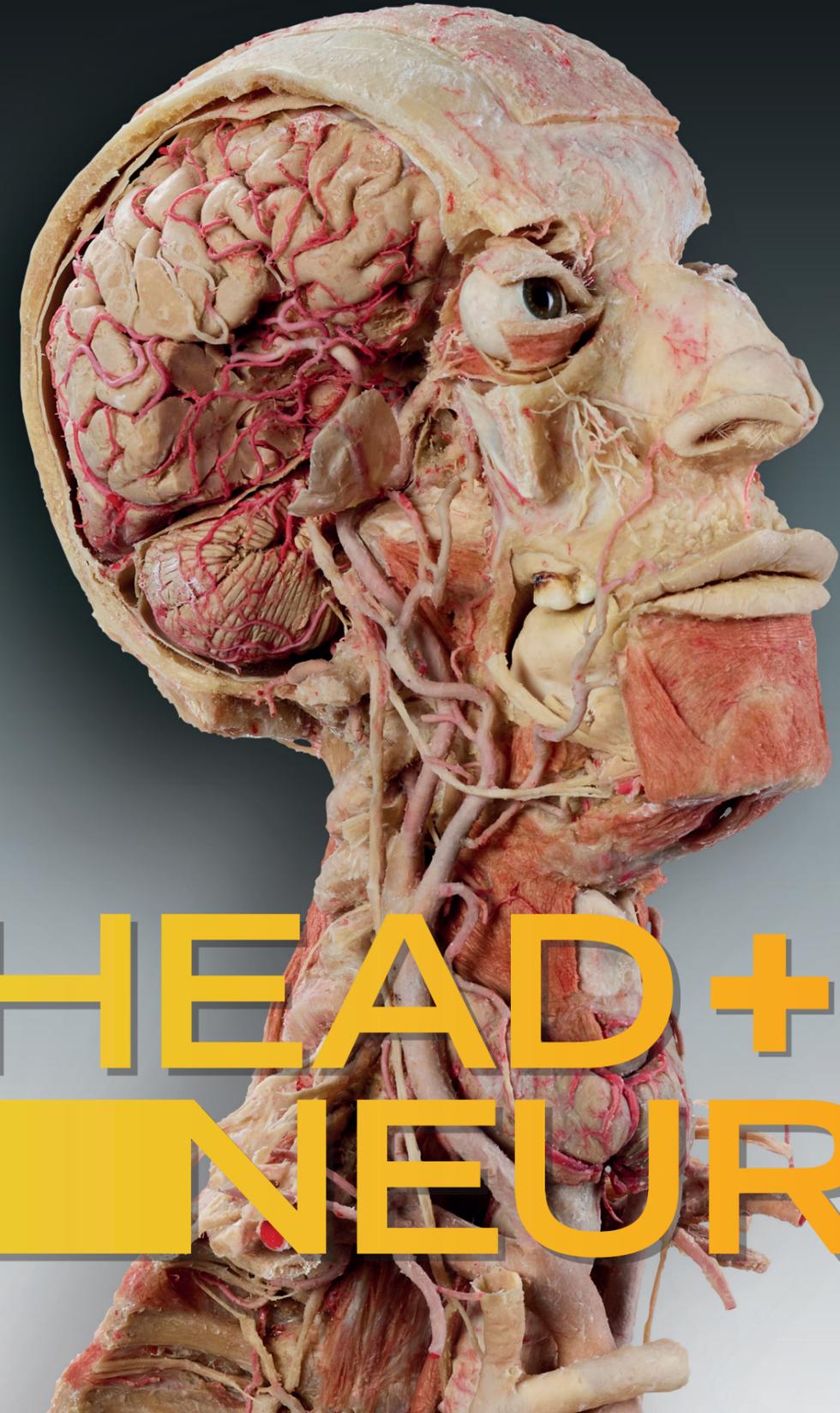


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HEAD + NEURO

www.vonHagens-Plastination.com

03/2022

A warm welcome from the team at von Hagens Plastination. Within this brochure, we are delighted to share a unique collection of anatomical specimens that will provide detailed insights into the complex yet beautiful anatomy of the head and nervous system. Many are special dissections that do not appear in our main catalog. The brochure will provide specialists in anatomical, medical and healthcare training an insight into the art and precision involved in the preparation of the highest quality Plastinated Specimens and Sheet Plastinates (slices), and an overview of their unique value in education.

Our invaluable collections of specimens will be presented across four chapters:

01 STEP-BY-STEP ANATOMY

This chapter shows how the progressive views seen in a classical dissection-based anatomy course can be demonstrated using Plastinated Specimens. Our specimens can be arranged, viewed and explored in a stepwise manner, providing learners time to explore, test and apply their knowledge. Uniquely, our specimens are able to reveal to educators, learners and practitioners, some of the most complicated or concealed regions of anatomy and even the smallest of structures—many of which are rarely seen. At every step learners can discover classic anatomical views, positions, routes of travel and relationships.

02 FOCUSED ANATOMY

This chapter shows how our Plastinated Specimens can be carefully designed to provide focus on the detailed yet pertinent anatomy of specific regions, systems or areas, enabling emphasis on features and positional relationships relevant to both function and clinical practice.

03 NEUROANATOMY

As one of the main disciplines associated with head and neck anatomy, and traditionally described in combination, this chapter showcases our collection of exquisitely presented neuroanatomical dissections, many of which are ideal companions to our head and neck specimens.

04 CROSS-SECTIONAL ANATOMY

This chapter shows how our cross-sectional (Sheet Plastinate) slices directly relate to the modern clinical imaging technique, ultrasound, and can be used to enhance teaching, learning and mastery in this discipline.

All of our specimens are expertly dissected and presented, are simple and safe to store and use, are odorless and non-hazardous, and are made to benefit generations of learners.

CONTENTS

HEAD+NEURO



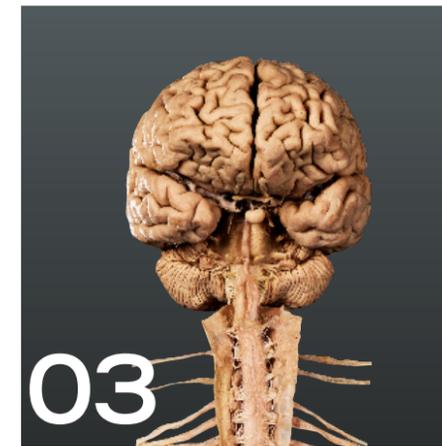
Page 6

STEP-BY-STEP ANATOMY



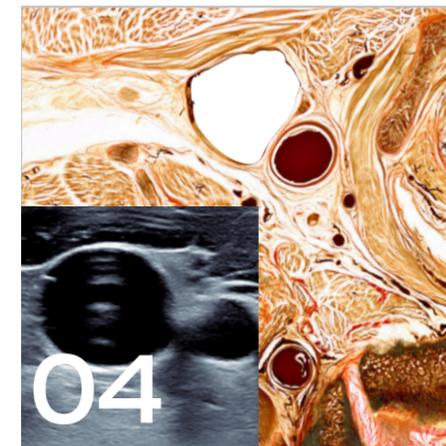
Page 16

FOCUSED ANATOMY



Page 40

NEUROANATOMY



Page 62

CROSS-SECTIONAL ANATOMY

Chapter

01

STEP-BY-STEP ANATOMY

This chapter shows how the progressive views seen in a classical dissection-based anatomy course can be demonstrated using Plastinated Specimens.

Our specimens can be arranged, viewed and explored in a stepwise manner, providing learners time to explore, apply and test their knowledge, and enhance their understanding of three-dimensional relationships.

Uniquely, our specimens show, educators, learners and practitioners, the most complicated regions of anatomy and even the smallest of structures—many of which are rarely seen.

At every step learners will discover classic anatomical views, routes of travel and positional relationships.

Specimens in this chapter are only available as pairs and are dissected from the head of a single body donor. They are presented as recommended combinations; however, any two of the six half head specimens can be combined.

Each pair of specimens is provided with six thin cross-sections (Sheet Plastinates) of a real human head, covering each reference plane (coronal, transverse and sagittal). These Sheet Plastinates* are an ideal companion to your combinations of dissections and will further enhance their educational value.

*not pictured

COMBINATION I

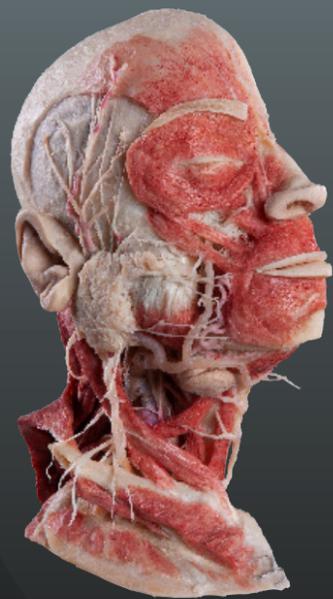
Dissection of superficial and intermediate levels consisting of HP0211 + HP0212

COMBINATION II

Dissection of intermediate and deep levels consisting of HP0213 + HP0214

COMBINATION III

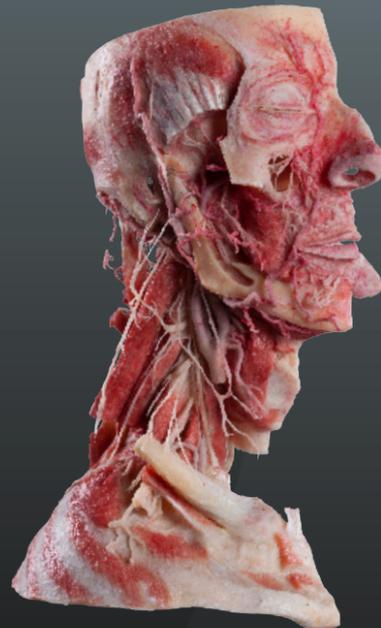
Dissection of superficial, intermediate and deep levels consisting of HP0215 + HP0216



HP0211
01.1



HP0212
01.2



HP0213
01.3



HP0214
01.4



HP0215
01.5



HP0216
01.6

01.1

COMBINATION I

ART.-NO. **HP02M01**

Dissection of superficial and intermediate levels consisting of HP0211 + HP0212

KEY FEATURES INCLUDE

- Superficial level dissection of the face and neck.
- Muscles of facial expressions with related arteries, veins and nerves.
- Salivary glands and the branching of the facial nerve (CN VII).
- Triangles of the neck with superficial structures *in-situ* (e.g., veins and branches of the cervical plexus).
- Intact anatomy shown along the median sagittal plane including the nasal septum, falx cerebri, corpus callosum, diencephalon, brainstem and cerebellum.

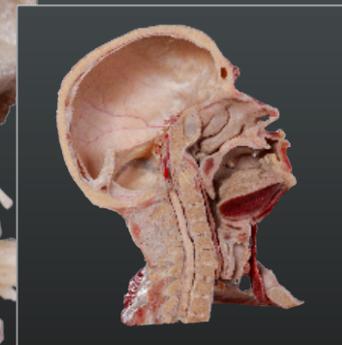


01.2

Comprises two half head dissections (sagittal cut) arising from a single body donor. Both halves of this combination are dissected to show superficial and intermediate levels. By design, the layers and structures shown on each half complement each other.

KEY FEATURES INCLUDE

- Intermediate level dissection of the neck, with salivary glands and sternocleidomastoid removed.
- Muscles of facial expression and mastication (temporalis and masseter).
- Temporomandibular joint, with its capsule intact.
- Brain, cerebellum and brainstem removed.
- Dura mater with its formations (folds) *in-situ*.
- Cranial nerves penetrating the dura mater.
- Lateral nasal cavity wall with nasal conchae.
- Floor of mouth with intact mucosa (tongue displaced medially).
- Intact hemi-pharyngeal cavity and hemi-laryngeal cavity.



