

**Supplementary Figure 1: Morphological database of reconstructed pyramidal neurons.**

Pyramidal cell reconstructions. Cell bodies and dendrites in red, axons in blue.

**Supplementary Figure 2: Morphological database of reconstructed Layer 2/3 PV neurons.**

Layer 2/3 PV cell reconstructions. Cell bodies and dendrites in red, axons in blue.

**Supplementary Figure 3: Morphological database of reconstructed Layer 5 PV neurons.**

Layer 5 PV cell reconstructions. Cell bodies and dendrites in red, axons in blue.

**Supplementary Figure 4: Morphological database of reconstructed SOM neurons.**

Layer 2/3 SOM cell reconstructions. Cell bodies and dendrites in red, axons in blue.

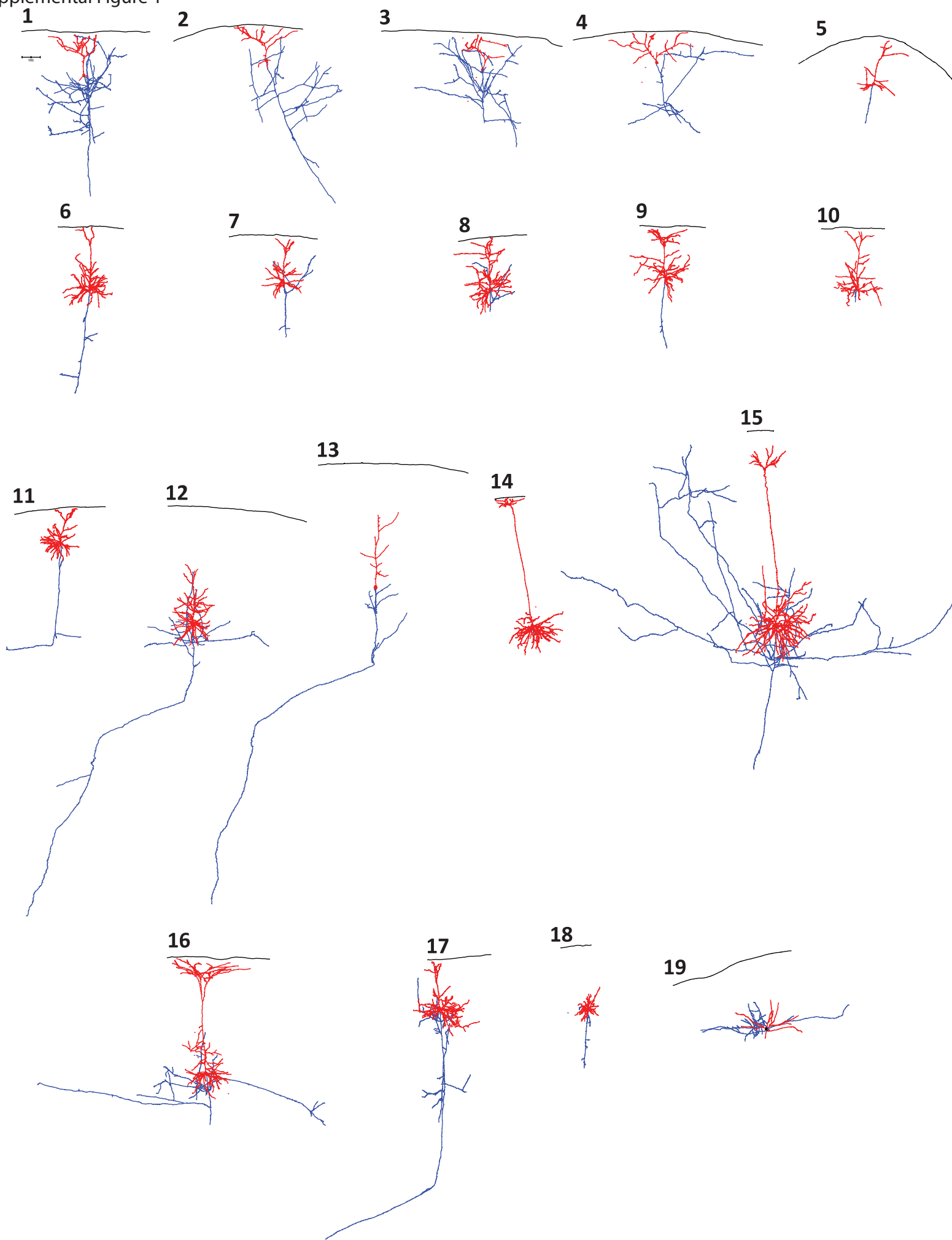
**Supplementary Figure 5: Reconstructed connected pairs of SOM-PC neurons**

Somatostatin cell and pyramidal cell pairs. Somatostatin cell bodies and dendrites in black, axons in blue. Pyramidal cell bodies and dendrites in red, axons in orange.

