



World's most advanced
virtual-holographic system
for dissecting human anatomy in 3D

Cyber-Anatomy Medical Station™

powered by zSpace is an advanced immersive individualized system for dissecting virtual human cadavers

Medical Station™ powered by zSpace offers immersive 3D stereographic technology to enable a user to visualize and interact with detailed anatomy through an intuitive approach.

“As a professor of anatomy for over 33 years, a program of this quality is long overdue! Cyber-Anatomy has the **potential to significantly impact student learning** of human anatomy in a **significant and positive way.**”

— Robert B. Tallitsch, Ph.D.
Professor of Biology, Augustana College Rock Island, IL, USA
Author of Human Anatomy, Fourth Edition, by Martini, F.H., Timmons, M.J., and Tallitsch, B., Pearson Publishing.



Realistic Human Body

Every aspect of the human body has been represented in 3D. Our 3D models were created from CT/MR images and actual cadavers, and reviewed by medical doctors and professors of anatomy. A comprehensive effort focused on modeling every anatomical structure larger than 1mm in size, yielding medical level accuracy and detail.

Foot detail with labeling

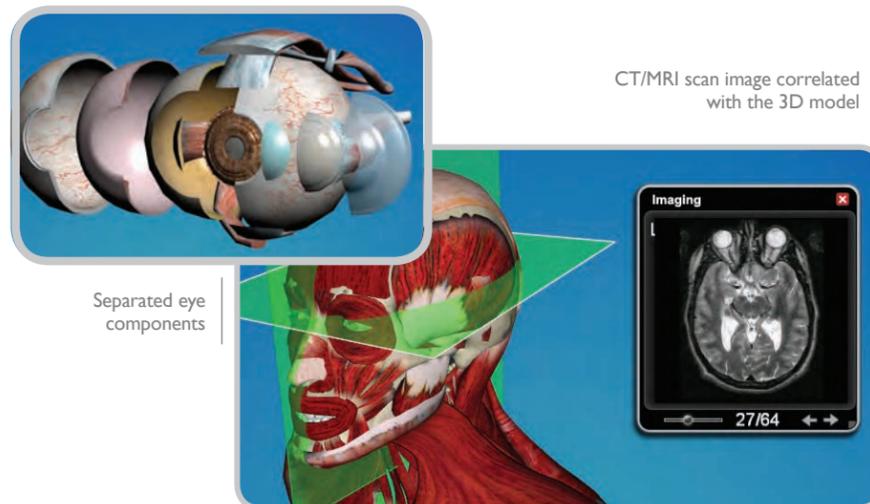
Right first metatarsa
Proximal phalanx

Cyber-Anatomy MedVR™
Anatomy Builder Interface

<ul style="list-style-type: none"> Thorax Skeletal Muscular Circulatory Nervous Digestive Respiratory Lymphatic Skin 	<ul style="list-style-type: none"> Back and Spine Skeletal Muscular Circulatory Nervous Skin 	<ul style="list-style-type: none"> Head and Neck Skeletal Muscular Circulatory Nervous Digestive Respiratory Lymphatic Skin 	<ul style="list-style-type: none"> Left Upper Limb Skeletal Muscular Circulatory Nervous Lymphatic Skin 	<ul style="list-style-type: none"> Abdomen Skeletal Muscular Circulatory Nervous Digestive Urinary Lymphatic Skin
<ul style="list-style-type: none"> Right Upper Limb Skeletal Muscular Circulatory Nervous Lymphatic Skin 	<ul style="list-style-type: none"> Pelvis Skeletal Muscular Circulatory Nervous Digestive Urinary Lymphatic Reproductive Skin 	<ul style="list-style-type: none"> Right Lower Limb Skeletal Muscular Circulatory Nervous Lymphatic Skin 	<ul style="list-style-type: none"> Left Lower Limb Skeletal Muscular Circulatory Nervous Lymphatic Skin 	

Advanced Virtual-Holographic Interactivity

- Personal dissection
- Most accurate 3D anatomical models, validated by medical doctors and anatomy professors
- Both male and female detailed anatomy
- Over 4,300 structures modeled in 3D
- Over 13,500 anatomical landmarks, labeled
- A variety of interactive tools provide the user with full control of the 3D model



Anatomy Systems Modeled:

- The Skeleton
- Joints
- Ligaments
- Muscular System/Tissue
- Nervous System/Tissue
- The Brain
- Endocrine System
- Cardiovascular System
- Lymphatic System
- Respiratory System
- Digestive System
- Urinary System
- Reproductive Systems (Male and Female)
- Anatomical Landmarks
- Muscle origins and insertions

Improved Learning

Under grant funding from the National Science Foundation, Dr. Robert Tallitsch of Augustana College (Illinois, USA) conducted a formal study showing a 35% increase in spatial reasoning and a 33% increase in retention using Cyber-Anatomy software.

Fully Interactive

Cyber-Anatomy Medical Station employs camera functions such as zoom, pan, rotate, and rotate in plane. The user can peel, hide, and control the contrast and brightness of each anatomical object to produce compelling educational illustrations.

Customizable Content

Instructors can use the Cyber-Anatomy 'Presenter' functionality to produce detailed sequences highlighting anatomical concepts. The system provides multiple standard Anatomica Terminologia labeling, and also supports user-defined labels, annotations, and functional descriptions in multiple languages to produce a fully customized learning experience. Images can also be integrated into these sessions and correlated to Cyber-Anatomy models to fully illustrate relevant processes and concepts.

Searching

A powerful search engine is provided to manage access to the internal feature database. Search results include CT/MR images, illustrations, anatomical models, and landmarks.

CT/MRI Imaging

With 10 sets of CT/MRI scans (over 750 images) correlated to the appropriate position in the body, a user can browse various scans and learn the interpretation and relation of a scan with respect to the body.

Visible Human Cross-Sections

Over 25,000 cryosection images (cryogenic cross-sections) of representative male anatomy are provided for correlation to the 3D model. These sectional images are provided courtesy of the US National Institutes of Health.

Quizzing

Embedded quizzing features challenge students to find and identify anatomical structures, and to answer multiple choice questions.

www.Cyber - Anatomy.com

Virtual-Holographic 3D

Employing camera functions such as zoom, rotate, pan, and walk, the user is able to examine and manipulate the scene. The user can peel or hide anatomical structures in to reveal

Product Specifications

- zSpace display, 24 inch HD Stereo LCD (1080p @ 120Hz) with tracking sensors
- Direct interaction stylus with 3-buttons and integrated accelerometer and vibration feedback
- Polarized passive eyewear with trackable markers
- SDK for application development

System Requirements

- 4+ GB of system memory (8 GB recommended)
- Windows 7 32/64bit or Windows XP 32/64bit
- nVidia Quadro K series or AMD FirePro V or W series GPU
- Intel Core i7 2.2ghz+ CPU, Xeon E3 or E5, AMD Opteron 4200 series, AMD FX-8xxx series, AMD Phenom II X6 or greater recommended

About zSpace

zSpace is a privately held, venture backed company located in Sunnyvale, CA, and has filed more than 30 patents for its innovative technologies.



CYBER-ANATOMY

Cyber-Anatomy Inc.
805 2nd Street, Suite 1.
Coralville, IA 52251
319.354.2555
sales@cyber-anatomy.com
www.cyber-anatomy.com

zSpace, Inc.
490 De Guigne Drive, Suite 200.
Sunnyvale, CA 94085
408.498.4550
sales@zspace.com
www.zspace.com