01.3

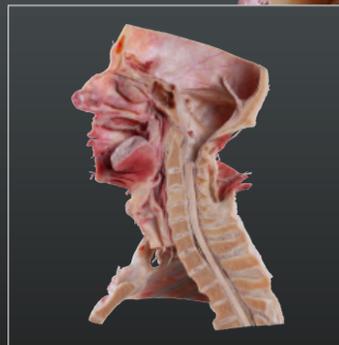
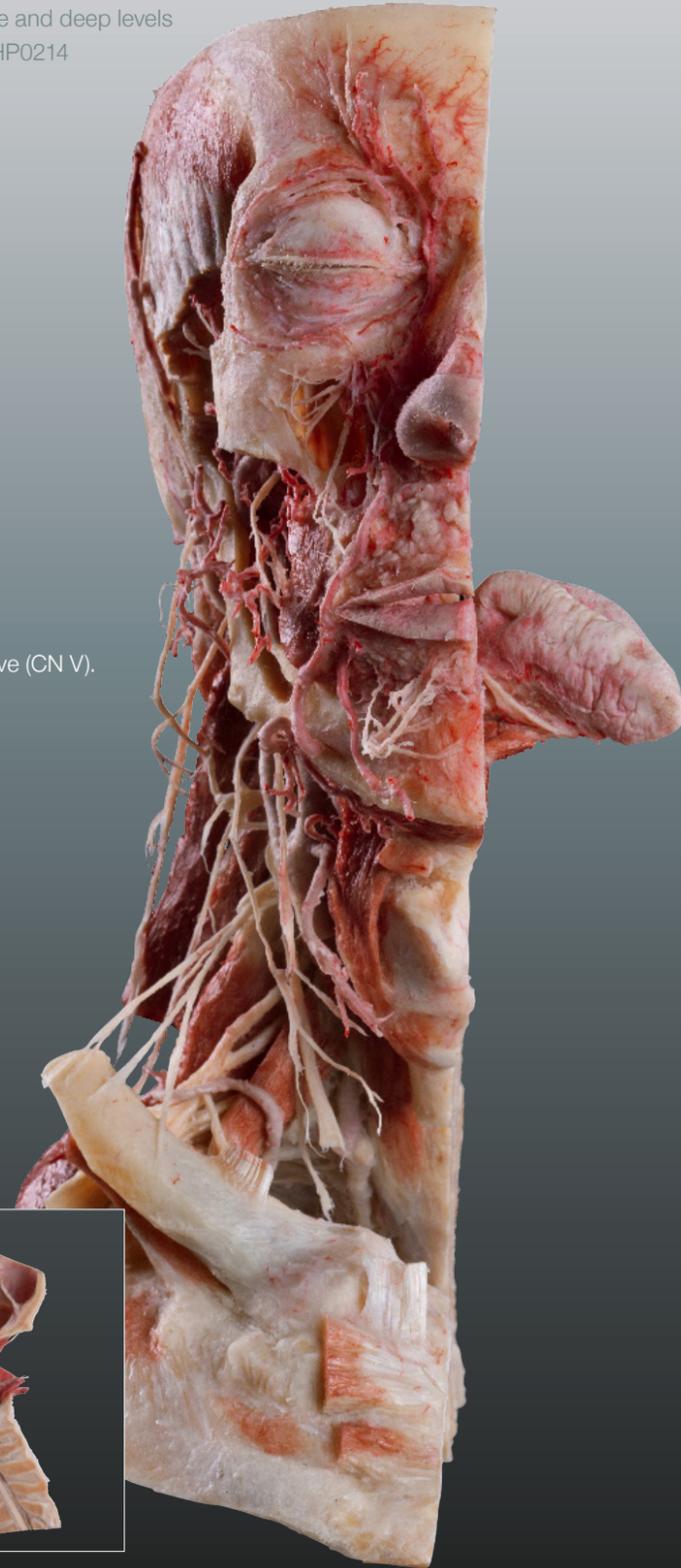
COMBINATION II

ART.-NO. **HP02M02**

Dissection of intermediate and deep levels consisting of HP0213 + HP0214

KEY FEATURES INCLUDE

- Skull cap removed.
- Deep dissection of the infratemporal fossa showing the pterygoid muscles and regional arteries.
- Internal structure of the temporomandibular joint shown via a sagittal cut.
- Dissection into the orbit through its roof.
- Eyelid structure including, superior and inferior tarsus, orbital septum and palpebral ligaments.
- Arteries of the face and distal branches of the trigeminal nerve (CN V).
- Medial view of the nasal cavity (septum removed) and pterygopalatine fossa, showing the pterygopalatine ganglion and related nerves.
- Tongue displaced medially to show the floor of the mouth.
- Mucosa removed from the lateral side of the tongue to show structures along the floor of the mouth.
- Deep dissection of the neck.



01.4

Comprises two half head dissections (sagittal cut) arising from a single body donor. The halves of this combination are dissected to show a combination of intermediate and deep levels.

KEY FEATURES INCLUDE

- Skull cap removed.
- Deep facial dissection showing the buccinator muscle.
- Temporomandibular joint with its capsule and capsular ligaments intact.
- Anterior view into the orbit, showing the eyeball and the extraocular muscles and their insertions.
- Nasal cartilages, nasal cavity, nasopharynx and oropharynx.
- Nasal conchae removed revealing the lateral nasal wall and ethmoidal bulla, and the drainage sites of the paranasal sinuses and nasolacrimal duct.
- Sphenoidal, ethmoidal and frontal sinuses opened
- Base of skull (cranial fossae) covered in dura mater, with the dural venous sinuses opened.
- Deep dissection of the structures and organs of the neck.



01.5

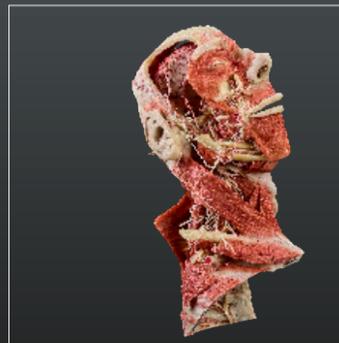
COMBINATION III

ART.-NO. **HP02M03**

Dissection of superficial, intermediate and deep levels consisting of HP0215 + HP0216

KEY FEATURES INCLUDE

- Temporal lobe of brain partially removed to expose the trigeminal ganglion and its divisions.
- Branches of the divisions of the trigeminal nerve (CN V).
- Main branches of the external carotid and maxillary arteries.
- Lateral and superior views of the orbital contents.
- Medial view into the pterygopalatine fossa.
- Parasympathetic ganglia of the head: ciliary, submandibular, pterygopalatine and otic.
- Intact anatomy shown along the median sagittal plane—including brain, brainstem and cerebellum, and the related arteries, veins and dural venous sinuses.
- Greater and lesser palatine nerves.
- Muscles of facial expression and vasculature of the face.
- Triangles of the neck with associated contents.

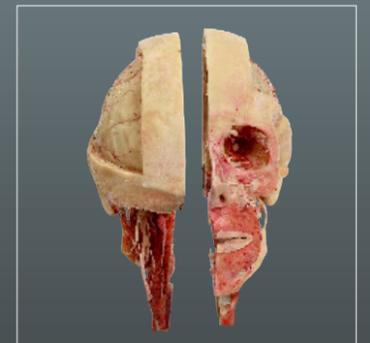
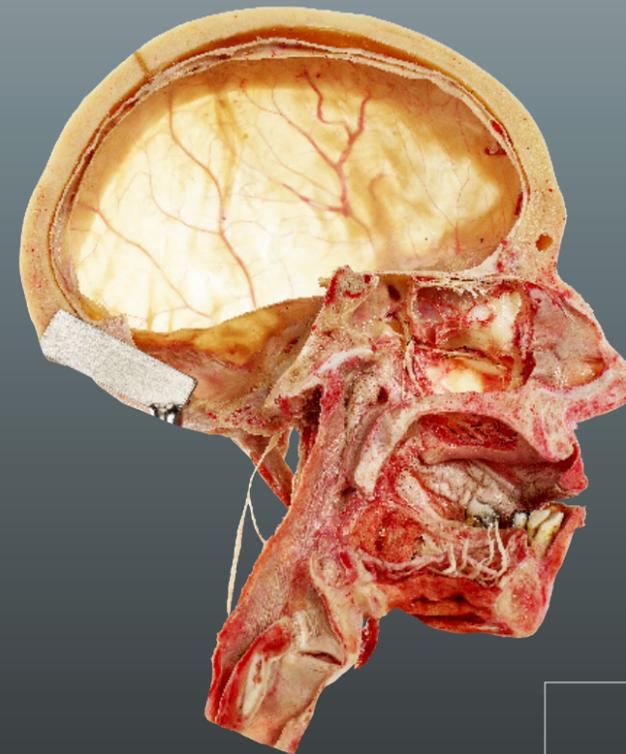


01.6

Comprises two half head dissections (sagittal cut) arising from a single body donor. The halves of this combination are dissected to show a combination of superficial, intermediate and deep levels.

KEY FEATURES INCLUDE

- Peripharyngeal space and infratemporal fossa.
- Muscles of the pharynx.
- Regional cranial nerves.
- Lateral view of the periosteal layer of dura mater with associated meningeal vessels.
- Anterior view of the orbit (with eyeball removed) showing the optic nerve and its meningeal coverings, and the extraocular muscles and their innervation.
- Nasal cartilages.
- Pterygopalatine ganglion and associated nerves.
- Auditory tube.
- Tongue removed to show regional nerves, arteries and muscles, and the salivary glands and their ducts.
- Hemi-laryngeal cavity showing the epiglottis, vocal and vestibular folds, and laryngeal ventricle.

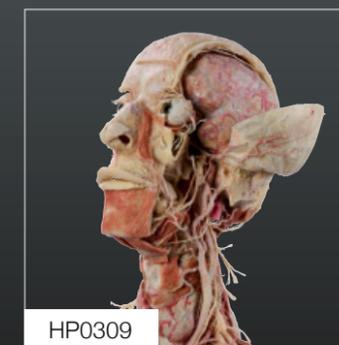
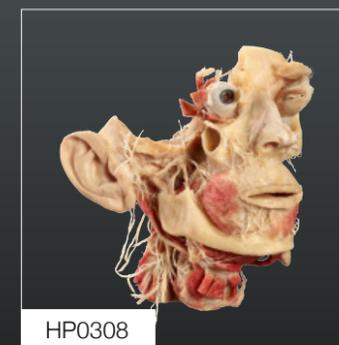
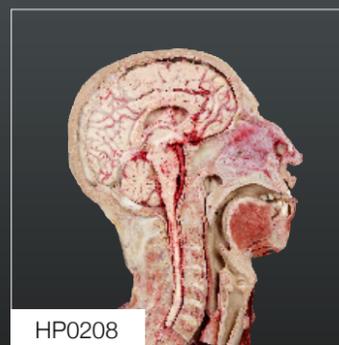
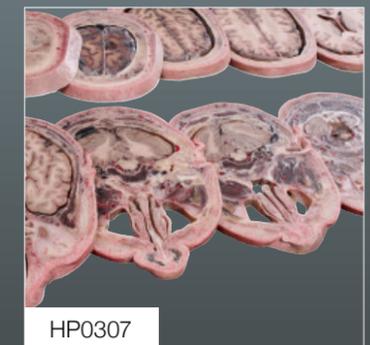
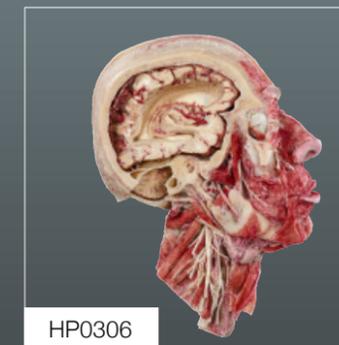
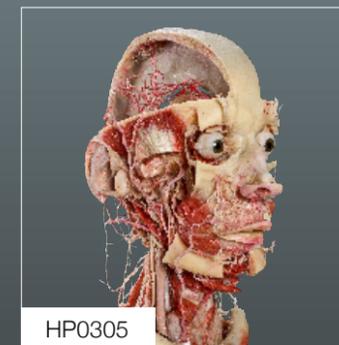
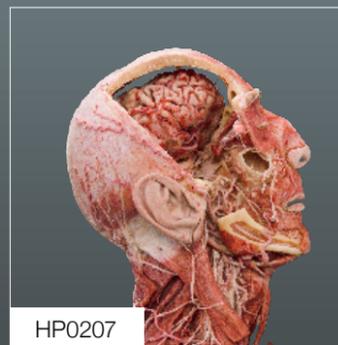
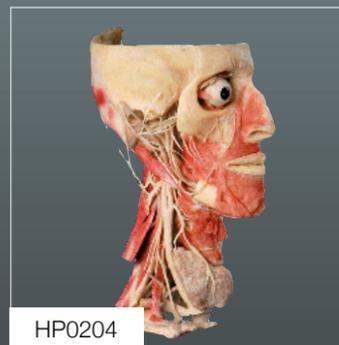
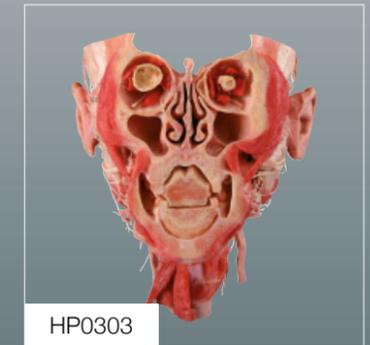
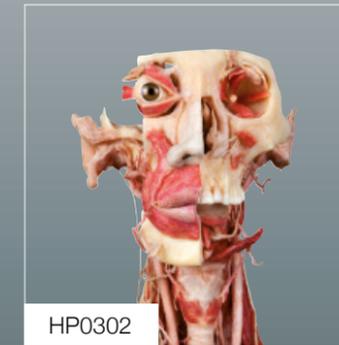
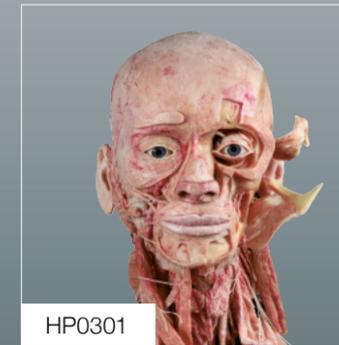
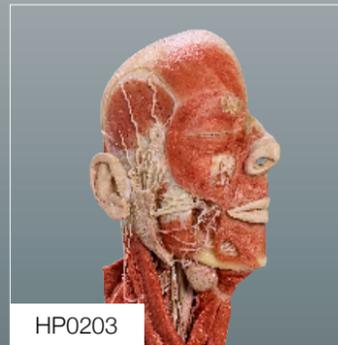
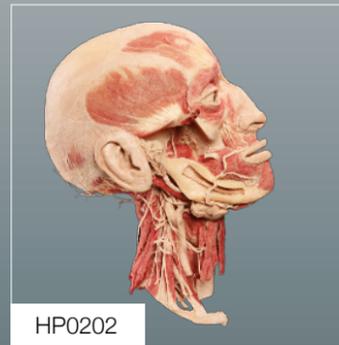
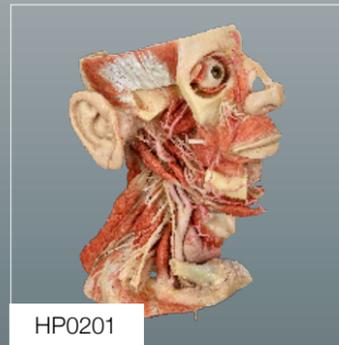


