL Research Integrity and Conflicts of Interest policies and procedures:
 https://www2.lbl.gov/Workplace/RIIO/ri/index.html
[2] JGI Data Release Policy: https://jgi.doe.gov/user-programs/pmo-overview/policies/
[3] JGI Data Use Policy: https://jgi.doe.gov/user-programs/pmo-overview/policies/
[4] Electronic Publication Tracking chart: https://bit.ly/2UxIHMQ