**Supplementary Figure 6: Reconstructed connected pairs of PV-PC neurons**

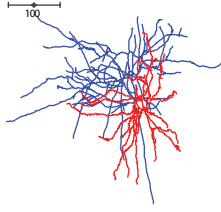
Parvalbumin cell and pyramidal cell pairs. Somatostatin cell bodies and dendrites in black, axons in blue. Pyramidal cell bodies and dendrites in red, axons in orange.

Supplemental Figure 1

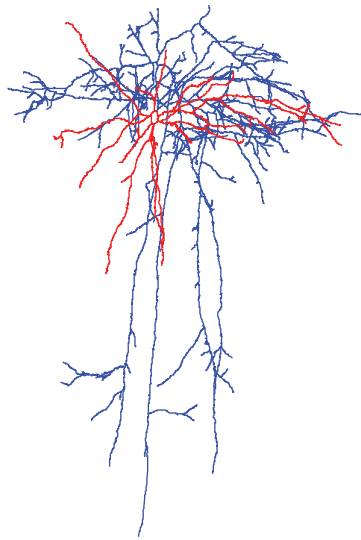


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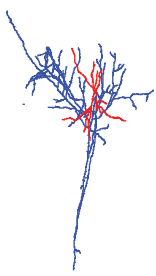
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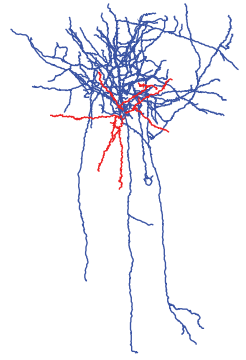
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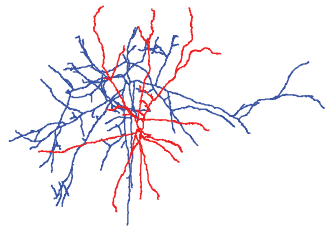
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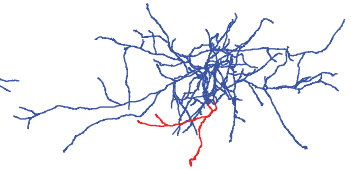
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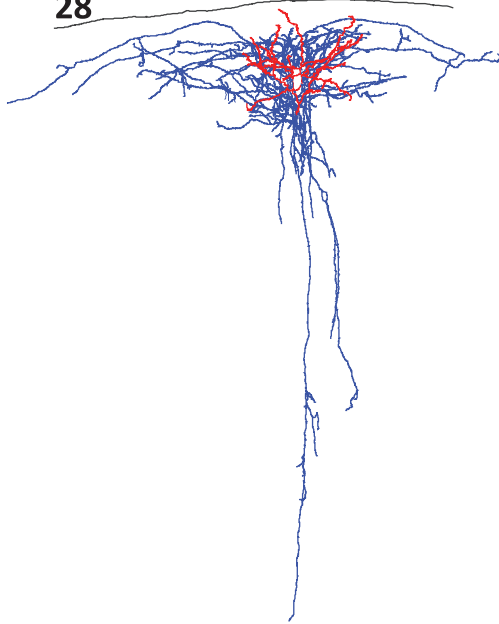
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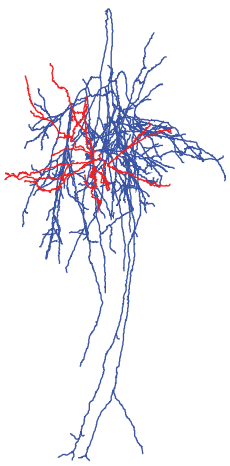
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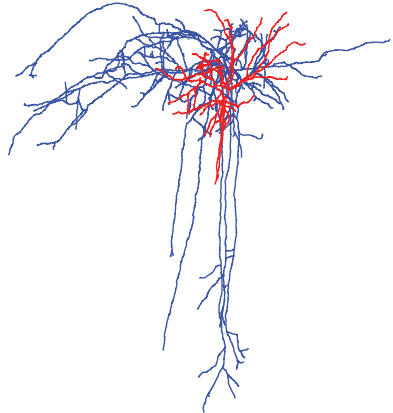
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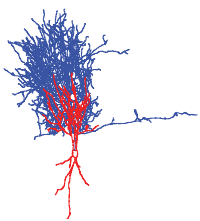
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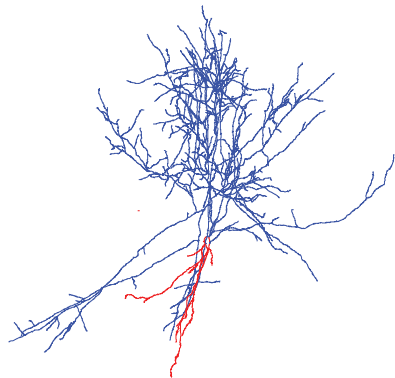
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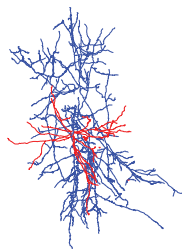
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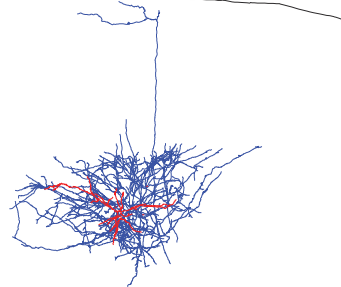
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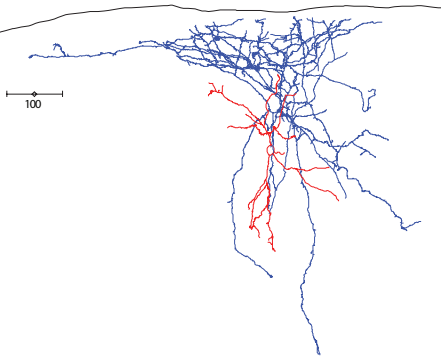
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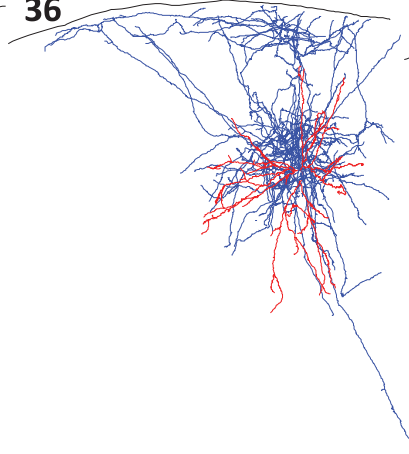
Supplemental Figure 4