ADDITIONAL SILICONE PLASTINATES (HP)

To further enhance your learning and teaching, you might also benefit from our additional range of exquisitely prepared specimens.

More details can be found online or in our main catalogue.
www.vonHagens-Plastination.com/catalogue

ADDITIONAL SILICONE PLASTINATES (HP)



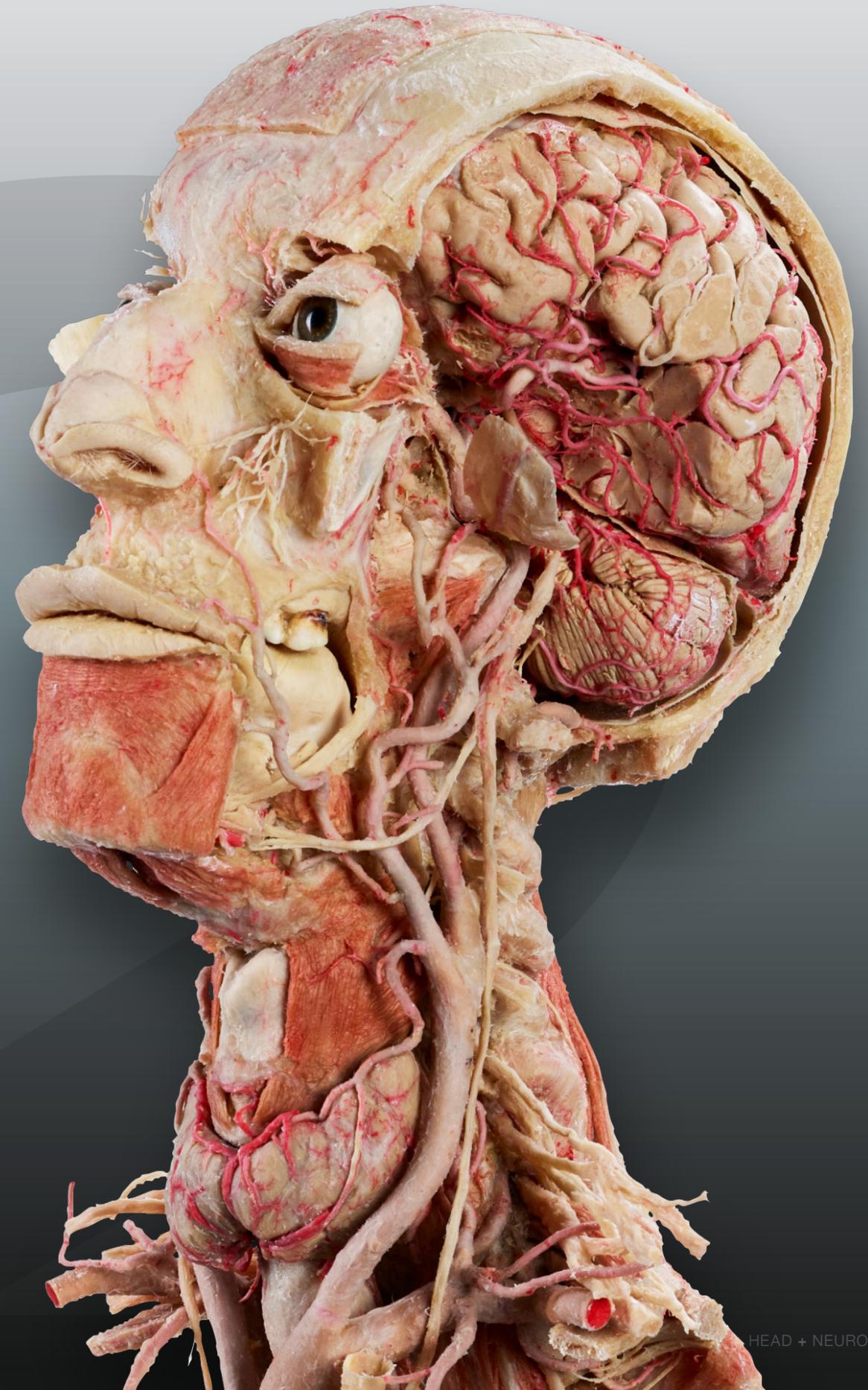
Chapter 02

FOCUSED ANATOMY

The carefully designed Plastinated Specimens in this chapter show how focus can be placed on the detailed yet pertinent anatomy of specific regions, systems or areas, enabling emphasis on key features, structural arrangements and positional relationships relevant to both function and clinical practice.

A selection of specimens are provided with three thin cross-sections (Sheet Plastinates) of a real head, one of each reference plane (coronal, transverse and sagittal). These Sheet Plastinates* are an ideal companion to your combinations of dissections and will further enhance their educational value.

*not pictured





Whole Head Specimen

incl. 3 Slices

02.1

ART.-NO. HP03M01

KEY FEATURES INCLUDE

- Consists of anterior and posterior parts.
- Cut coronally through the foramen magnum.
- Brain, brainstem and cerebellum *in-situ*.
- Ventricles of the brain, dural formations and dural venous sinuses.
- Various cranial nerves from their point of brainstem origin to their exit from the cranial base.
- External, middle and internal ear.
- Parapharyngeal space and associated structures.
- Superficial dissection of the face with muscles of facial expression, neurovasculature, and the salivary glands.



Whole Head Specimen

incl. 3 Slices

02.2

ART.-NO. HP03M02

KEY FEATURES INCLUDE

- Superficial dissection of the face (on one side) showing muscles of facial expression, parotid gland and duct, associated neurovasculature, and salivary glands.
- Deep dissection of the face (on the opposite side) showing contents of the orbit and the deep facial region.
- Multilayered neck dissection showing the triangles of the neck and their contents.
- Transverse cut permits removal of the skullcap and associated part of the brain.
- Brain cut through the lateral ventricles, internal capsule and basal ganglia.
- Lateral ventricle dissected to reveal its horns, the choroid plexus and the insula.





Whole Head Specimen

incl. 3 Slices

02.3



ART.-NO. **HP03M03**

KEY FEATURES INCLUDE

- Intracranial dissection exposes the thalami, brain stem and dural formations.
- The trigeminal ganglion and external carotid artery, both with their branches, are shown on opposite sides.
- Cranial nerves innervating the face, neck and orbit.
- Anterior and lateral views of the orbit showing the eyeballs, extra-ocular muscles (from origin to insertion) and related neurovasculature.
- Posterior view of the pharynx showing the pharyngeal raphe, constrictor muscles, proximal esophagus, the pharyngoesophageal constriction and the region for pharyngeal pouch formation.
- Neurovasculature of the pharynx and peripharyngeal space.
- Multiple views of the viscera of the neck.

02.4

Whole Head Specimen

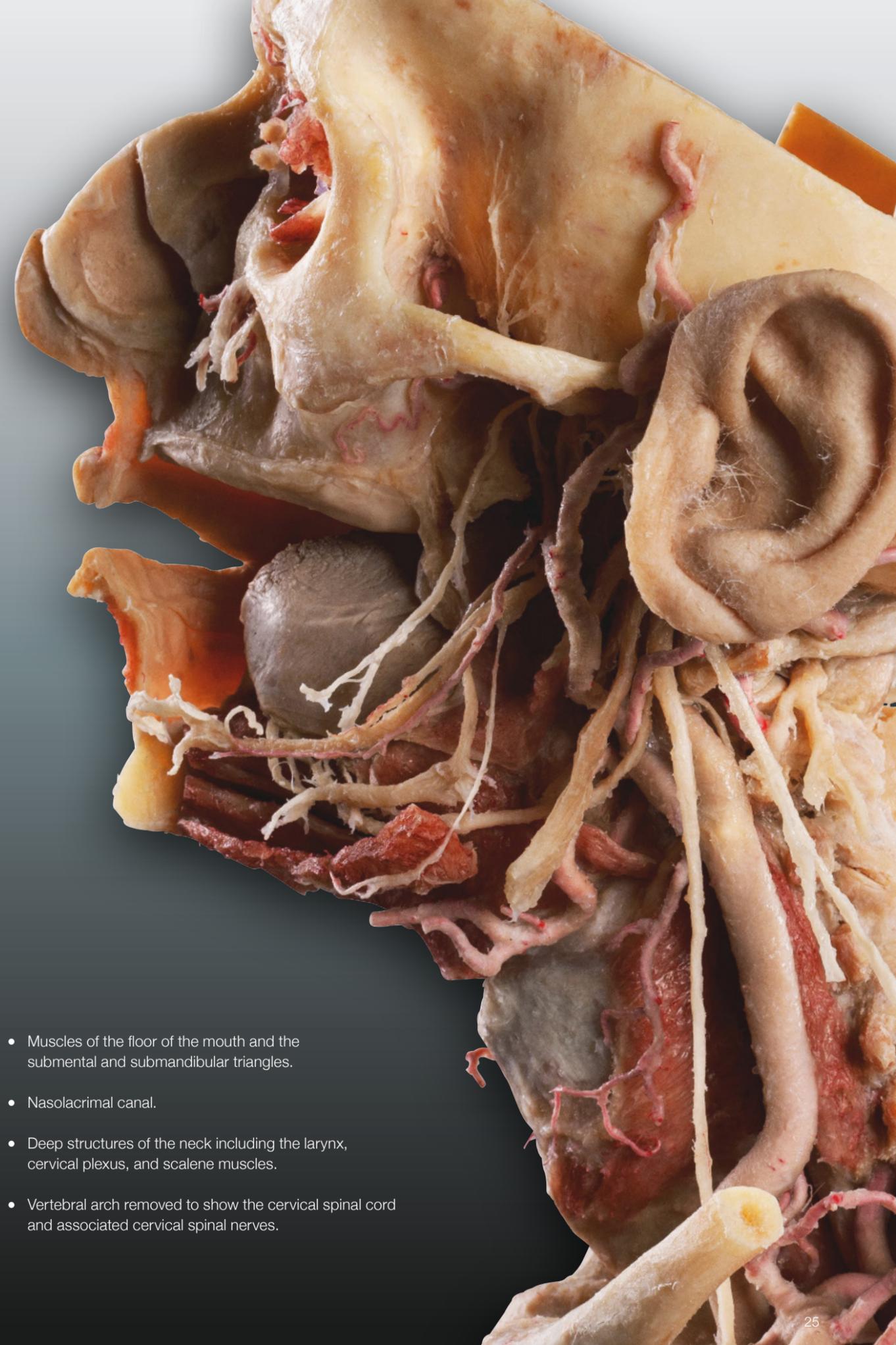
incl. 3 Slices



ART.-NO. **HP03M04**

KEY FEATURES INCLUDE

- Skullcap removed.
- Dura mater reflected to reveal the dural formations.
- Cerebral cortexes and brainstem removed to show the points of cranial nerve exit from the cranium.
- Zygomatic arch and part of the mandible removed revealing buccinator and the styloid muscles and ligaments.
- Carotid arterial system (common, internal and external carotid arteries) and its branches.
- Anterior view (without eyeball) and anterolateral view (with eyeball) of the orbit and its content.
- External and middle ear dissection, showing the tympanic membrane and auditory ossicles.
- Infratemporal and pterygopalatine fossae and their contents.
- Muscles of the floor of the mouth and the submental and submandibular triangles.
- Nasolacrimal canal.
- Deep structures of the neck including the larynx, cervical plexus, and scalene muscles.
- Vertebral arch removed to show the cervical spinal cord and associated cervical spinal nerves.



