Supplementary Online Content

Sheng G, Demers M, Subburaju S, Benes FM. Differences in the circuitry-based association of copy numbers and gene expression between the hippocampi of patients with schizophrenia and the hippocampi of patients with bipolar disorder. Arch Gen Psychiatry. Published online February 6, 2012. doi:10.1001/archgenpsychiatry.2011.1882

eTable. Demographics of subjects.
eFigure 1. Laser microdissection.
eFigure 2. Relative copy number of the GAD67 gene in genomic DNA from SZ, BD, and healthy controls.

This supplementary material has been provided by the authors to give readers additional information about their work.
Table. Demographics of subjects.

<table>
<thead>
<tr>
<th>DX</th>
<th>M/F</th>
<th>AGE</th>
<th>PMI</th>
<th>Cause of Death</th>
<th>Medications</th>
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<tbody>
<tr>
<td>1</td>
<td>C</td>
<td>F</td>
<td>70</td>
<td>15.0 cardiopulmonary arrest</td>
<td>resperidone, fluoxetine, clorazepate, midazolam prn</td>
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<td>2</td>
<td>C</td>
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<td>78</td>
<td>23.9 cancer</td>
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<tr>
<td>3</td>
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<td>F</td>
<td>51</td>
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<td>trifluoperazine</td>
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<tr>
<td>4</td>
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<td>F</td>
<td>59</td>
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<tr>
<td>5</td>
<td>C</td>
<td>F</td>
<td>71</td>
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<tr>
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<td>C</td>
<td>F</td>
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<td>lithium carbonate</td>
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<tr>
<td>7</td>
<td>C</td>
<td>F</td>
<td>65</td>
<td>16.5 myocardial infarction</td>
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<td>M</td>
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<td>M</td>
<td>54</td>
<td>24.2 congestive heart failure</td>
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<td>M</td>
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<td>20.6 myocardial infarction</td>
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<tr>
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<td>C</td>
<td>M</td>
<td>49</td>
<td>27.2 myocardial infarction</td>
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<tr>
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<td>C</td>
<td>M</td>
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<tr>
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<td>C</td>
<td>M</td>
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<tr>
<td>Average</td>
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<td>61</td>
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</table>

DX = Diagnosis. PMI= Post mortem interval (h). There were 15 normal controls (C), 15 bipolar disorder (BD) and 15 schizophrenia (SZ) subjects matched for age, PMI, gender and on a group basis.
Laser Microdissection
Deconstructing the Trisynaptic Pathway in the Hippocampus of SZs and BDs

Benes, Lim, Matzilevich, Walsh and Subburaju. PNAS (2007)
**eFigure 1.** A, A set of photomicrographs showing a schematic drawing of a transverse section through the human hippocampus showing the area dentata and sectors CA4, 3, 2 and 1 and their associated layers. In sectors CA3, 2 and 1, the layers include the stratum lacunoso-molecular (Str. Lac. Mol.), stratum radiatum (Str. Rad.), stratum pyramidale (Str. Pyr.) and stratum oriens (Str. Pyr.). B, A cresyl violet-stained frozen section from a human hippocampus showing sector CA4, the granule cell layer (GC) and, in CA1, the Str. Mol. (SM), Str. Rad. (SR), Str. Pyr. (SP) and Str. Oriens (SO). Shown with red outlines are the samples of tissue that were obtained with a laser microdissection (LMD) apparatus prior to removal of the samples from the respective layers in CA1 and CA3/2 (not shown). C, GABA cells (blue) are the preponderant neurons in the SO and SR and by using laser microdissection (LMD), it is possible to study hippocampal interneuron at these loci without significant contamination from pyramidal neurons that are found in SP. The schematic diagram is from Carpenter’s Human Neuroanatomy, 9th Edition, Parent, A., William and Wilkins; 1996; Fig. 18.15B, p.762).
Relative gene copy number of GAD67 in genomic DNA refers to the ratio of the quantity of GAD67 produced in a quantitative polymerase chain reaction compared with that of RNAse P, as calculated by the ΔΔCt method. Each sample was compared with an average ratio of 6 control samples that was selected as a calibrator, to allow comparison of the relative amounts between individuals. Left panels are the copy number changes in CA3/2, and right panels are relative copy numbers in CA1.