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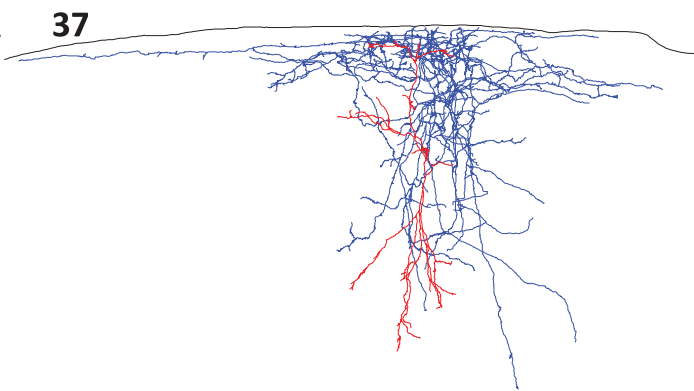
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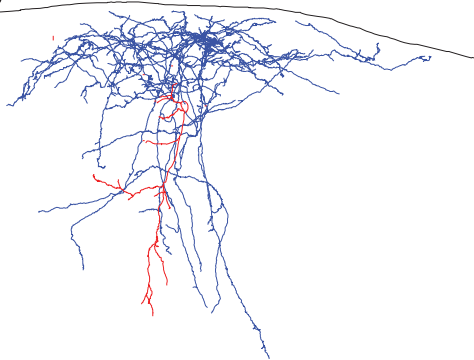
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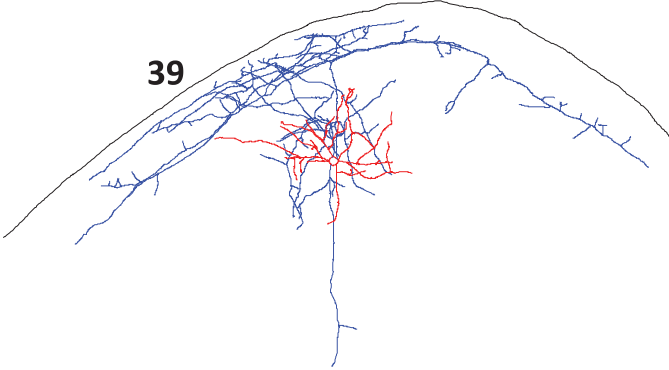
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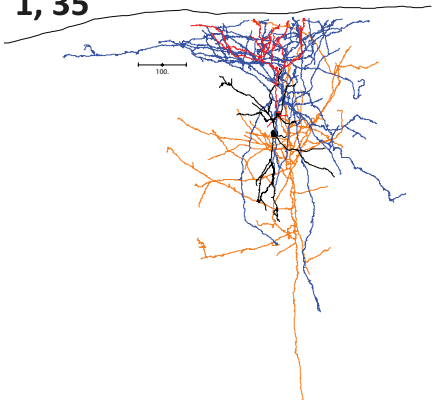