02.5

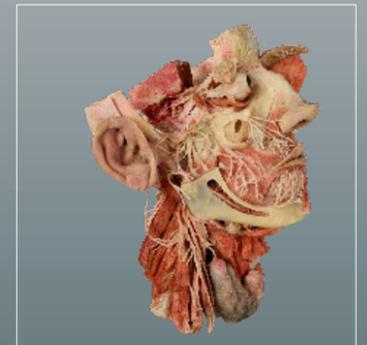
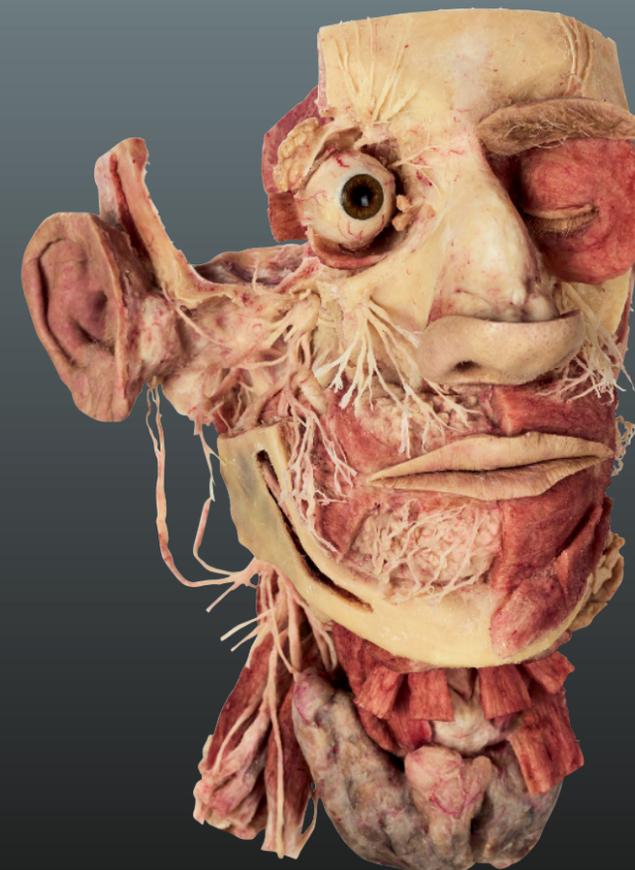
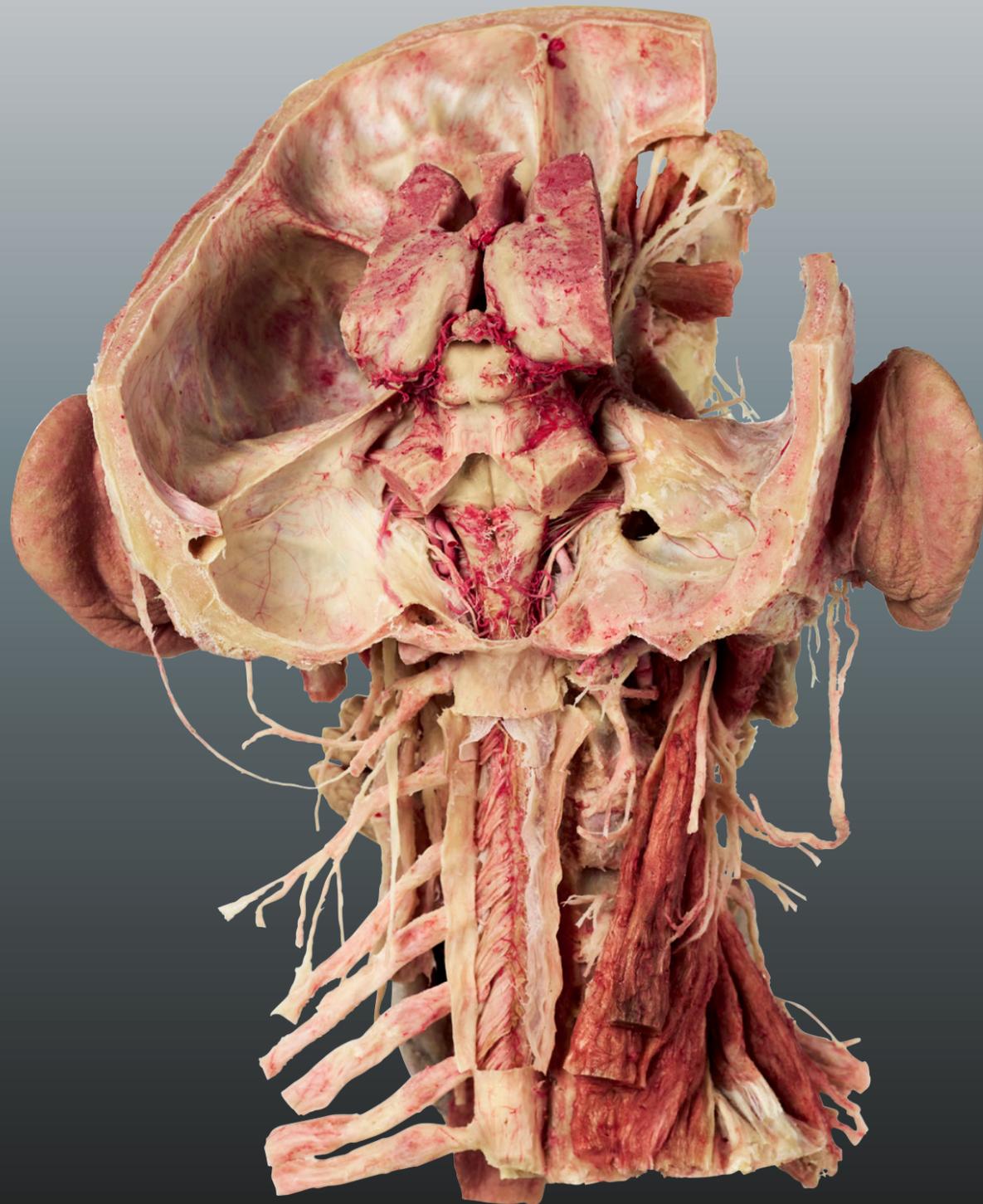
Whole Head and Neck Specimen

with 12 Cranial Nerves incl. 3 Slices

ART.-NO. HP03M05

KEY FEATURES INCLUDE

- Base of skull with thalami, brain stem and the twelve pairs of cranial nerves *in-situ*.
- One side shows the cranial nerves penetrating the dura mater, the other shows the cranial nerves exiting the cranium via removal of the dura mater.
- Posterior view of the brainstem, fourth ventricle and cerebellar peduncles.
- Vertebral arches removed and meninges reflected to show the cervical spinal cord, proximal parts of the spinal nerves and the spinal root of the accessory nerve (CN XI).
- Carotid bifurcation, internal carotid artery and lingual artery, other arteries and all veins are removed.
- Deep dissection of the face showing the emergence of regional cranial nerves and their branching.
- Differing views of the orbital contents.
- Organs and nerves of the parapharyngeal space.
- Petrous temporal bone dissected to reveal the facial and vestibulocochlear nerves (CN VII and CN VIII) and the inner ear.
- Parasympathetic ganglia (ciliary, pterygopalatine, submandibular and otic) of the head.



02.6

Head and Neck Specimen

Cerebrospinal Fluid incl. 3 Slices

ART.-NO. HP03M06

KEY FEATURES INCLUDE

- Parasagittal cut.
- Stepwise dissection through the scalp (5 layers) and cranium.
- Lateral view of the lateral ventricle and its choroid plexus.
- Medial view of the third and fourth ventricles, and the interventricular connections.
- Dural formations, dural venous sinuses, cerebral (bridging) veins and arachnoid granulations.
- Subarachnoid space and cranial subarachnoid cisterns.
- Middle ear and mastoid air cells.
- Medial view of the brainstem and cranial nerves.
- Deep neck dissection showing regional musculature, neurovasculature and viscera.
- Cervical part of the vertebral canal containing the spinal cord, meninges and vertebral artery.
- Infratemporal fossa and pterygopalatine ganglion.
- Lateral view of the orbit and its contents.





Head and Neck Specimen

incl. 3 Slices

02.7

The arterial supply to the neck, head and associated parts of the central nervous system (CNS) is complex to visualize, often requiring the review of multiple resources. To help, we present a unique and invaluable solution, dissection HP0309.

Starting at the heart, HP0309 enables the origin, course, shape, orientation and relations of the arterial trees to be followed and visualized.

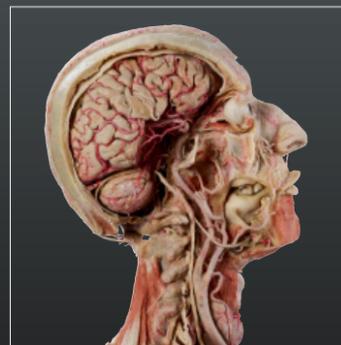
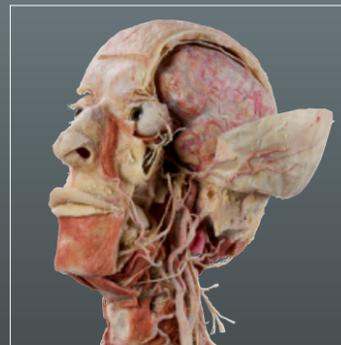
At a glance, learners are able to appreciate the geometry of CNS circulation and directly compare it to angiographic imaging, or determine the clinical consequences of aneurysm, skull fracture, stenosis of the foramen transversarium or regional space occupying mass.

In addition, deep and superficial dissections of the face enable exploration of the external carotid arterial system, including its role in supplying the meninges.

ART.-NO. **HP03M07**

KEY FEATURES INCLUDE

- Cervical and thoracic vertebral column (down to T7).
- Viscera of the neck with their blood supply.
- Contents of the mediastinal regions.
- Heart and the coronary arteries.
- Great vessels and their branches.
- Right external carotid artery and its branches.
- Route of the right internal carotid artery into the cranium.
- Route of the vertebral arteries into the cranium.
- Right side of the cerebral arterial circle (Willis) and the cerebral arteries shown via dissection of the right temporal lobe.
- Left maxillary artery and its branches.
- Left lateral view of the dura mater and its blood supply.
- Reflection of the dura mater reveals the arachnoid mater covering the brain.
- Contents of the orbits (*in-situ*), showing regional arterial anastomoses, and the blood supply of the eyeballs and orbital structures.
- Arterial supply to the deep facial and retromandibular regions.



02.8

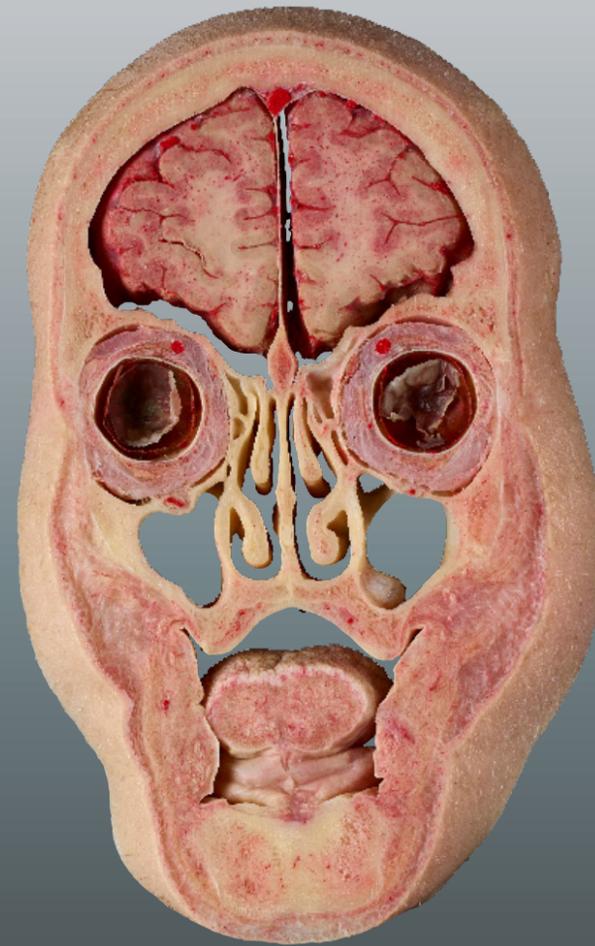
Silicone Slices of Head

coronal plane

ART.-NO. HP0310

KEY FEATURES INCLUDE

- 13–15 coronal slices (up to 15 mm thick) of the head and neck from a single body donor.
- Provide unique 3D views of sectional anatomy.
- Cut perpendicular to the Frankfurt plane.
- Structures remain in their anatomical positions—they are not dissected or separated.
- Central nervous system and its blood supply *in-situ*.



