**Build Open Ephys GUI from source code** 

**Platform: Windows 10** 

**IDE: Visual Studio Community 2019** 

- Download and install CMake (https://cmake.org/download/).
- Download and install Visual Studio Community 2019 (<a href="https://visualstudio.microsoft.com/pt-br/vs/">https://visualstudio.microsoft.com/pt-br/vs/</a>).
- Download the Open Ephys GUI source codes (https://open-ephys.org/gui).
- Unzip the "plugin-GUI-master.zip" in a folder with no special character in its path (this is important!). After unzipping, remove the "-master" from the inner folder and rename the parent folder to open-ephys. Ex.: FolderWithNoSpecialCharacter >> open-ephys >> plugin-GUI.
- Run CMake using administrator credentials. CMake >> ... >> bin >> cmake-gui.exe
- Select the source folder (FolderWithNoSpecialCharacter >> open-ephys >> plugin-GUI). Note that the "CMakeLists.txt" file must be there. Select the build folder (FolderWithNoSpecialCharacter >> open-ephys >> plugin-GUI >> Build). Click the "Configure" button and choose the 2019 version of Visual Studio. In the next dropdown menu, select x64. After the configuration, go ahead and click "Generate".
- Go to the "Build" folder and open the solution in the Visual Studio 2019. Build the solution. After that, go to the properties of the solution and choose "open-ephys" as the initialization project. Run!

## Add custom plugin to the Open Ephys GUI from source code

- Get your source codes (.cpp, .h and CMakeLists.txt), put it inside a folder with the name of your plugin and put that folder in FolderWithNoSpecialCharacter >> open-ephys >> plugin-GUI >> Plugins. For example: FolderWithNoSpecialCharacter >> open-ephys >> plugin-GUI >> Plugins >> RippleDetector (contains the source codes).
- Go to the FolderWithNoSpecialCharacter >> open-ephys >> plugin-GUI >> Plugins and change the CMakeLists.txt file to include your plugin's folder.
- Generate the Open Ephys GUI build files again using CMake and do the same steps to build the GUI project again. Everything must run smoothly!