



Specification cadaVR Anatomy

3D Anatomy Atlas
based on Real cadavers
with VR support



Content

Application

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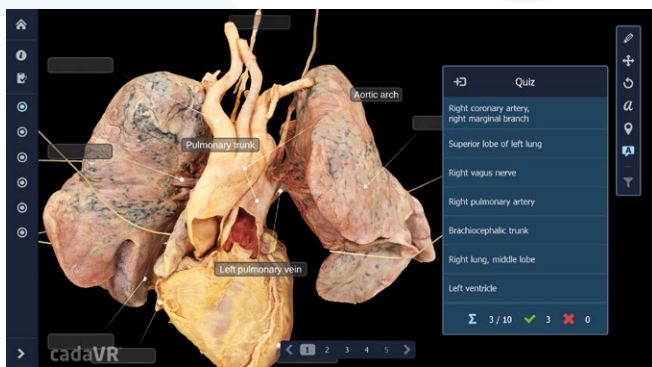
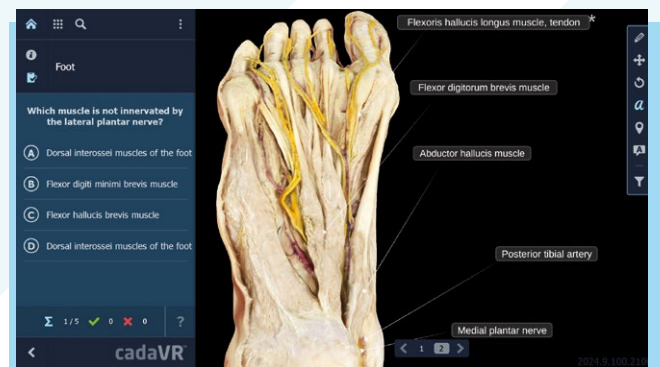


cadaVR[™]
anatomy

cadaVR anatomy - Content

The cadaVR digital anatomy atlas offers medical students and teachers a unique opportunity to study anatomical structures. The atlas contains 3D models digitalised from a collection of **real anatomical specimens found in the dissecting room as well as rare fixed wet and paraffin-embedded specimens.**

The digital atlas supports VR devices and includes **more than 280 models, 10,000 labels and 1,000 quiz questions**, providing an extensive and efficient educational tool both for medical staff and students in training.



Real cadavers

The spectacular anatomic models offer a realistic view in virtual space and can thus complement the limited number of classes spent in the dissection room. **The models enable students to profoundly understand anatomical structures** and provide teachers with a unique opportunity to share their knowledge.

Content:

- 3D models based on real anatomical specimens found in dissecting rooms
- 280+ high-quality, optimised and photoscanned models
- texts written and images reviewed by anatomy experts
- models, based on special specimens found in a museum, presenting organs and organ systems
- body sections that show every 2 cm of the human body from the top of the head to the sole of the feet
- more than 10,000 labels with additional clinical information
- self-check, quiz, labelling exercise
- complementary developmental biology and patient education animations
- 3D human body generated from real CT images, which can be freely cut along 3 axes
- comparison based on body sections and CT images

cadaVR anatomy - Application

Available on PCs, mobile devices and VR headsets

In the virtual environment, the highly detailed models, based on real anatomical specimens, come to life. **Connect a supported VR device to your PC** or get the **native app** from the app stores. You can have a fully functional anatomy application on your mobile devices. The cadaVR app supports **Meta Quest** and **Pico** VR devices.







Application:






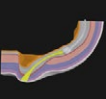
- easy-to-use user interface with a clean design
- labels in the Latin language
- multiplatform:
 - PC: Windows, MacOS, Linux, ChromeOS
 - Mobile: iOS, Android
 - VR: Meta Quest 2/3/3s, Pico 3/4 normal + Enterprise
- interactive VR environment, controller-based use with full functionality
- data traffic saving operation

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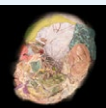


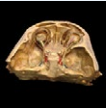


Bodysurface

1		Whole-body CT scans (female)	Computer tomography images of a female human cadaver.
2		Whole-body CT scans (male)	Computer tomography images of a male human cadaver.
3		Surface anatomy of the human body	This 3D scene demonstrates the surface anatomy of both the female and male body.
4		Cross-section cadaver	The organs are shown in accordance with modern imaging techniques on two-dimensional projections of a three-dimensional human body.