Silicone Slices of Head

transverse plane

02.9

ART.-NO. HP0307

KEY FEATURES INCLUDE

- 13–15 transverse slices (up to 15 mm thick) of the head and neck from a single body donor.
- Cut parallel to the Frankfurt plane.
- Provide unique 3D views of sectional anatomy.
- Structures remain in their anatomical positions—they are not dissected or separated.
- Central nervous system and its blood supply *in-situ*.



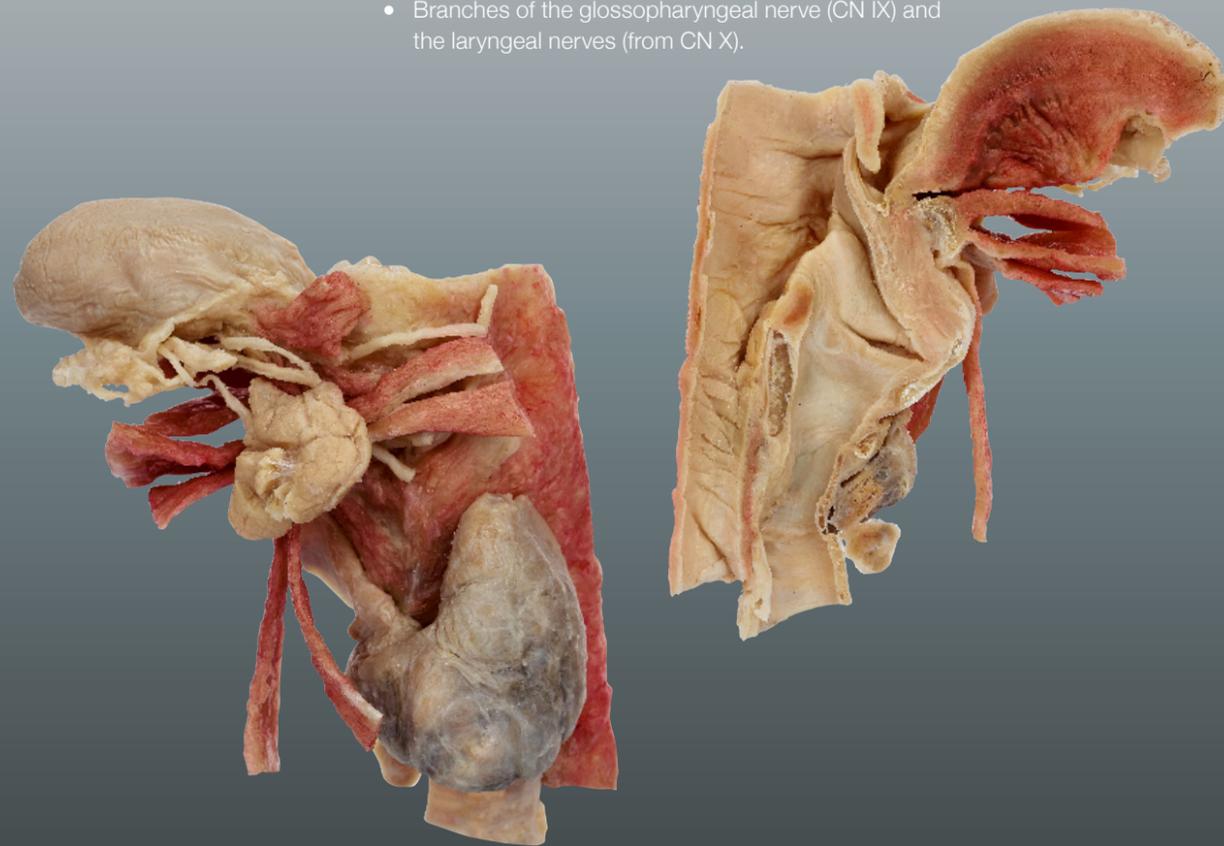
02.10

Tongue and Larynx Specimen

ART.-NO. **HP1408**

KEY FEATURES INCLUDE

- Tongue, larynx, laryngopharynx and esophagus hemisected along the median sagittal plane.
- Medial view of the internal structure of the larynx.
- Branches of the glossopharyngeal nerve (CN IX) and the laryngeal nerves (from CN X).



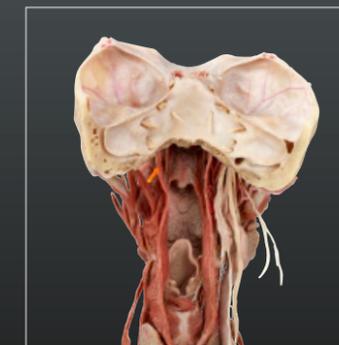
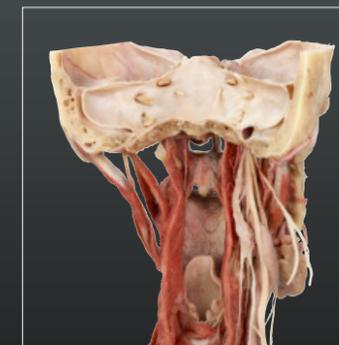
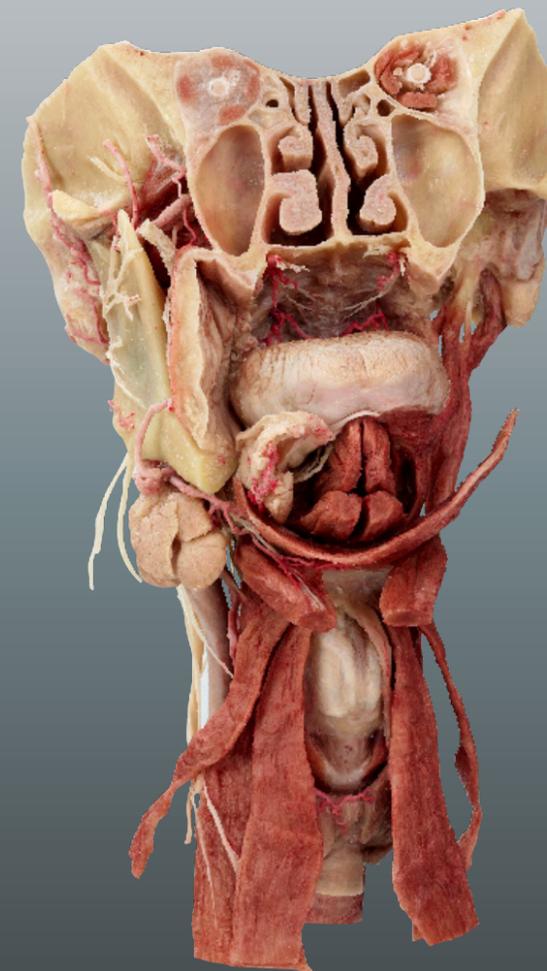
Pharynx Specimen

02.11

ART.-NO. **HP0303.1**

KEY FEATURES INCLUDE

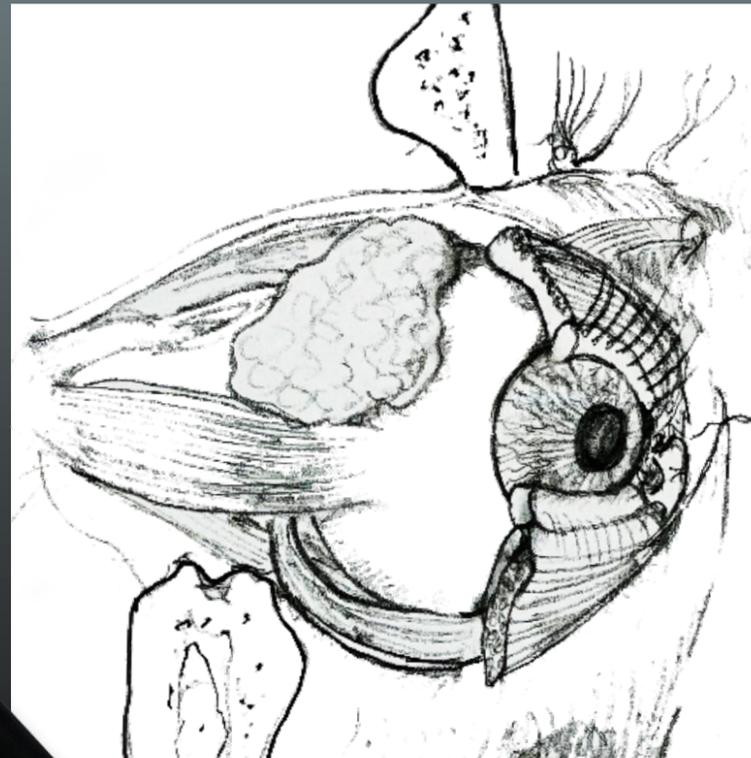
- Coronal cut shows the paranasal sinuses, nasal cavity and orbits.
- Tongue, nasopharynx, oropharynx and larynx.
- Muscles and ligaments of the styloid process.
- Muscles of the soft palate.
- Larynx with extrinsic and intrinsic muscles.
- Pharyngeal constrictor muscles.
- Contents of the peripharyngeal space.
- Posterior view into the pharynx (opened via a median sagittal cut) showing the choana, soft palate, laryngeal inlet and piriform recesses.
- Lingual nerve, glossopharyngeal nerve (CN IX), vagus nerve (CN X) and hypoglossal nerve (CN XII).
- Vasculature removed.



Orbital Specimen

The orbit is a design masterpiece that permits rapid yet precise movements of the eyeball, without compromising the numerous structures contained within. Its small size, osseous surrounding and delicate contents make it challenging to dissect and study.

This pair of specimens, from a single body donor, present numerous views of the orbit, its content and anatomical relations, thereby enhancing the learning process. The final design of this specimen can be specified and designed according to your teaching and learning needs.



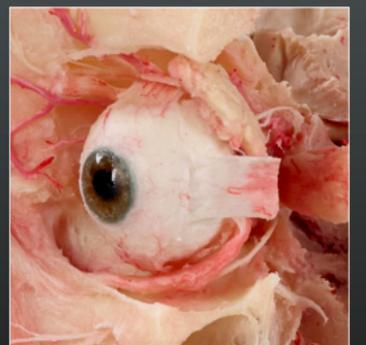
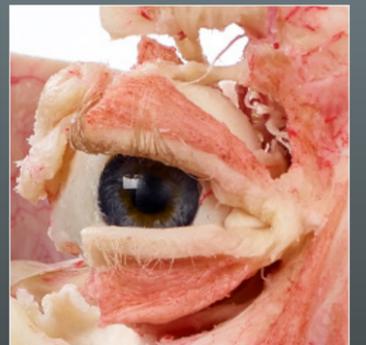
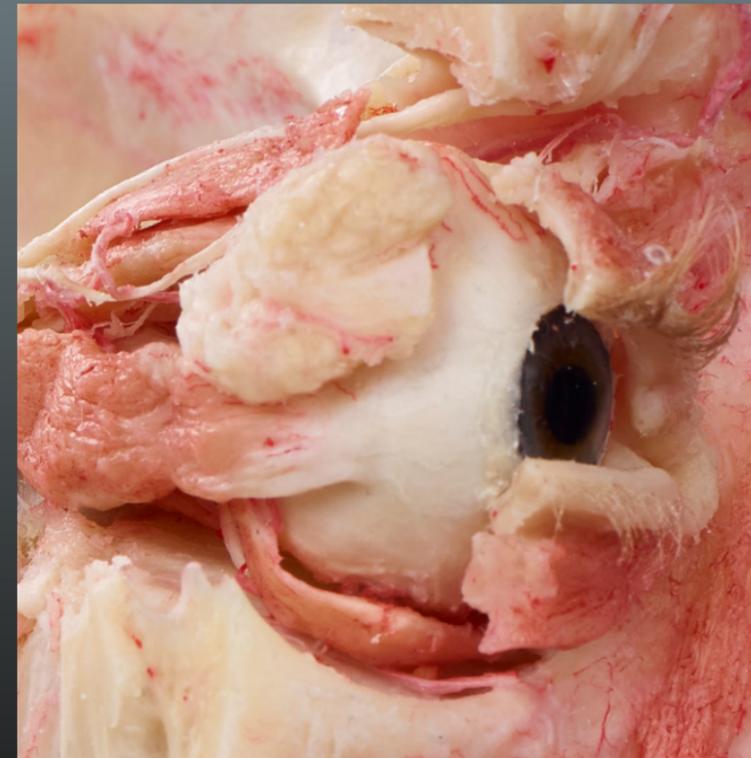
ART.-NO. **HP0316**

KEY FEATURES INCLUDE

- Two orbits from the same donor showing multiple views.
- Eyelid structure and related musculature.
- Lacrimal gland and its neurovascular supply.
- Extraocular muscles and their neurovascular supply.
- Eyeball and its neurovascular supply.
- Regional relations e.g., paranasal sinuses.

