Signaling by cytosolic FGFR http://pontherbasal body to the plasma membrane Signaling by Receptor Tyrosine Kinases Stimuli-sensing channels Protein—protein interactions at synapses
Transport of inorganic cations/anions and amino acids/digopeptides

Neurexins and neuroligins Ion channel transport

Effects of PIP2 hydrolysis

PI Metabolism

size Neuronal System Synthesis of PIPs at the plasma membrane Laminin interactions

100

200

300

0.002

0.004

0.006

Transmission across Chemical Synapses Extracellular matrix organization p.adjust

Phospholipid metabolism Netrin-1 signaling RAB GEFs exchange GTP for GDP on RABS

CD28 co\_stimulation SUMO E3 ligases SUMOylate target proteins

Heparan sulfate/heparin (HS-GAG) metabolism **SUMOylation** Rho GTPase cycle

Circadian Clock

SUMOylation of intracellular receptors NRAGE signals death through JNK

Nuclear Receptor transcription pathway G alpha (12/13) signalling events

Intracellular signaling by second messengers

RORA activates gene expression