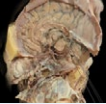
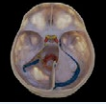
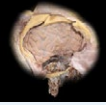


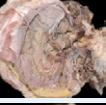









Developmental biology

5		Inversion and eversion of the foot	Demonstration of the inversion and eversion of the foot through animations.
6		Lateral folding in the embryo	In the early phase of embryonic development, the lateral edges of the embryonic disc flex ventrally and fuse.
7		Development of the optic cup	The optic cup develops in the diencephalon following the closure of the neural tube.
8		Descent of the testes	Descent of the testes through the inguinal canals into the scrotum.

Headneck








9		Special approaches of the regions of the head 2	Demonstration of the blood vessels, nerves and muscles located around the dura mater and the mandible.
10		Special approaches of the regions of the head 1	This scene demonstrates superficial blood vessels, nerves, and muscles of the head.
11		Cervical organs and their blood supply	This 3D scene demonstrates the anatomy and arterial blood supply of the larynx and the related organs.
12		Orbit	This 3D scene presents the muscles and nerves of the orbit.
13		Submandibular and sublingual regions	This 3D scene demonstrates the anatomical structures of the submandibular and sublingual regions.
14		Tongue, larynx and trachea	This 3D scene demonstrates the anatomy of the tongue, larynx and trachea.

>> Headneck




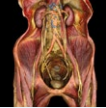





15		Prepared skull	This dissected skull shows cranial cavity systems of various functions.
16		Special approaches of the regions of the head 4	This 3D scene concentrates exclusively on deep cerebral structures.
17		Cranial nerves and vessels	The 12 pairs of cranial nerves are components of the peripheral nervous system.
18		Special approaches of the regions of the head 6	This scene demonstrates the major anatomical structures visible before and after decompressive craniotomy.
19		Skull and meninges	The scene demonstrates selected parts of the skull and the meninges.
20		Cranial base and its surface structures	This 3D scene demonstrates the external and internal structures of the cranial base as well as the orbit.
21		Special approaches of the regions of the head 5	This 3D scene demonstrates anatomical structures found in the deep part of the brain and around the brainstem.
22		Special approaches of the regions of the head 3	Superficial and deeper structures are demonstrated in the opened cranium.
23		Newborn skull	Brief anatomical description of the newborn skull.
24		Temporal bone (opened)	This 3D scene demonstrates the anatomical structures of the paired temporal bones.
25		Petrus part of temporal bone	This 3D scene demonstrates the medial part of the temporal bone.
26		Skull	Proper knowledge of the anatomical structures of the skull is essential both in gross anatomical descriptions and in clinical practice.
27		Cerebellum and brainstem	This 3D scene demonstrates major anatomical structures of the cerebellum and the brainstem.
28		Dissected heads	This scene presents various dissected heads in which major anatomical structures can be studied.
29		Ethmoid bone	Ethmoid bone is an unpaired, cubical bone located between the two orbits.
30		Cerebral hemispheres	This 3D scene demonstrates the cerebral cortex and internal structures of the brain.

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>> Headneck

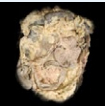
















31		Teeth	This scene demonstrates all human teeth in anatomical position.
32		The temporal bone	The scene shows the surface structures of the temporal bones of the skull.
33		Cerebrum (median sagittal section)	This 3D scene allows for studying the cerebral structures.
34		External and middle ear	This 3D scene demonstrates the anatomical structures of the external and middle ear.
35		Head	This 3D scene demonstrates the muscles, blood vessels and nerves of the head.
36		The brain in situ and the meninges	The meninges are membranes that envelop the central nervous system.
37		Sphenoid bone	Because of its centrally placed body with the greater and lesser wings extending on each side, the sphenoid bone resembles a bat.

