Neurotransmitters and Drugs of the Complex Synapse

**Amino Acids**

- **Glycine**
  - Neurotransmitter, a chemical messenger
  - Binds to two of the GloN1 subunits of the NMDA receptor

- **Glutamate (Glutamic Acid)**
  - Neurotransmitter, a chemical messenger
  - Binds to two of the GloN2 subunits of the NMDA receptor and may bind to each of the four subunits of the AMPA receptor

- **Serine**
  - Neurotransmitter, a chemical messenger
  - Binds to two of the GloN1 subunits of the NMDA receptor

**Ketamine**

- Appears to inhibit the NMDA receptor by binding both in the open channel and at an allosteric site
- One of the "date rape" drugs

**PCP**

- Phencyclidine (angel dust)
- Binds to and blocks the activity of the NMDA receptor (antagonist)

PostSynaptic Neuron