Defining Disease: Exploring Single-Cell Gene Expression Associated with Alzheimer's Disease

This is free, open source set of materials for conducting an advanced-undergraduate lab activity exploring disease states with the Seattle Alzheimer's Disease Atlas (SEA-AD), an open-source data set created by the Allen Institute.

These materials were developed by: Theresa McKim (University of Nevada, Reno), Shveta Parekh (Boston College), Thomas Newpher (Duke University), and Lucinda Carnell (Central Washington University), and Bob Calin-Jageman (Dominican University) through support from the Allen Institute, with specific guidance from Lauen Alfiler, Jeremy Miller, and others.

Here you will find:

- A complete set of lab materials you can adapt for your own courses.
    - These pages present the lab in html format
    - Our github provides these pages in Markdown, which can easily be re-published as a PDF, ePuB, etc.
    - A set of Canvas import files you can use to import into your university's LMS
- Resources and possible lab extensions

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