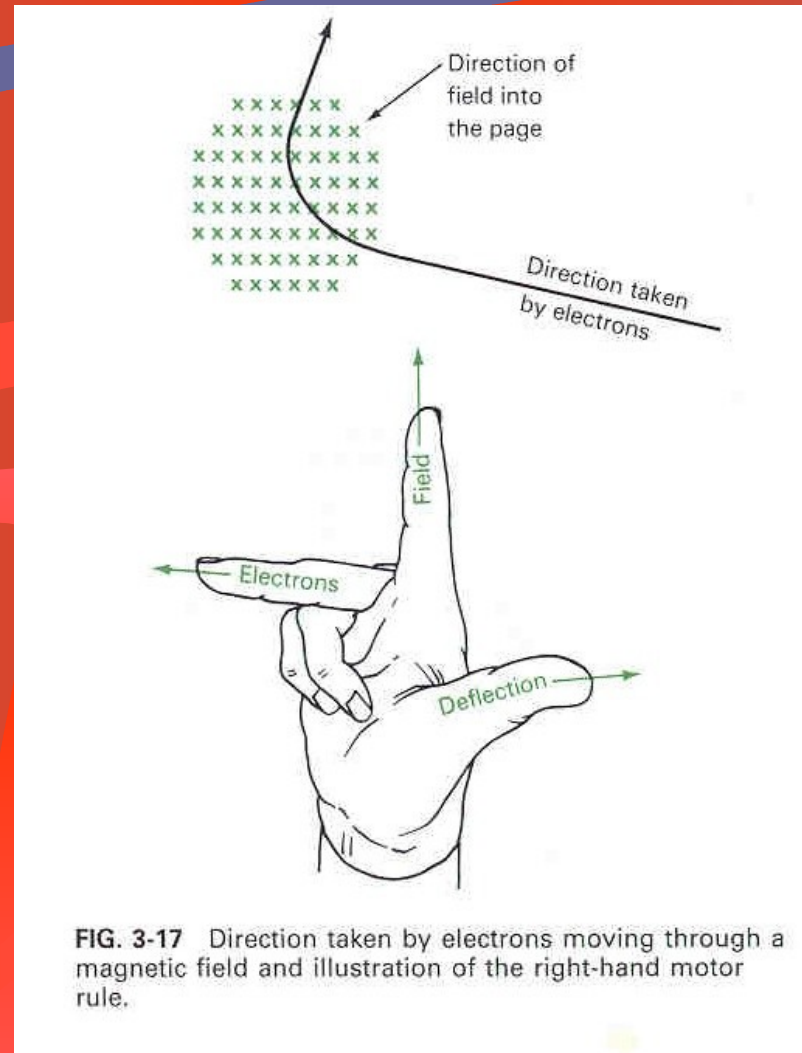


Right Hand Rule



The Basics

- Catalyst actions
- Chemical actions
- Biochemical actions
- Physical chemical actions
- Atomic actions
- Osmotic actions

Neurofeedback

- Display neuro-something
- Give subject a goal
- Concentration leads to brain wave changes
- ?relationship between volition and firing rate
- ?differences in neurotransmitters

Pulsed EMF

- Moves
 - Electrons - jerky or back & forth
 - Positive ions - jerky or back & forth
 - Negative ions - jerky or back & forth
- Disadvantages
 - More general effect
 - May be generating current and secondary EMFs

The Basics

- Catalyst actions
- Chemical actions
- Biochemical actions
- Physical chemical actions
- Atomic actions
- Osmotic actions

Magnet Principles

- Influence opposite electrical
- Uniform electromagnetic field
- Penetrates easily
- Less relative insulation
- Secondary charge flow
- Continuous or pulsed
- Produces low current flow
- Aligns chemical dipoles

Considerations

- Internal vs. External
- DC vs. AC
- Pulsed vs. Non-pulsed
- Burst vs. Non-burst
- Chemical bonding
- Ionic Flow
- Cable Flow
- Excitable vs. Non-excitable cells

Magnetic Action

- Moves
 - Electrons
 - Positive ions
 - Negative ions
- Disadvantages
 - More general effect
 - Static or limitations of pulsed

Electrical Action

- Moves charges
 - Positive ions
 - Negative ions
 - Electrons via cable theory
- Current = secondary EMF
- EMF advantages
 - Local
 - Focused
 - More local power
 - Infinitely variable frequency technologically possible
- What about other places?