Trunk

38		Topography of the abdominal organs	This scene presents the location of the organs in the abdominal cavity.
39		Muscles of the abdominal wall	This 3D scene demonstrates location and layered arrangement of the muscles of the abdominal wall.
40		Muscles of the back	This scene demonstrates the superficial and deep muscles of the back.
41		Thoracic, abdominal, and pelvic cavities	The human trunk can be divided into three major parts: thorax, abdomen, and pelvis.
42		Muscles of the anterior chest wall	This 3D scene demonstrates the superficial muscles of the anterior chest wall and the abdominal wall.
43		Muscles of the trunk	This 3D scene demonstrates the muscles of the trunk and the anatomy of the sternum.
44		Female pelvis	This 3D scene demonstrates the anatomy, blood supply and nerves of the female pelvis.
45		Lumbosacral plexus	This 3D scene demonstrates the course of the lumbosacral plexus.
46		Perineal region	This scene demonstrates the anatomical structures of the male and female perineal regions.

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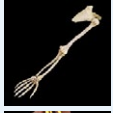
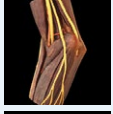

>> Trunk

47		Abdominal organs and their blood supply	This 3D scene shows the arterial blood supply of the abdominal part of the digestive system.
48		Vertebral column	The vertebral column supports the skull, the pectoral girdle, the upper limbs, the thoracic cage, and the pelvic girdle.
49		Retroperitoneal organs	This 3D scene demonstrates the kidneys and the anatomical structures of the retroperitoneum.
50		Thoracic cavity and intercostal space 2	The 3D scene demonstrates the anatomical structures of the mediastinum, the central part of the thoracic cavity.
51		Frontal sections of the trunk	This 3D scene shows frontal sections of the trunk in the male and female body.
52		Heart	Located at the center of the circulatory system, the heart is a muscular organ that acts as a pump.
53		Thoracic and abdominal situs	This 3D scene demonstrates the organs of the thoracic and abdominal cavities.
54		Topography of the lumbar plexus	This 3D scene demonstrates the topography of the lumbar plexus.
55		Muscles of the head, neck and trunk (selected)	This 3D scene demonstrates the muscles of the head, neck, and chest, as well as the axial muscles and the muscles of the posterior abdominal wall.
56		Heart and lungs	This 3D scene demonstrates the anatomical structures of the heart, the lungs and the lower airways.
57		Male genital organs and pelvis 1	Male genital organs are categorized as external or internal organs.
58		Small intestine	The small intestine is the longest, approximately 5–6 m long segment of the gastrointestinal tract.
59		Male genital organs and pelvis 2	This 3D scene demonstrates the external and the internal male genital organs.
60		Spinal cord	This 3D scene demonstrates the anatomical structures of the human spinal cord both in situ and ex situ.
61		Sympathetic trunk	This 3D scene allows the study of the entire course of the sympathetic nervous system.
62		Liver, stomach, and duodenum	This 3D scene demonstrates the anatomy and the location of the liver, the stomach and the duodenum in the abdominal cavity.
63		Large intestine	Large intestine is the terminal part of the gastrointestinal system, reaching a length of approximately 1.5 meters.