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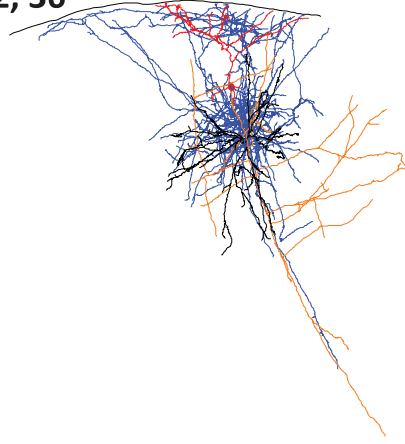


Supplemental Figure 5

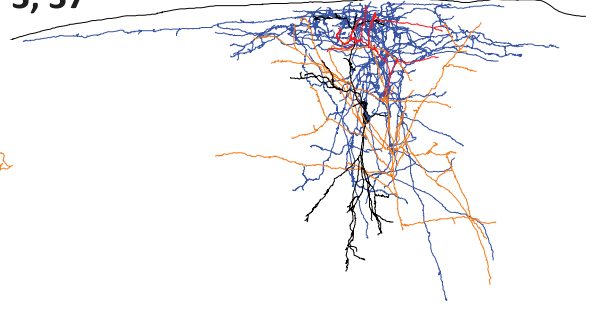
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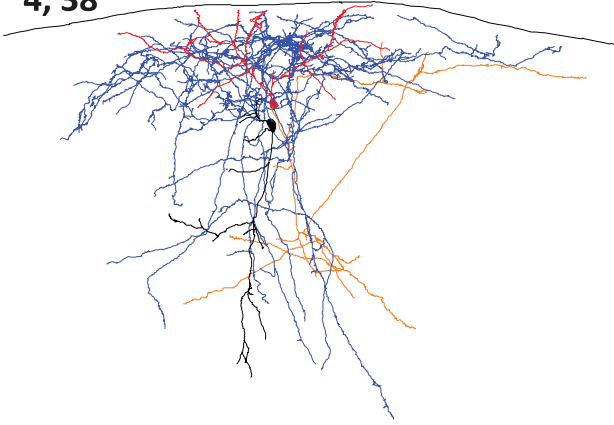
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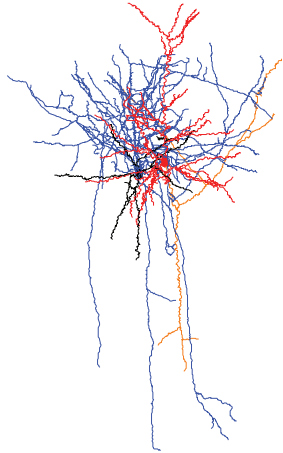


Supplemental Figure 6

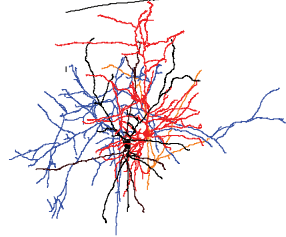
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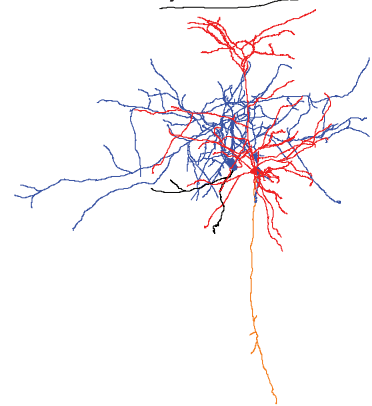
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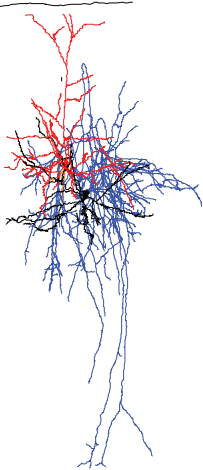
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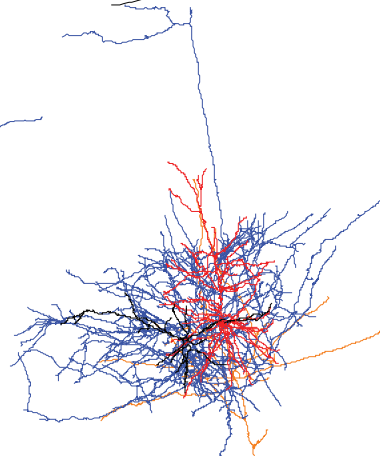
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**11, 30**



**12, 34**



**13, 34**

