I. Overview

The autonomic nervous system (ANS) plays a vital role in maintaining homeostasis.

The ANS is responsible for the response used to regulate “set points” in this negative feedback loop.

“Effectors” in the ANS

1) 

2) 

II. Autonomic Organization

Two + one distinct divisions:

1. Sympathetic

   General role:

2. Parasympathetic

   General role:

AN IMPORTANT A.N.S. NOTE:

★3. Enteric

   General role:
III. Autonomic Output Pathways

1. Anatomy - refer to A550 notes

2. Neurotransmitters
   Spinal motor neurons: use acetylcholine (ACh) to activate skeletal muscle fibers. The ANS uses two neurotransmitters and can either activate OR inhibit the effector.

3. Receptors/channels ... are important because they______________________________.

   A. Sympathetic
      i. Preganglionic
         ii. Postganglionic

   B. Parasympathetic
      i. Preganglionic
         ii. Postganglionic
IV. Adrenal Medulla: exception to several rules