A GUIDE TO THE BIOINFORMATIC EXERCISES

The questions, resources and steps included are not prescriptive requirements, but are merely guidelines

that should help your students achieve bioinformatics learning goals described at the beginning of each exercise. These exercises can be done in the classroom and/or for homework. If you would like to add, remove or change certain elements of the exercise to match the needs of your students, please feel free to do so. If you make a drastic change that works well in practice, or if you notice any errors, we would love to know about your adjustment.

Allow time for your students to freely explore the databases.

The exercises will lead students down a particular path, but that does not mean it is the only path to get to the information they are seeking. They also may find additional information about a gene, disease or species by clicking around. The wealth of customizations, visualizations and seemingly infinite data is what makes these databases so powerful in modern biology.

You may find that students are more inclined to click around than you are.

Do not be afraid if you do not know the answers to their questions, they may be able to find the answers themselves if given time to explore and troubleshoot (most databases have help or tutorial sections to explain the information being displayed).

Finally, it is nearly impossible to do something "wrong" in these databases.

If students ever find themselves too far down the rabbit hole and cannot get out of it by using the back icon on their browser, simply click the database icon (typically in the top left hand corner) and they can start from the beginning again.

The following exercise was developed by the Teaching the Genome Generation team at The Jackson Laboratory for use by students in the classroom.