Movie 1

The movie contains 512 x 512 pixel images of fluorescent signals from CTO in a P3 brain. Depth in μm is shown on bottom left corner. Scale bar, 50 μm .

Movie 2

The movie contains fluorescent signals from CTO (red) and THG signals (green). The 3D reconstruction shows the depth from 1050 μ m to 1400 μ m in a juvenile brain. Scale bar, 100 μ m.

Movie 3

The movie contains fluorescence signals from CTO (red). The 3D reconstruction shows fine processes of cells at depths from 1150 μm to 1472 μm in a P3 brain. Scale bar, 80 μm.

Movie 4

Filament tracking in a P3 brain. The 3D reconstruction shows thin lines that represent the fine basal processes of neural stem cells and the thick line represents a blood vessel. One of the processes has a direct contact with the blood vessel. Scale bar, $100 \mu m$.

Movie 5

The movie contains fluorescence signals from CTO (red). The 3D reconstruction shows the depth from 1271 μ m to 1325 μ m in a juvenile brain. Scale bar, 50 μ m.

Movie 6

The movie shows CTG imaging with our 3PM at U Oxford. Cells are shown from depths of from 761 to 950 μm in a P3 brain. Scale bar, 50 μm .