

Reference Books (PSIO 603 & BME 511)

1) Structure of the Nervous System

- a) Tortora, G.J. & Grabowski, S.R (2003). Principles of Anatomy & Physiology. New Jersey: John Wiley & Sons. Ch.12: pp.385-395; Ch.13: pp.419-425, Ch.14: relevant sections.
- b) Silverthorn, D.U (1998). Human Physiology: An Integrated Approach. New Jersey: Prentice Hall. Ch.8: pp.208-224; Ch.9: pp.235-244, pp.248-250; Ch.11: pp.307-310.
- c) Witelson, S.F. et al., (1999). The exceptional brain of Albert Einstein. Lancet 353: pp.2149-2153.
- d) Boron, W.F. & Boulpaep, E.L. (2005). Medical Physiology: Elsevier. Ch.10, Ch.15
- e) Bear, M.F., Connors, B.W. & Paradiso, M. A. (2007). Neuroscience: Exploring the brain. Philadelphia: Lippincott Williams & Wilkins. 3rd Ed. Ch.2, Ch. 20 (split-brain experiments).

2) Resting Membrane Potential

- a) Boron, W.F. & Boulpaep, E.L. (2005). Medical Physiology: Elsevier. Ch.3 & 6
- b) Tortora, G.J. & Grabowski, S.R (2003). Principles of Anatomy & Physiology. New Jersey: John Wiley & Sons. Ch.12, pp.396-398.
- c) Silverthorn, D.U (1998). Human Physiology: An Integrated Approach. New Jersey: Prentice Hall. Ch.5, pp.131-133, 136-141.
- d) Johnston, D. & Wu, S. (1999). Foundations of Cellular Neurophysiology: Cambridge, Mass.:MIT Press. Ch.2 & 3
- e) Kandel, E.R., Schwartz, J.H. & Jessell, T.M. (2000). Principles of neural science. New York: McGraw-Hill. Ch. 6 & 7.

3) Action Potentials & Nerve Conduction

- a) Tortora, G.J. & Grabowski, S.R (2003). Principles of Anatomy & Physiology. New Jersey: John Wiley & Sons. Ch.12, pp.398-403.
- b) Silverthorn, D.U (1998). Human Physiology: An Integrated Approach. New Jersey: Prentice Hall. Ch.8, pp.208-224.
- c) e) Kandel, E.R., Schwartz, J.H. & Jessell, T.M. (2000). Principles of neural science. New York: McGraw-Hill. Ch. 8 & 9.
- d) Nicholls J.G. et al., (2001). From neuron to brain. Massachusetts: Sinauer Assoc. Ch.5, 6 & 7.
- e) Johnston, D. & Wu, S. (1999). Foundations of Cellular Neurophysiology: Cambridge, Mass.:MIT Press. Ch.4
- f) Katz, B. (1966). Nerve, muscle & synapse. McGraw-Hill. Ch.5
- g) Aidley, D.J. (1978). The physiology of excitable cells. Cambridge University Press (2nd edition). Ch. 4 & 5.
- h) Boron, W.F. & Boulpaep, E.L. (2005). Medical Physiology: Elsevier. Ch.7

4) Synapses

- a) Tortora, G.J. & Grabowski, S.R (2003). Principles of Anatomy & Physiology. New Jersey: John Wiley & Sons. Ch.12, pp.404-411.
- b) Silverthorn, D.U (1998). Human Physiology: An Integrated Approach. New Jersey: Prentice Hall. Ch.8, pp.224-231.
- c) Nicholls J.G. et al., (2001). From neuron to brain. Massachusetts: Sinauer Assoc. Ch.9, Ch. 16 (pp.318-321).
- d) Kandel, E.R., Schwartz, J.H. & Jessell, T.M. (2000). Principles of neural science. New York: McGraw-Hill. Ch. 11, 12 & 14.
- e) Boron, W.F. & Boulpaep, E.L. (2005). Medical Physiology: Elsevier. Ch.12
- f) Bear, M.F., Connors, B.W. & Paradiso, M. A. (2007). Neuroscience: Exploring the brain. Philadelphia: Lippincott Williams & Wilkins. 3rd Ed.Ch.5.

5) Dendrites

- a) Boron, W.F. & Boulpaep, E.L. (2005). Medical Physiology: Elsevier. Ch.11
- b) Numerous references cited in the lecture notes.