SPECIAL NOTE

The final specification and design of this specimen can be customized.

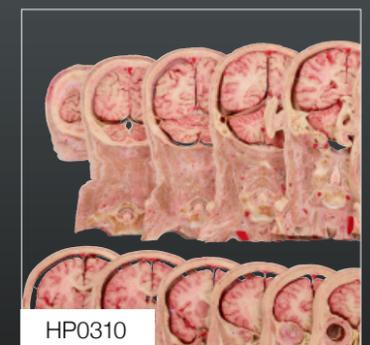
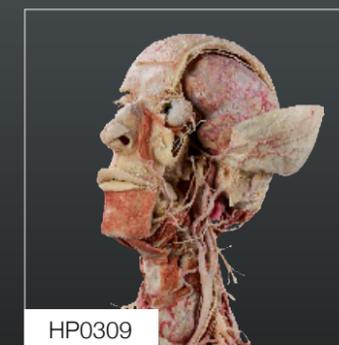
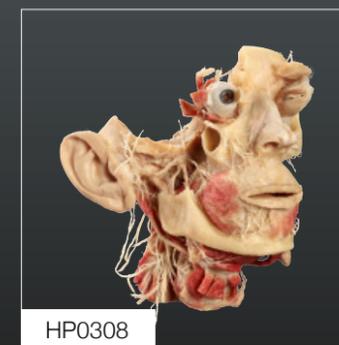
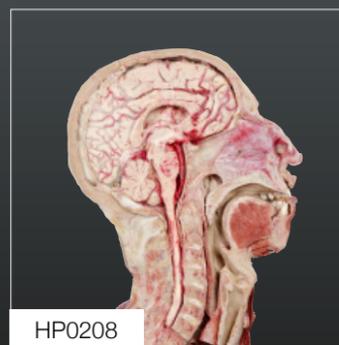
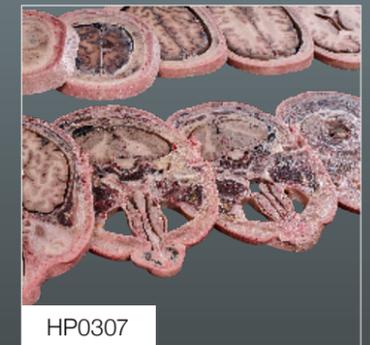
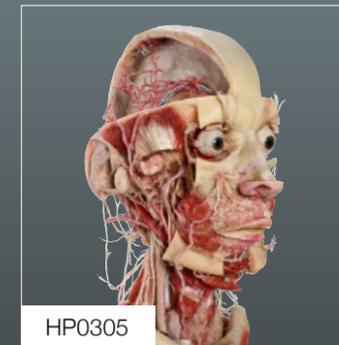
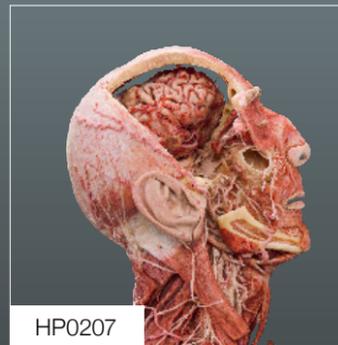
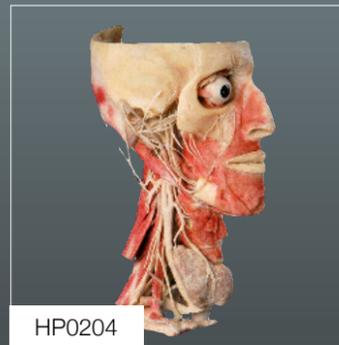
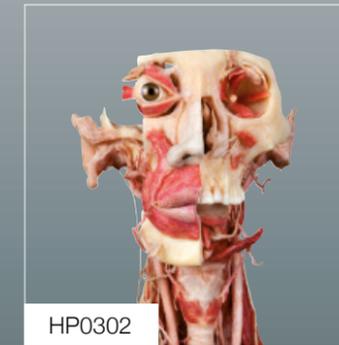
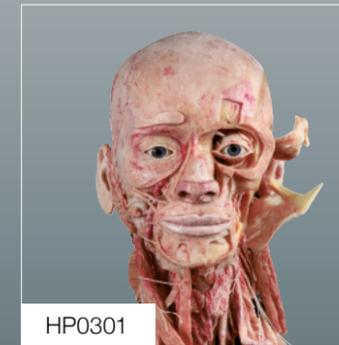
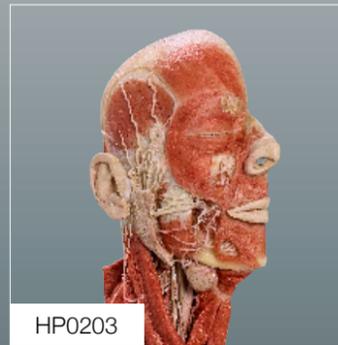
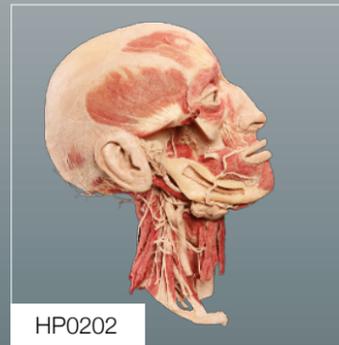
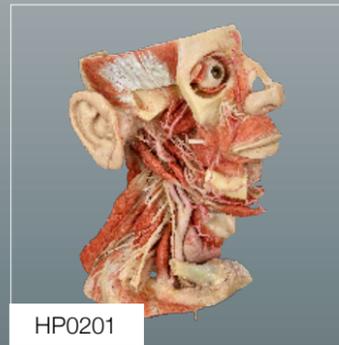


ADDITIONAL SILICONE PLASTINATES (HP)

To further enhance your learning and teaching, you might also benefit from our additional range of exquisitely prepared specimens.

More details can be found online or in our main catalogue.
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ADDITIONAL SILICONE PLASTINATES (HP)



Chapter 03

NEURO- ANATOMY

As one of the main disciplines associated with head and neck anatomy, and traditionally described in combination, this chapter showcases our collection of exquisitely presented neuroanatomical dissections, many of which are ideal companions to our head and neck specimens.



03.1

Set of Two Halves of One Brain

ART.-NO. **HP1210**

KEY FEATURES INCLUDE

- Single brain cut along the median sagittal plane.
- Arachnoid mater and pia mater removed.
- Clear views of the main sulci and gyri.
- Cerebral arterial circle (Willis) and its main contributors and branches.
- Cranial nerves (normally all are shown*).

**While every attempt is made to preserve all cranial nerves, in some cases this may not be possible on both sides.*



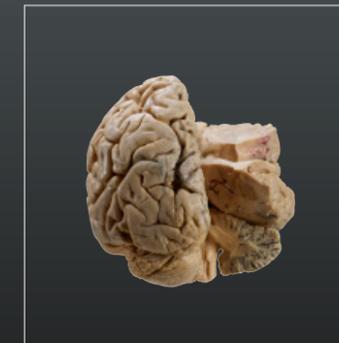
Whole Brain Specimen

03.2

ART.-NO. **HP1211**

KEY FEATURES INCLUDE

- Cerebral and cerebellar hemisphere dissected on one side to show the ventricular system and its interconnections.
- Lateral ventricle and its anatomical relations.
- Third and fourth ventricles are partly exposed.
- Choroid plexus.
- For reference, one cerebral hemisphere remains intact (undissected).



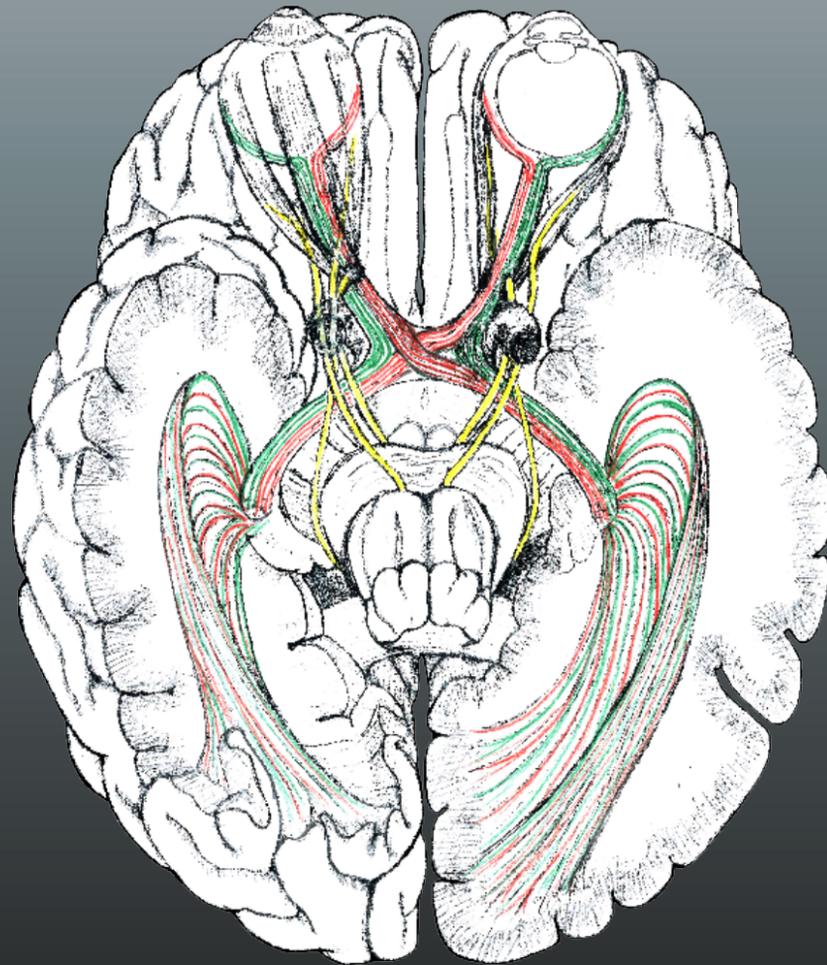
Visual Pathway Specimen

The visual pathway and the structures controlling the movement of the eyeballs are critical to normal functioning and feature extensively in common tests of the central nervous system.

Being able to visualize these structures and their arrangement is challenging, yet key to proficient neurological examination.

This unique specimen shows the course, arrangement and relations of the visual pathway, from the retina to the primary visual cortex, and the muscle and nerves controlling movement of the eyes.

With this specimen learners can instantly appreciate the scale, beauty and ever-changing morphology of the visual pathway, and can apply and test their knowledge in new and challenging ways.



