Training report for Cellpose model (cellpose_afm_v02)
Date: 2021-12-09
Training time: 0.0hour(s) 43.0min(s) 23sec(s)
Information for your materials and methods:
The Cellpose model was trained for 500 epochs on 60 paired image patches (image dimensions: (512, 512), with a batch size of 8, using the Cellpose ZeroCostDL4Mic notebook (v 1) (von Chamier & Laine et al., 2020). The model was re-trained from a pretrained model. Key python packages used include tensorflow (v file:///tensorflow-2.7.0-cp37-cp37m-linux_x86_64.whl), Keras (v reprocessing==1.1.2), numpy (v 1.21.4), cuda (v 11.1.105
Build cuda_11.1.TC455_06.29190527_0). The training was accelerated using a Tesla K80 GPU.

Augmentation: The dataset was augmented by a factor of 4

Parameters
Default Advanced Parameters were enabled

| Parameter	Value
number_of_epochs	500
batch_size	8
percentage_validation	20
initial_learning_rate	0.0002

Training Dataset
Training_source:/content/gdrive/MyDrive/Colab Notebooks Testing/cellpose_afm/train/afmheight
Training_target:/content/gdrive/MyDrive/Colab Notebooks Testing/cellpose_afm/train/label

Model Path: /content/gdrive/MyDrive/Colab Notebooks Testing/cellpose_afm/Models/cellpose_afm_v02

Example Training pair
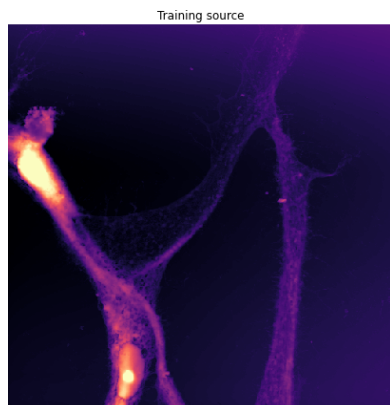
References:
 - ZeroCostDL4Mic: von Chamier, Lucas & Laine, Romain, et al. "ZeroCostDL4Mic: an open platform to simplify access and use of Deep-Learning in Microscopy." BioRxiv (2020).
- Cellpose: Stringer, Carsen, et al. "Cellpose: a generalist algorithm for cellular segmentation." Nature Methods 18, pages100-106(2021).

Important:
Remember to perform the quality control step on all newly trained models
Please consider depositing your training dataset on Zenodo