Multi-receptor balances in feed-forward and feedback processing: Anatomical localization and multireceptor fingerprints

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The density (fmol/mg protein) of 15 different receptor binding sites for glutamate, GABA, acetylcholine, noradrenaline, serotonin and dopamine will be visualized and measured in input and output layers of primary and higher areas of the visual, auditory and somatosensory system. Human, monkey and rat brains will be studied. Multi-receptor fingerprints of the layers and cortical areas will be analyzed to identify similarities and dissimilarities of the input and output layers at this molecular level.