ART.-NO. **HP1212**

KEY FEATURES INCLUDE

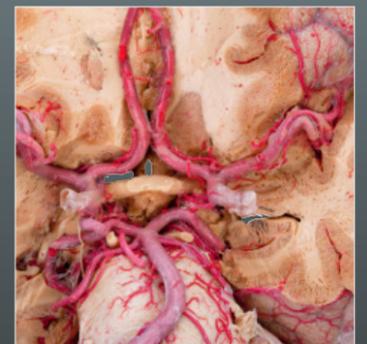
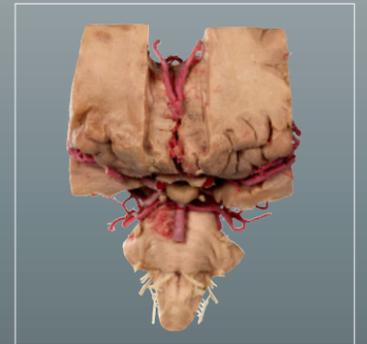
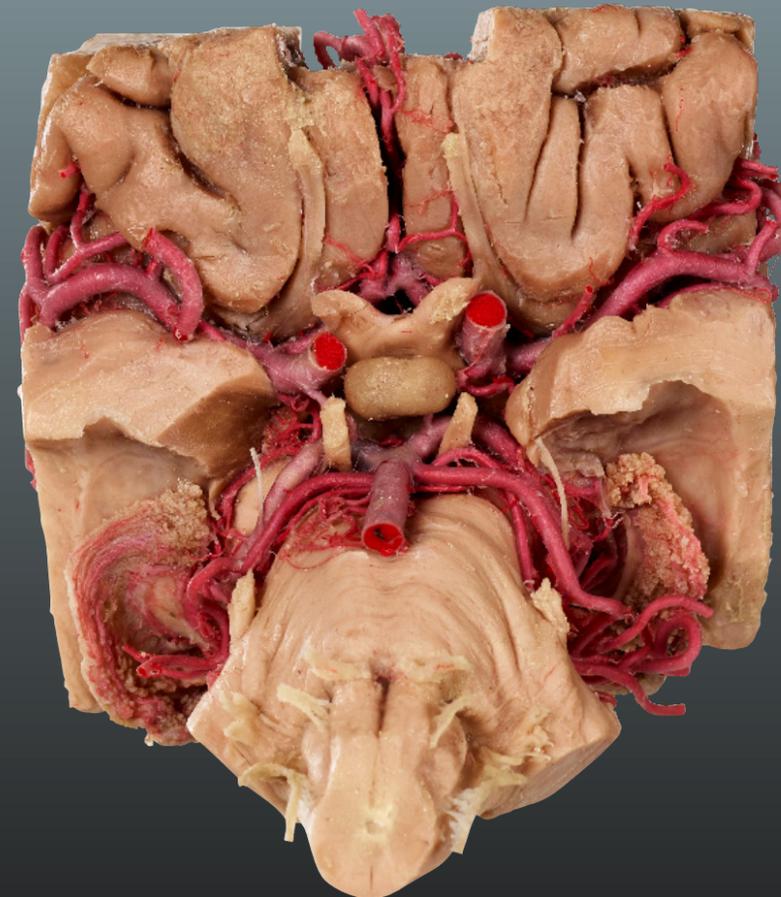
- Visual pathway, from the retina to the primary visual cortex, including the optic chiasm and optic radiation.
- Internal structure of an eyeball.
- Brainstem and the origins of the oculomotor (CN III), trochlea (CN IV) and abducens (CN VI) nerves.
- Internal carotid arteries and their relation to the optic chiasm and regional cranial nerves (shown on one side).
- Extraocular muscles and related neurovasculature.



ART.-NO. **HP1204.1**

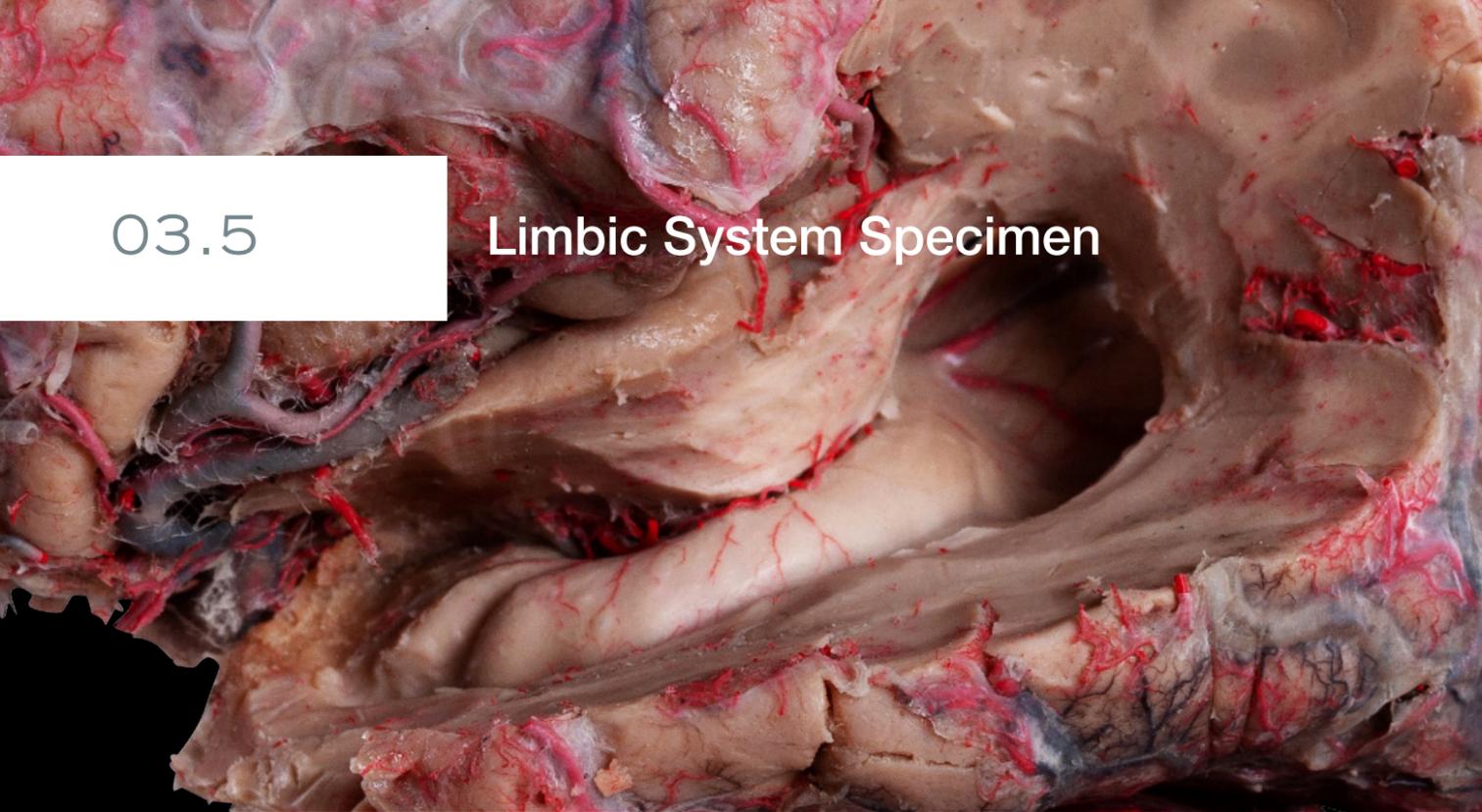
KEY FEATURES INCLUDE

- Medulla oblongata, pons, midbrain, and parts of the diencephalon and telencephalon.
- Points of emergence of the cranial nerves.
- Cerebral arterial circle (Willis) with its main contributors and branches.
- Key regional vascular relations of the cranial nerves.
- Views of the lateral, third and fourth ventricles with choroid plexus and their anatomical relations.
- Posterior view of the brainstem and cerebellar peduncles.



03.5

Limbic System Specimen



Many of the component parts of the limbic system and its interconnections are concealed within the central nervous system, making its position, size and relations difficult to visualize.

For these reasons, limbic system anatomy can be misunderstood by learners. This specimen helps address these issues by focusing on the component parts of the limbic system, their positions and anatomical relations.

ART.-NO. **HP1213**

KEY FEATURES INCLUDE

- Cortical parts of the limbic system.
- Temporal lobe dissected, and part of the corpus callosum removed to expose the fornix and mamillary bodies, hippocampal formation, amygdaloid body, thalamus and epithalamus.



Cerebellum

03.6



ART.-NO. **HP1214**

KEY FEATURES INCLUDE

- Cerebellar hemispheres, vermis and lobes.
- Cerebellar fissures and folia.
- Cerebellar peduncles and velum (cut).



Cerebellar Peduncles

03.7



ART.-NO. **HP1215**

KEY FEATURES INCLUDE

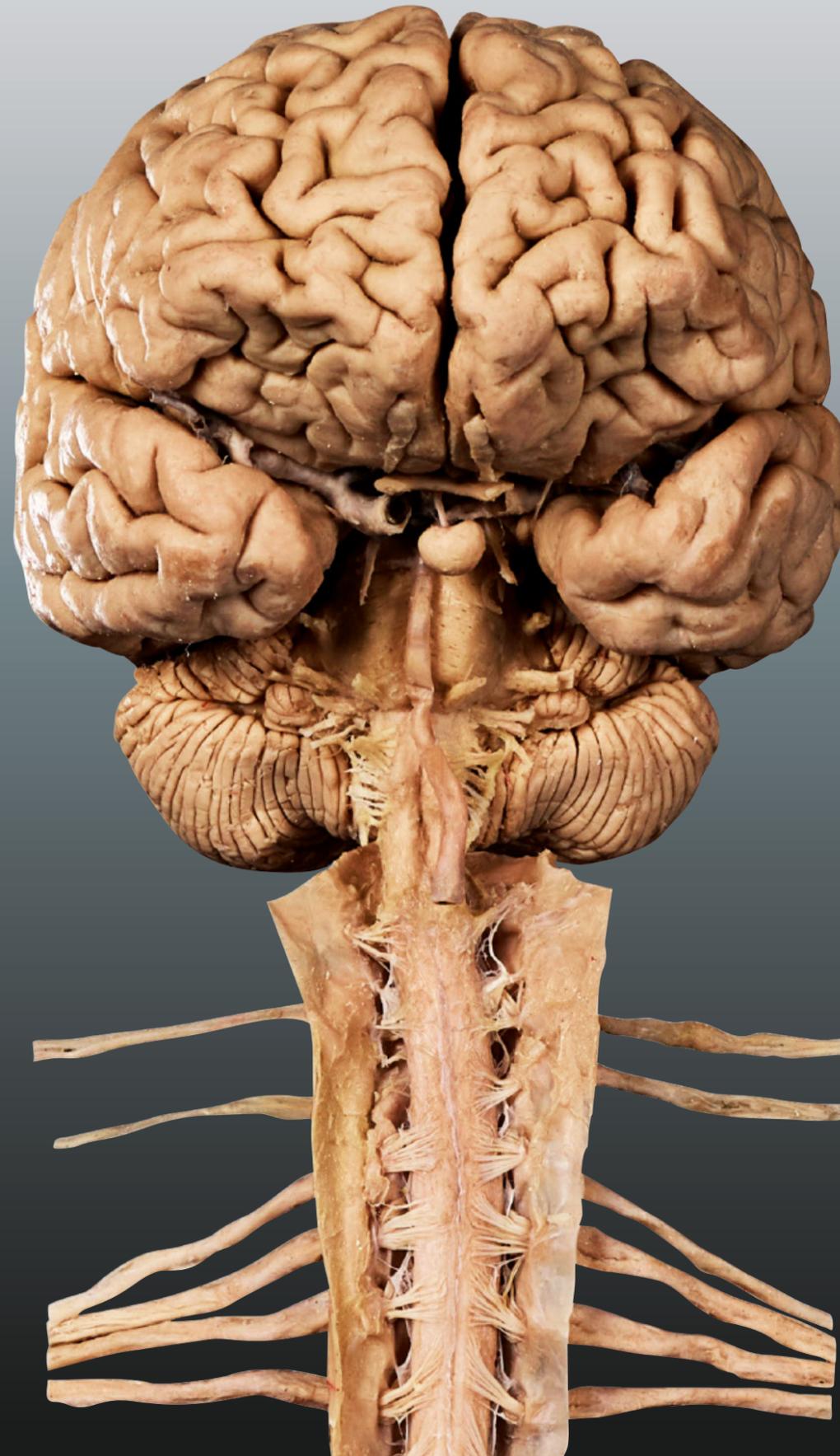
- Cerebellum and brain stem (midbrain, pons and medulla).
- One hemisphere of the cerebellum is partially dissected.
- Superior, middle and inferior peduncles and their connection to the brainstem are exposed.
- Regional cranial nerves.



