Installation Manual for Cellprofiler-Omero Conda environment

Installation Conda environment "WS44"

1) Prepare before:

- Install C++ Build Tools --> all: https://www.techpowerup.com/download/visual-c-redistributable-runtime-package-all-in-one/
- JDK 11 from Oracle (login required)
- Set JAVA_HOME and JAVA_JDK
- CUDA Toolkit (for cellpose): https://developer.nvidia.com/cuda-11.2.2-download-archive?target_os=Windows&target_arch=x86_64&target_version=10&target_type=exelocal
- cuDNN: https://www.tensorflow.org/install/source_windows#gpu

2) Open Anaconda Prompt as Administrator:

Create environment and install cellprofiler

```
# Create environment
conda create --name WS44 python=3.8

python -m pip install --upgrade pip (23.0)
pip install --upgrade wheel (0.38.4)

# Install Cellprofiler
pip install cellprofiler==4.2.5
pip install pandas
pip install seaborn
```

3) check if Cellprofiler works

(type cellprofiler, let GUI start) (GUI should start, but might give an error that certain plugins are not found)

4) Install Cellpose

Install Cellpose

```
pip3 install torch torchvision torchaudio --extra-index-url https://download.pytorch.org/whl/cu116
pip install cellpose==2.0.5
```

5) Configure Cellprofiler - Plugins

- Open Cellprofiler and configure plugins directory
  e.g. C:\Users\Public\GitHub\CellProfiler-plugins

6) Install Omero and Jupyter

Install Omero and Jupyter

```
#Install Omero
pip install ezomero==1.1.0

# Jupyter Notebook
pip install jupyter
ipython kernel install --name WS44
```

7) Configure Java Virtual Machine

- Copy Java folder to Github Cellprofiler folder
- Set CP_JAVA_HOME Variable to Github Cellprofiler java folder