**Presurgical MRI data processing**

**1. Open the following location on NEF:**

```
sftp://nef-devel/data/athena/user/monno/connectc/
```

**2. Create a directory for the new Patient on NEF**. We will call it Patient 1:

```
sftp://nef-devel/data/athena/user/monno/connectc/patient01
```

Note that the directory name can be composed of letters, digits, or the '-' character for a separation. Don't use other characters.

Then, create a subdirectory for storing DICOM files:

```
sftp://nef-devel/data/athena/user/monno/connectc/patient01/dicom
```

**3. Copy DICOM images from CD disks to NEF**, respecting the structure of directories as in the example below:

```
sftp://nef-devel/data/athena/user/monno/connectc/patient01/dicom/cd1/IMAGES/
sftp://nef-devel/data/athena/user/monno/connectc/patient01/dicom/cd2/IMAGES/
sftp://nef-devel/data/athena/user/monno/connectc/patient01/dicom/cd3/IMAGES/
```

Note that the "IMAGES" directory appears in the root directory of every disk recorded by the MRI lab at CHU Nice. It is the only directory that we need.

**4. Copy all .sh files from the 'scripts' directory** located here:

```
sftp://nef-devel/data/athena/user/monno/connectc/scripts/
```

to our new patient's directory:

```
sftp://nef-devel/data/athena/user/monno/connectc/patient01/
```

**5. Login to NEF from the terminal:**

```
ssh nef-devel
```

**6. Go to our patient's directory:**

```
cd /data/athena/user/monno/connectc/patient01
```

**7. Run the conversion script:**

```
./run_convert.sh
```

Running time is 1-2 days.

**8. Use MI-Brain to virtually dissect the interesting fibers.** Save them in the .TCK format and place in the following location on NEF:

```
sftp://nef-devel/data/athena/user/monno/connectc/patient01/tracts
```

**9. Run the script to create the DICOM images for the neuronavigation system:**

```
./run_neuronav.sh
```

Running time is about 15 minutes.

**10. Copy the “neuronav” directory to the USB key and load it on the neuronavigation system.** The directory can be found on NEF here:

```
sftp://nef-devel/data/athena/user/monno/connectc/patient01/neuronav
```