## supplemental figure 2 Striatum hGFAP

## **Supplementary Figure 2**

## OPCs were recruited as oligodendrocytes or astrocytes in a context-dependent manner

In the presumptive white matter, implanted OPCs typically matured as either MBP<sup>+</sup> myelinogenic oligodendrocytes in the presumptive white matter, or less so as GFAP<sup>+</sup> astrocytes. In contrast, in the recipient cortex and subcortical gray matter, donor cells gave rise solely to GFAP-defined astrocytes. **A**, as in **fig. 2F**, shows the striatocallosal border of a shiverer brain, 3 months after perinatal engraftment with human fetal OPCs (hNA in *blue*). Donor-derived MBP (*red*) expression is evident in the corpus callosum, while donor-derived GFAP<sup>+</sup> (*green*) astrocytes predominate on the striatal side. Here, in **B-D** the individual color splits reveal the sharp borders between white matter-associated MBP<sup>+</sup> oligodendrocytes and striatal GFAP<sup>+</sup> astrocytes, both derived from a common injection of nominally homogeneous fetal OPCs.

Scale =  $200 \mu m$ .