Today’s plan

• Overview of nervous system structure
  – Can’t follow the game without a program
• Invertebrates
• Vertebrates

Some simple invertebrate NSs

Hydra
Starfish

Matthews 2-2
Some more complex invertebrate nervous systems

Matthews 2-2  Leech  Grasshopper

Generic vertebrate CNS

Matthews 2-3
Relative proportion of forebrain

Mammalian brain

Matthews 2-4
Matthews 2-5
Early vertebrate CNS

Matthews 2-7
Development of telencephalon

Highlights spiral expansion

Matthews 2-8

Human brain

Matthews 2-9
Terms

• Brain
  – Forebrain
    • Telencephalon
    • Diencephalon
      – Thalamus
      – Hypothalamus
    • Mesencephalon (midbrain)
    • Hindbrain
      – Pons
      – Medulla oblongata
    • Cerebellum

• Spinal cord

More terms

• Ventricles – lateral, third, fourth
• PNS/CNS
• Planes: sagittal, coronal/frontal, horizontal
• Axes: Rostral-caudal, medial-lateral, dorsal-ventral (note that anterior is ambiguous, but used medically)
More resources

- [http://www.digitalanatomist.org](http://www.digitalanatomist.org)
  - (here at UW)
- [http://www.neuropat.dote.hu/anatomy.html#Brain](http://www.neuropat.dote.hu/anatomy.html#Brain)
- Others...please tell us your favorite one(s)