# Module 4 Activity: Case-Based Questions

Review Regeneration of Functional Heart Tissue in Rats: <http://library.umassmed.edu/necdmc/research_cases> .

The following passages illustrate problems of storage and back-up.

1.) Explain the problems and write up potential solutions.

* *“At any time, some tissue that was sectioned and on slides may be in one freezer, and some tissue that had not been sectioned yet but was embedded and ready to be sectioned is in another and still other tissue that may be sitting in a container someplace in another freezer. It should be entered into the excel spreadsheet saying what was done and where it is, but that doesn’t always happen.”*
* *“The older lab notebooks are in the PI‟s office, but the ones that are currently in use are in the lab. Older Lab notebooks are only in the PI‟s office of lab with no backup. The lab notebook has to be in pen on specific paper because this paper is supposed to be good for 100 years.”*
* *“We backup the data sets on an external hard drive someplace (emphasis added). The optical and electronic images are both backed up. The current backup system we are using truncates the data set name to 6 digits then puts a tilde sign and number starting from 001.”*
* *“The files are not password protected or anything. The lab notebook is either in the PI‟s office or (most often) in the lab, which has key card access (although it is an open floor plan).”*

2.) What does the researcher do well with regard to data storage and back up?