There are multiple relationships!

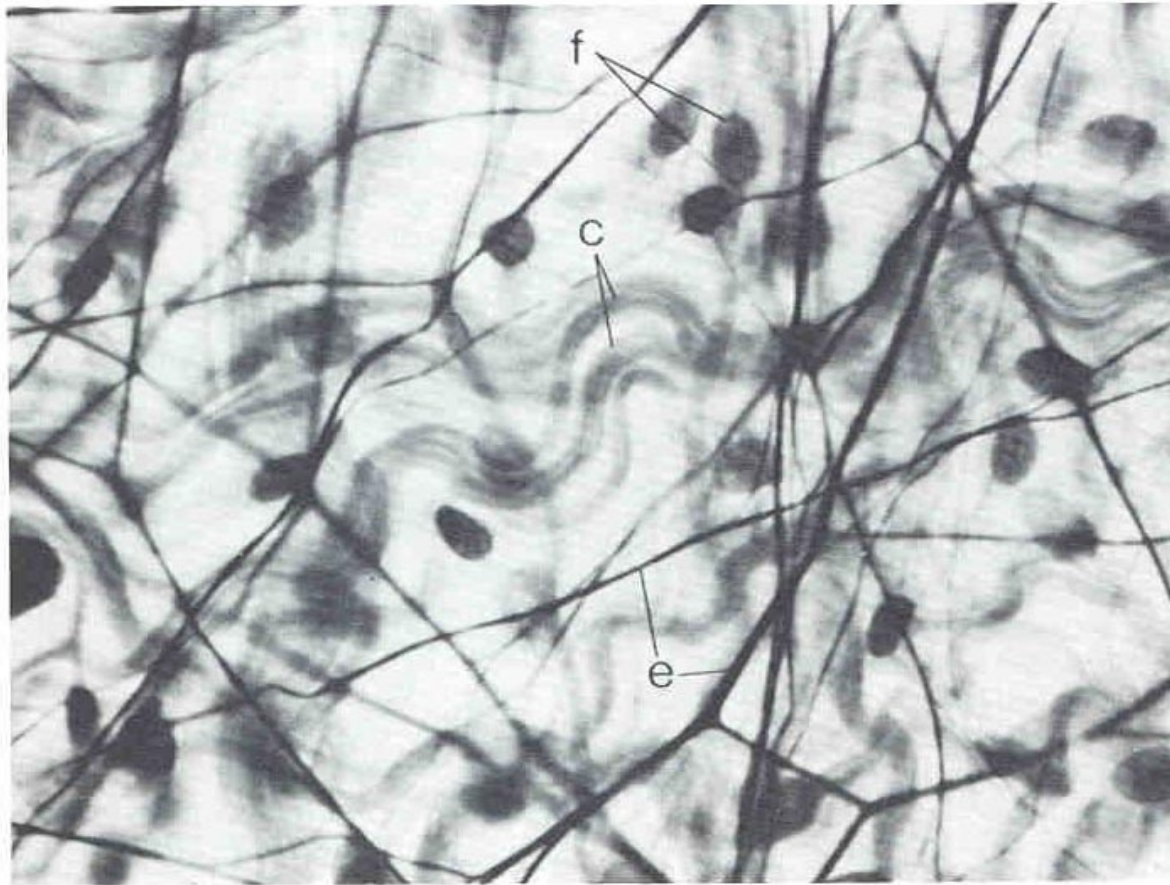
