

# Zygote Human Anatomy Version 3.5 Upgrades

## Upgrade 3.5: Nervous System

Our upgraded Nervous System model has increased detail to the Brain including a Cerebrum better revealing typical features such as landmark sulci and gyri; it also now includes internal brain anatomy. Newly improved grouping better enables users to easily select and show any feature of the brain; now simply add transparency to the Cerebrum and Cerebellum to reveal anatomical features deep within the Brain.

*Upgraded Features to Brain 3.5 include:*

- \* Increased Cerebral Definition
- \* Central Sulcus
- \* Superior Frontal Sulcus
- \* Lateral Sulcus
- \* Precentral Gyrus
- \* Postcentral Gyrus
- \* Superior Frontal Gyrus
- \* Interior Anatomy
- \* Basal Ganglia
- \* Caudate Nucleus
- \* Putamen
- \* Globus pallidus
- \* Lateral Medial
- \* Fornix
- \* Mamillary Bodies
- \* Amygdaloid Bodies
- \* Body of Fornix
- \* Hippocampus
- \* Thalamus
- \* Hypothalamus
- \* Subthalamic Nucleus
- \* Substantia Nigra
- \* Lateral Ventricle
- \* Interventricular Foramen
- \* Third Ventricle
- \* Cerebral Aqueduct
- \* Fourth Ventricle

Insula and Brain Stem models are available separately.

## Upgrade 3.5: Circulatory System

Our upgraded Circulatory System model now includes much more detailed and accurate vessels to and from every organ. Branches of arteries and veins providing circulation to viscera as well as reproductive organs now enables illustration of blood flow from the heart to every organ and extremity of the body.

### **Upgraded Features of the Circulatory System 3.5**

- \* Vasculature of Liver
- \* Vasculature of Stomach
- \* Vasculature of Kidneys
- \* Vasculature of Large and Small Intestines
- \* Vasculature of Spleen
- \* Vasculature of Pancreas
- \* Vasculature of Reproductive Organs

### **Upgrade 3.5: New Connective Tissue Model**

Our new Connective Tissue model now is sold as part of the Male and Female Anatomy Collections 3.5. Each joint of the appendicular skeleton is included - from the Distal Interphalangeal Joints of the hands and feet, to the Ligaments and Acetabular Surfaces of the shoulders and hips. Each individual ligament and bursa is modeled independently and grouped so that users can easily focus illustrations or animations on relevant joint anatomy.

*Joints included in the Connective Tissue Model 3.5 include:*

- \* Interphalangeal Joints of the hands and feet
- \* Metacarpophalangeal Joints
- \* Metatarsophalangeal Joints
- \* Deep Transverse Metacarpal and Metatarsal Ligaments
- \* Ligaments of Wrist
- \* Ligaments of Ankle
- \* Interosseous Membranes of Arm and Leg
- \* Ligaments and Cartilage of Knee
- \* Ligaments and Capsule of Elbow
- \* Ligaments and Cartilage of Hip
- \* Ligaments and Cartilage of Shoulder

### **Upgrade 3.5: Organ Texture Map**

With version 3.5, texture maps are available not only for the exteriors of every organ, but now a texture and bump map is also available for the interior of the Stomach.

### **Upgrade 3.5: Male Reproductive System**

Our Male Reproductive System has been upgraded to now include much greater anatomical detail. Synchronizing with our version 3.5 Circulatory System, blood flow to and from the male Reproductive System can be illustrated along with detailed structures of male anatomy.

### **Upgrades to the Male Reproductive System 3.5 include:**

- \* Detailed Blood Vessels to Testis and Penile Tissue
- \* Detailed Testicles with Rete Testis and Seminiferous Tubules
- \* Tunica Albuginea
- \* Efferent Ductules
- \* Epididymis
- \* Ductus Deferens

- \* Cremaster Muscle
- \* Scrotal Facia
- \* Detailed Seminal Vesicle
- \* Detailed Prostate
- \* Prostatic Utricle
- \* Ejaculatory Ducts

### **Upgrade 3.5: Lymphatic System**

Upgrades have been made to the Lymphatic System to improve its positioning in relation to other systems of the body. Now users will more easily illustrate the relationship of Lymph Nodes to other anatomical features of the body.

### **Upgrade 3.5: Muscle System**

The male Muscle System now includes muscles of the pelvic floor, and has been upgraded with increased connective tissue details in the texture map.