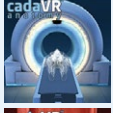

Limb		
64		Muscles and nerves of the foot This 3D scene demonstrates the superficial and deep nerves and muscles of the foot.
65		Muscles of the leg and foot 1 This 3D scene demonstrates the muscle groups of the leg and foot.
66		Upper limb 1 The scene demonstrates the muscles of the shoulder girdle and the free upper limb.
67		Bones of the pelvic girdle and lower limb The lower extremity consists of the pelvic girdle and the free lower limb.
68		Ankle joint and joints and ligaments of the foot This scene demonstrates the anatomy of the foot and the ankle, as well as the ligaments.
69		Muscles of the hip and the free lower limb This scene demonstrates the superficial and deep muscles of the hip, thigh, leg, and foot.
70		Muscles, vessels, and nerves of the pelvis This 3D scene demonstrates the muscles, blood vessels and nerves of the pelvis.
71		Muscles, blood vessels and nerves of the hand This 3D scene demonstrates the muscles, blood vessels and nerves of the human hand.
72		Elbow joint The elbow joint is a complex joint.
73		Brachial plexus Brachial plexus supplies the muscles of the shoulder girdle and provides complete innervation for the free upper limb.
74		Upper limb 2 Cutaneous innervation and blood supply of the upper limb.
75		Knee joint This 3D scene shows the basic anatomy of the knee joint, the muscles that move the joint, the borders of the popliteal fossa, and the anatomical structures found in it.
76		Muscles of the leg and foot 2 This 3D scene demonstrates the muscles that move the ankle and the joints of the foot.
77		Bones and ligaments of the pectoral girdle This scene demonstrates the bones and ligaments of the pectoral girdle.
78		Muscles of the shoulder joint, arteries and nerves The scene demonstrates the muscles, blood vessels and nerves of the shoulder and the arm.
79		Upper limb 3 This scene demonstrates the blood vessels, muscles and nerves of the upper limb.

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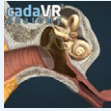

>> Limb

80		Lower limb (muscles, vessels, and nerves)	The animation demonstrates the muscles and the most important arteries, veins and nerves of the lower limbs.
81		Foot	This 3D scene demonstrates the muscles, blood vessels and nerves of the sole of the foot.
82		Bones of the upper limb	The upper limb consists of the shoulder girdle and the free part of the upper limb.
83		Cubital region (muscles, vessels, and nerves)	The 3D scene demonstrates the nerves, blood vessels, and muscles of the cubital region.
84		Muscles of the pelvis and muscles of the lower limb (selection)	The lower limbs carry the entire body weight and provide balance and stability for bipedal locomotion.

Patient information

85		Flat feet - formation, prevention and management	An orthopaedic disease of the foot, in which the longitudinal arch of the foot, formed by the tarsal bones, collapses.
86		Appendicitis - symptoms, management, and prevention	Appendicitis is the inflammation of the vermiform appendix, which is connected to the cecum. It requires immediate surgical intervention.
87		Color vision deficiency and color blindness	The inability to differentiate certain colors is called color vision deficiency.
88		Short-sightedness and long-sightedness	Concave and convex lenses are commonly used for the correction of short-sightedness and long-sightedness.
89		Spinal deformities	Persistent changes in the healthy curvature of the spine are considered spinal deformities.
90		The functioning of the heart; ECG	The heart generates the electrical impulses with the help of the sinoatrial node. These impulses control the functioning of the atria and the ventricles.
91		Human body (male)	This animation introduces the most important organ systems of the human body.
92		What you need to know about heart attacks	A heart attack happens when a coronary artery is blocked, causing damage to the heart muscle. It is one of the most common causes of death.
93		PET-CT	Through positron emission tomography (PET), visual information on the anatomical structure and the functioning of internal organs can be obtained.
94		Thrombosis and pulmonary embolism	Thrombosis is the formation of a blood clot in the deep veins of the lower limbs that can cause a fatal pulmonary embolism.

>> Patient information

95		The effects of sun exposure on the skin	Demonstrating the damaging effect of sunlight on the skin.
96		Birthmarks and melanomas	Birthmarks, dark lesions on the skin or mucous membranes are benign in most cases, but they can become malignant when exposed to regular mechanical irritation or excessive sunlight.
97		Otitis media and possible complications	This animation explains the symptoms and treatment of otitis media (middle ear infection).
98		The effects of smoking	Smoking severely damages the respiratory system, it may cause COPD or lung cancer.