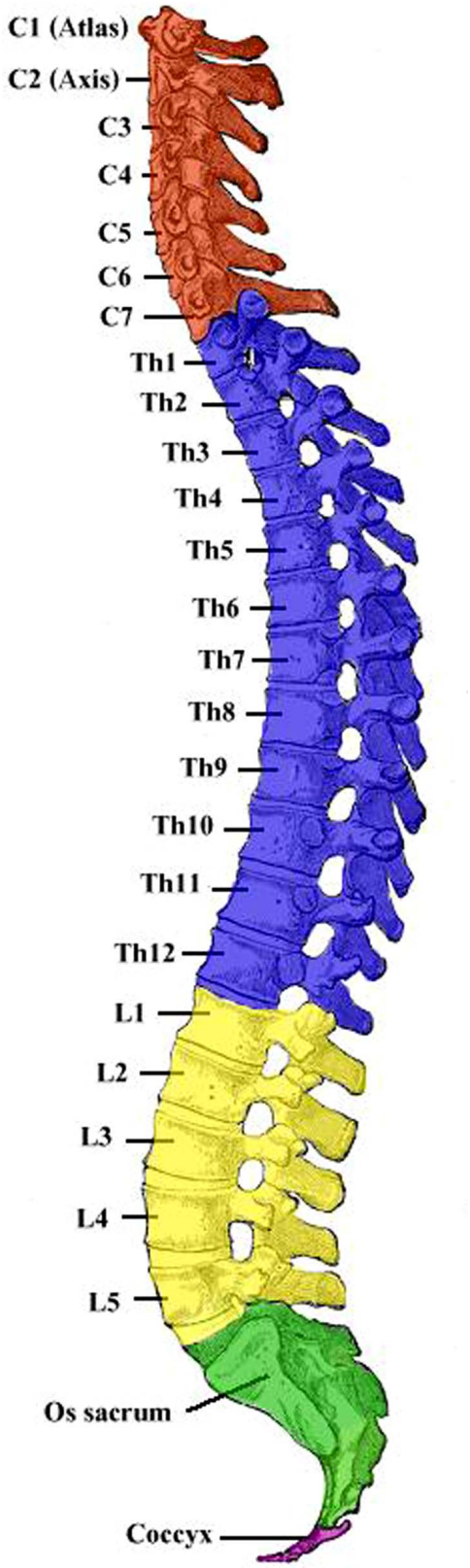
VON VOIGTLANDER WOMEN'S HOSPITAL
MICHIGAN MEDICINE

Anatomy of the Spine



The spine is made up of bones, muscles, tendons, nerves, and other tissues that reach from the base of the skull to the coccyx (tailbone). The vertebrae (back bones) of the spine include the cervical spine (C1-C7), thoracic spine (T1-T12), lumbar spine (L1-L5), sacral spine (S1-S5), and the tailbone. Each vertebra is separated by a disc. The vertebrae surround and protect the spinal cord.

The Cervical vertebrae (C-1 through C-7) control signals to the:

- Back of the head
- Neck and shoulders
- Arms and hands
- Diaphragm (the muscle that sits at bottom of chest and separates abdomen (belly) from chest)

The Thoracic vertebrae (T1 through T12) Thoracic spinal nerves control signals to the chest muscles, some muscles of the back and parts of the abdomen.

The Lumbar vertebrae (L-1 through L-5) control signals to the:

- Lower part of the abdomen and the back
- Buttocks
- Some parts of the external genital organs
- Parts of the leg

Sacral spinal nerves (S-1 to S5) control signals to the:

- Thighs
- Lower part of the legs
- Feet
- Most of the external genital organs
- Area around the anus

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