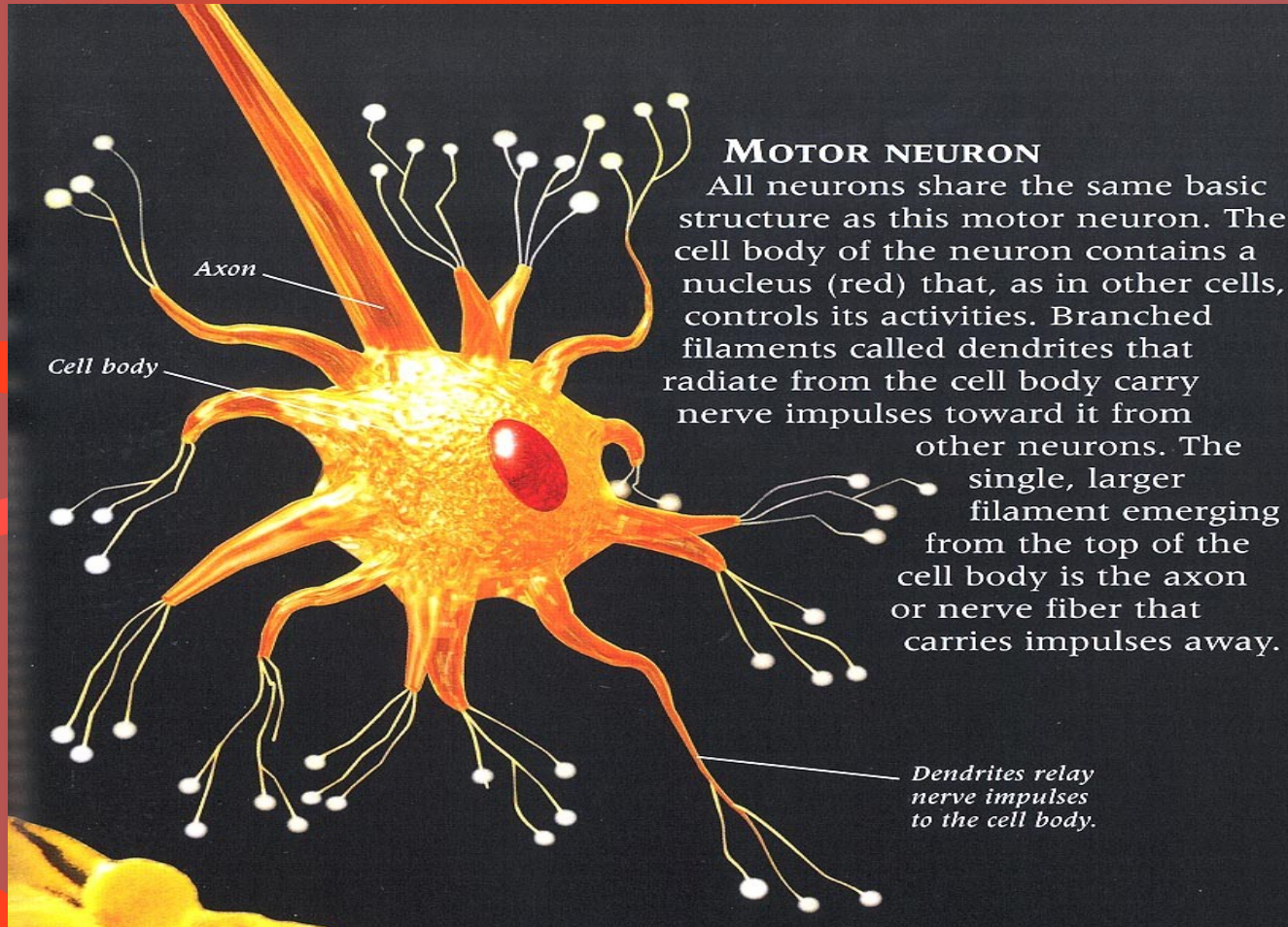
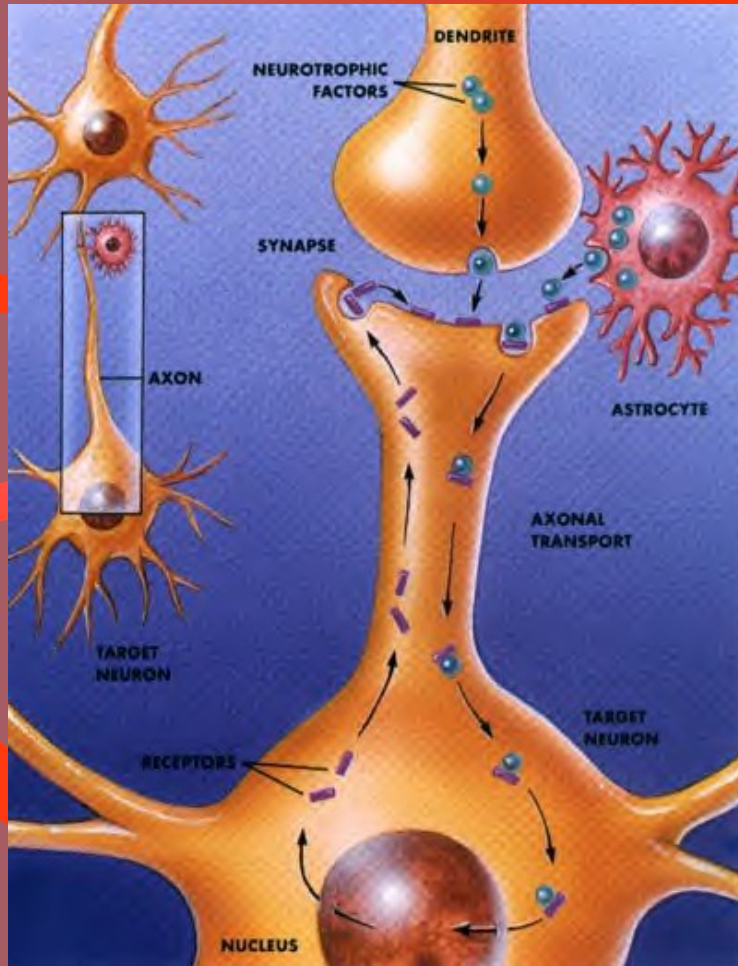


