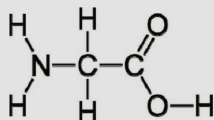


# Neurotransmitters and Drugs of the Complex Synapse

## Amino Acids

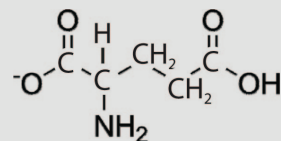
### Glycine



#### Glycine

- Neurotransmitter, a chemical messenger
- Binds to two of the GluN1 subunits of the NMDA receptor

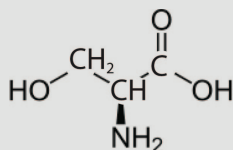
### Glutamate



#### Glutamate (Glutamic Acid)

- Neurotransmitter, a chemical messenger
- Binds to two of the GluN2 subunits of the NMDA receptor and may bind to each of the four subunits of the AMPA receptor

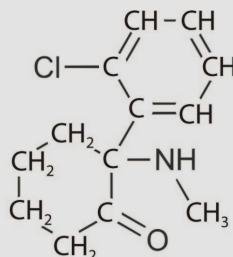
### Serine



#### D-serine

- Neurotransmitter, a chemical messenger
- Binds to two of the GluN1 subunits of the NMDA receptor

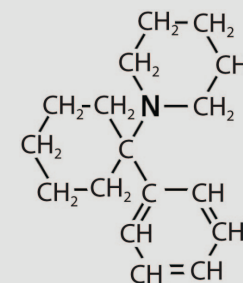
## Ketamine



#### 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



#### PCP

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

