Additional Scripting Exercises

If you have extra time, please try to modify the script that shows you representative regions.

1. Shrink or enlarge the tiles that the tissue is divided into. How does this change the final image in a future figure?
2. This script throws out any tiles that have too few or too many cells as necessarily unrepresentative. Perhaps a better way to remove tiles would be to use the area of each tile occupied by tissue (to remove tiles that are just small pieces of the edge). Modify the script to use region area instead of number of detections. Hint: the area of an object can be found with object.getRoi().getArea()
3. Change how many regions of each type (low, average, high) it displays at the end
4. Instead of setting a specific number of images (ie 3 each of low, average, high H-score), modify the code so that it saves the lowest 5%, middle 5% and highest 5% of tiles. Or, set a range of H scores (i.e., average = any tiles from mean -.5 to mean +.5)

Advanced exercise:

6) The ultimate purpose of this script is to make it easy to find “representative images” for a paper figure. Write a script to export the images of the final selected regions as Tifs. To get started, read the example code “Tiling a whole slide image” on the QuPath wiki: https://github.com/qupath/qupath/wiki/Scripting-examples