Figure 3-2 Photomicrograph of loose connective tissue. The connective tissue fibers lie in a bed of ground substance. *Source:* Reprinted from *Histology* (p 212) by A.W. Ham and D.H. Cormack with permission of J.B. Lippincott Co., © 1979.

These organs must fire to be healthy!

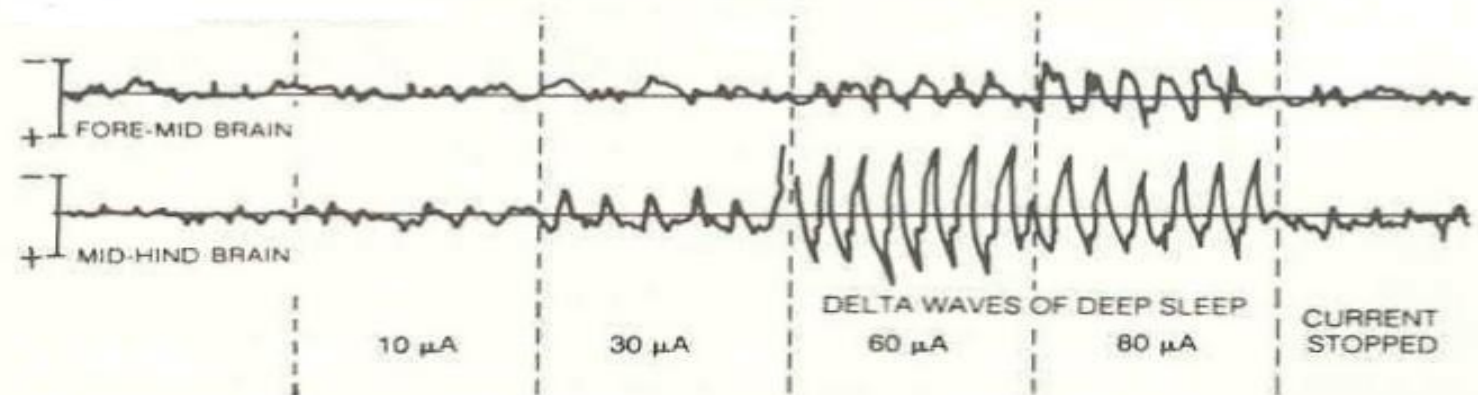


Everything works better with circulation



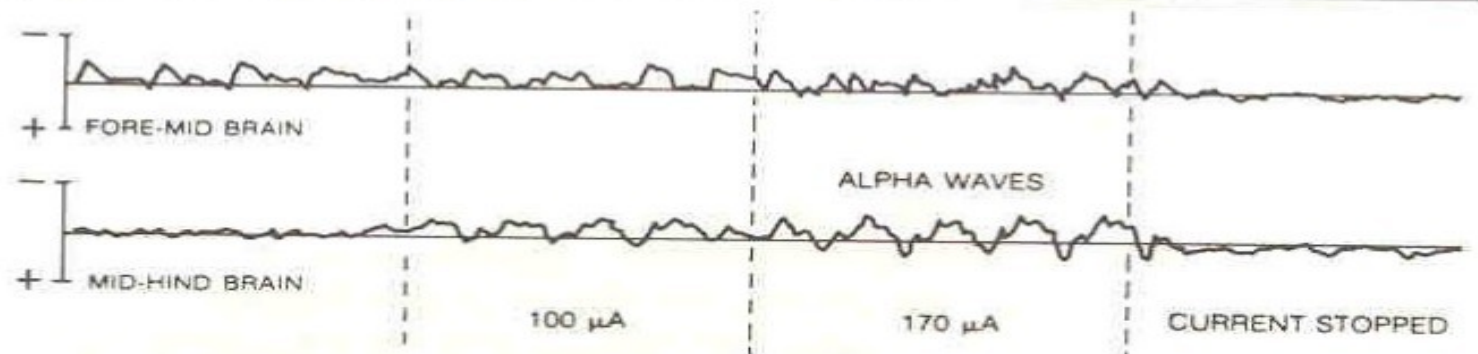
*Complementary/Alternative
Medicine is The Medicine of
the Sympathetic Nervous
System and other Primitive
Body Systems*

