Brain cell counting

<https://github.com/gnayuy/braincellcount>

**BrainCellCount**

BrainCellCount is an open-source, semi-automatically Slice-to-volume Brain Aligner, to count cells via mapping mouse brain regions of interests (ROIs) between the studying brain and the Allen mouse brain atlas [CCFv3](https://doi.org/10.1016/j.cell.2020.04.007).

<https://github.com/itsasimiqbal/DeNeRD>

# DeNeRD: high-throughput detection of neurons for brain-wide analysis with deep learning (MATLAB)

Trained model (Cleared\_DeNeRD.mat) for detecting neurons in cleared brain tissue is available now. The model is scale- and intensity-invariant and handles diverse imaging modalities e.g. CLARITY techniques, ISH, FISH and other light-sheet imaging. It is trained on thousands of neurons, hand-labeled by annotation experts at the University of Zurich and ETH Zurich. Run the following (MATLAB script) by just changing your path locations to analyse large scale brain imaging datasets.

Blood cell counting

<https://github.com/Souravjyoti/Platelets-and-WBC-detection-and-count-from-blood-smear-images>.

[**Platelets-and-WBC-detection-and-count-from-blood-smear-images.**](https://github.com/Souravjyoti/Platelets-and-WBC-detection-and-count-from-blood-smear-images.) **(not machine learning-based)**

Platelet Detection and Count are one of the major analysis of the pathological test of the blood. Conventional methods of analysis involve observation of blood smear samples under the microscope and manually identifying and counting the numbers. This process is slow and tedious. This work presents a method to automatically detect and count the number of platelets.

<https://github.com/garrrikkotua/cellule>

[**cellule**](https://github.com/garrrikkotua/cellule)

This is repository for website Cellule.ru. On the website **you can estimate number of cells on image** (biological cells). It's a routine task for many biologists around the globe. However, sometimes it's very hard to count them all with a naked eye. So, this is the tool to help them. **Of course, I don't guarantee it's 100% correct. At least, it's a good estimation.**

<https://github.com/farkoo/Cells-Segmentation-and-Count>

# Cells-Segmentation-and-Count (MATLAB)

Cell counting is any of various methods for the counting or similar quantification of cells in the life sciences, including medical diagnosis and treatment. It is an important subset of cytometry, with applications in research and clinical practice. For example, the complete blood count can help a physician to determine why a patient feels unwell and what to do to help. Cell counts within liquid media (such as blood, plasma, lymph, or laboratory rinsate) are usually expressed as a number of cells per unit of volume, thus expressing a concentration (for example, 5,000 cells per milliliter).

This program is implemented to count the number of cells in the image. The cells are also labeled and the area and average brightness level are calculated for each cell.

<https://github.com/not-a-feature/MultiImageCellCounter>

# Multi Image Cell Counter (MICC)

MICC is a simple [ImageJ](https://imagej.nih.gov/ij/) - Macro to count cells of multiple images at once.