Different Intensities have Functional Consequences



DC THROUGH THE HEAD ANESTHETIZES THE SALAMANDER

112 *The Body Electric*



DC THROUGH THE HEAD PARTIALLY AWAKENS THE SALAMANDER

Fiber Diameter Spectra Cutaneous Nerve

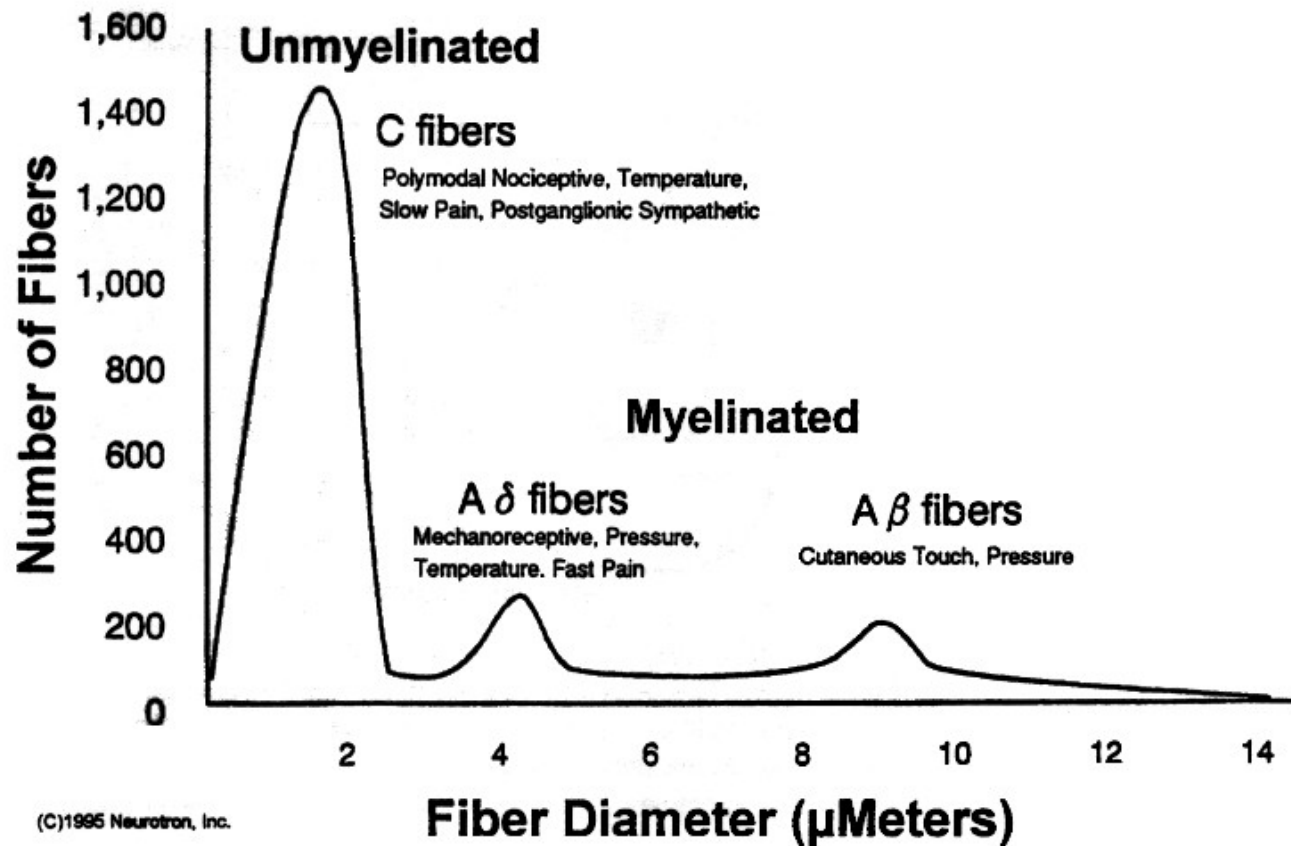
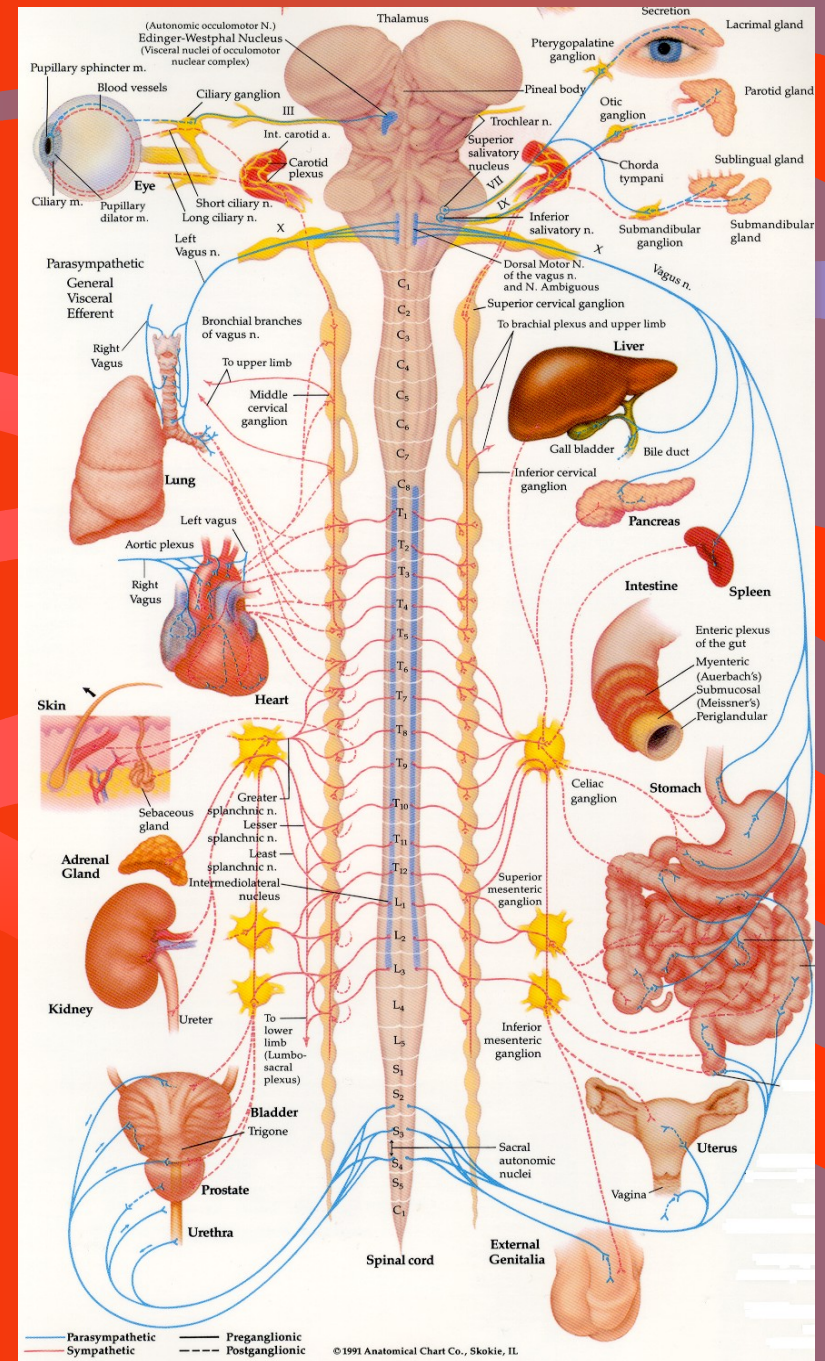
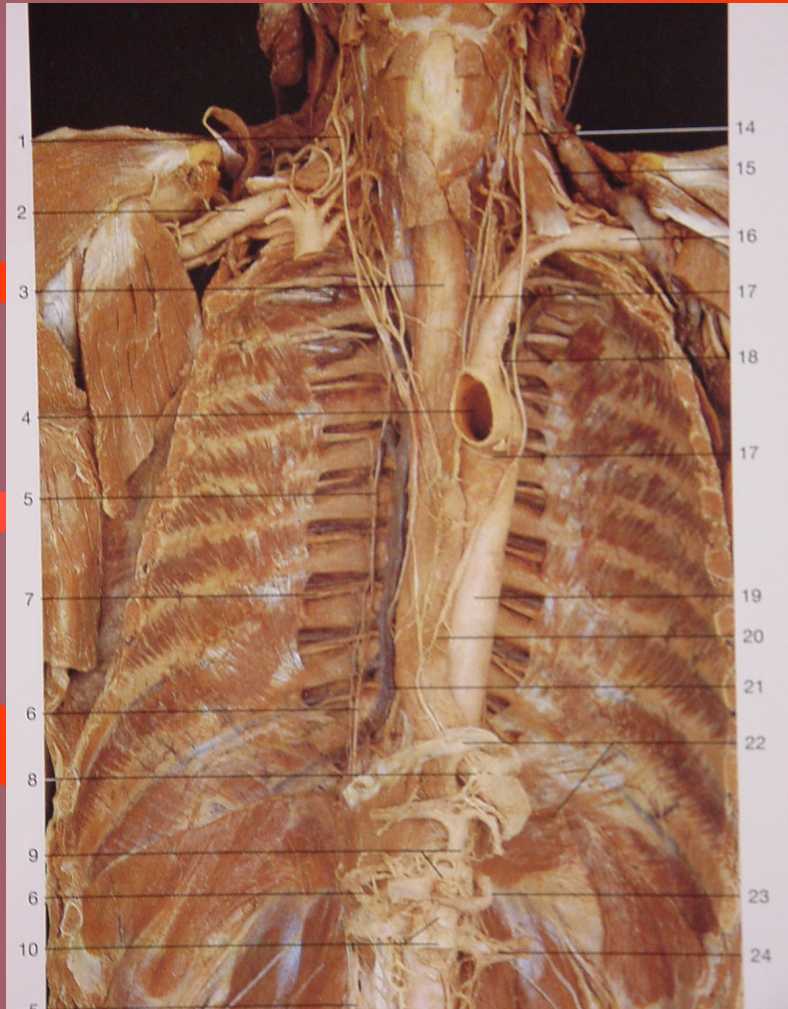


Fig. 2. Fiber spectra profile of a typical sensory nerve. Adapted from Boyd and Davey [74]. (Neurotron, Inc., with permission.)

Sympathetic Nervous System



Sclerotomes