ART.-NO HP1207

KEY FEATURES INCLUDE

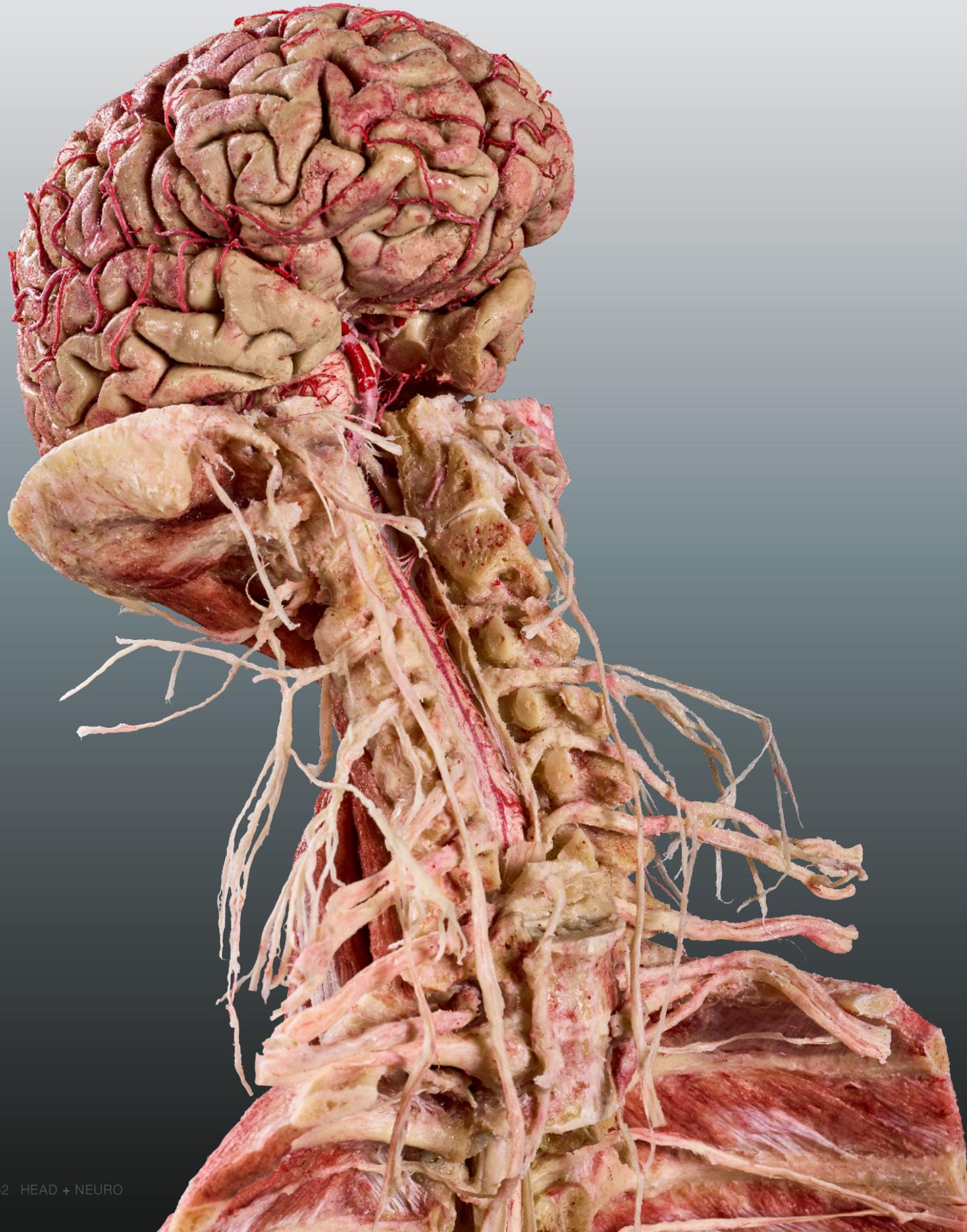
- Brain, brainstem and spinal cord.
- Pituitary gland, optic nerves and optic chiasm.
- Cranial nerve origins from the brainstem.
- Meningeal coverings of the spinal cord.
- Cauda equina.
- Spinal nerves and the spinal (dorsal root) ganglia.
- Roots and trunks of brachial plexus.



Central Nervous System

in situ

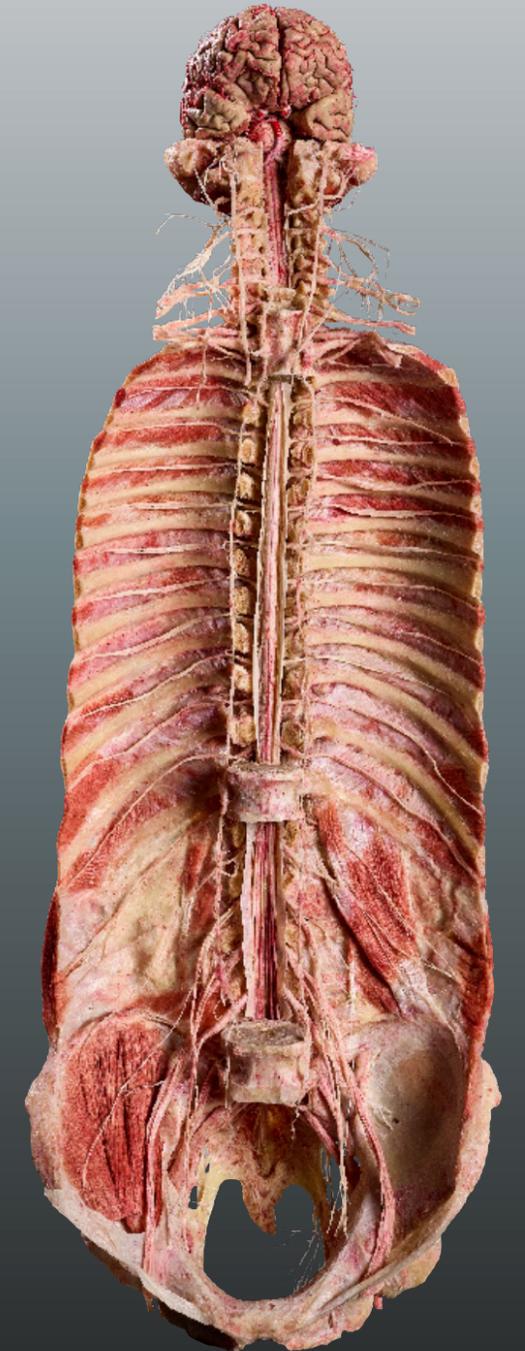
03.9



ART.-NO. HP1216

KEY FEATURES INCLUDE

- Base of the cranium, vertebral column and pelvis.
- Posterior thoracic and abdominal walls showing the deep parts of the erector spinae muscles.
- Bodies of the vertebrae removed to show an anterior view of the vertebral canal and its contents.
- Brain, spinal cord, spinal nerves and spinal (dorsal root) ganglia.
- Parts of the main somatic nerve plexuses (cervical, brachial, lumbar and sacral).
- Parts of the sympathetic trunks.
- Central nervous system vasculature.



Series of Brain Slices

inside Skull, A4-Format

A new plastination technique has been used to create these highly detailed slices of the central nervous system within the cranium.

The technique preserves numerous delicate features including regional vasculature, cranial nerves and structures involved in the formation and absorption of cerebrospinal fluid.

The slices provide detailed views of morphology and positional relationships, alongside the structure of the central nervous system and the covering meninges.

Slices are available as sequential sets of 6, 12 or 24, cut along the following planes:

SAGITTAL

Cut parallel to the median sagittal plane

CORONAL

Cut perpendicular to the Frankfurt plane

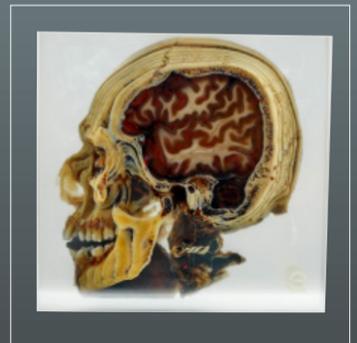
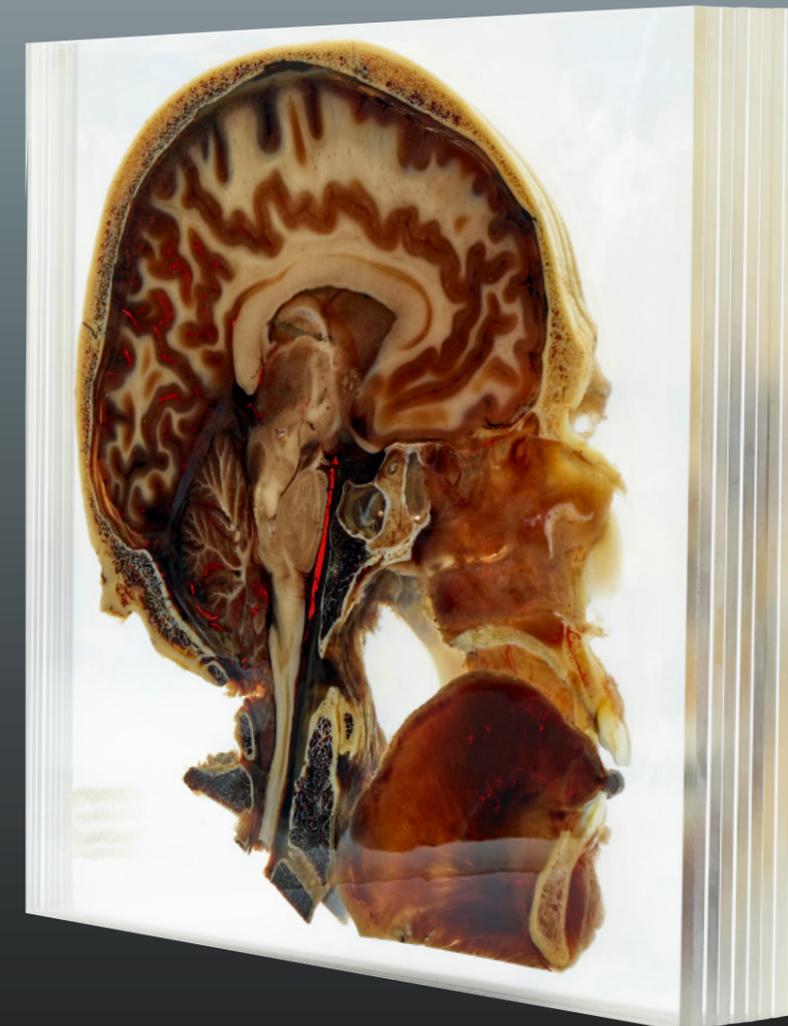
TRANSVERSE

Cut parallel to the Frankfurt plane

ART.-NO **HS68S1** · **HS68S2** · **HS68S3**

KEY FEATURES INCLUDE

- Sagittal slices of the central nervous system in the cranium—structures outside of the cranial cavity are removed.
- Grey and white matter structures of the brain, brainstem and cerebellum.
- Deep brain nuclei.
- Ventricles of the brain.
- Meninges, dural formations and dural venous sinuses.
- Regional vasculature and cranial nerves.



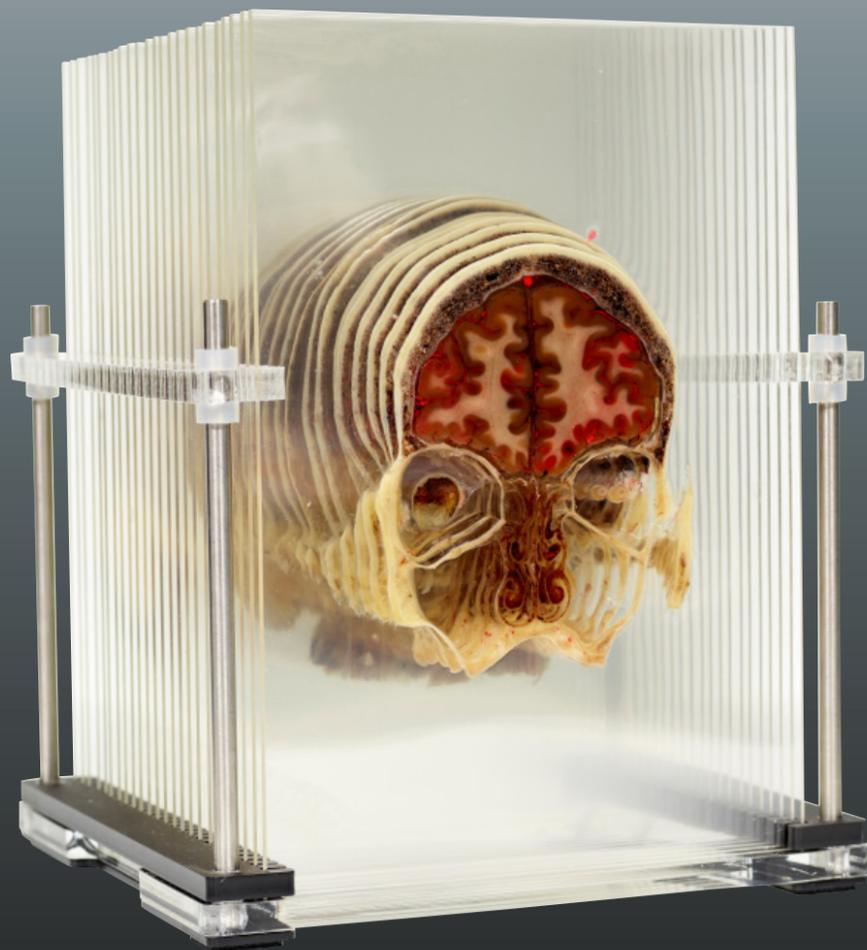
03.10.2

Coronal Plane

ART.-NO HS68C1 · HS68C2 · HS68C3

KEY FEATURES INCLUDE

- Coronal slices of the central nervous system in the cranium—structures outside of the cranial cavity are removed.
- Grey and white matter structures of the brain, brainstem and cerebellum.
- Deep brain nuclei.
- Ventricles of the brain.
- Meninges, dural formations and dural venous sinuses.
- Regional vasculature and cranial nerves.



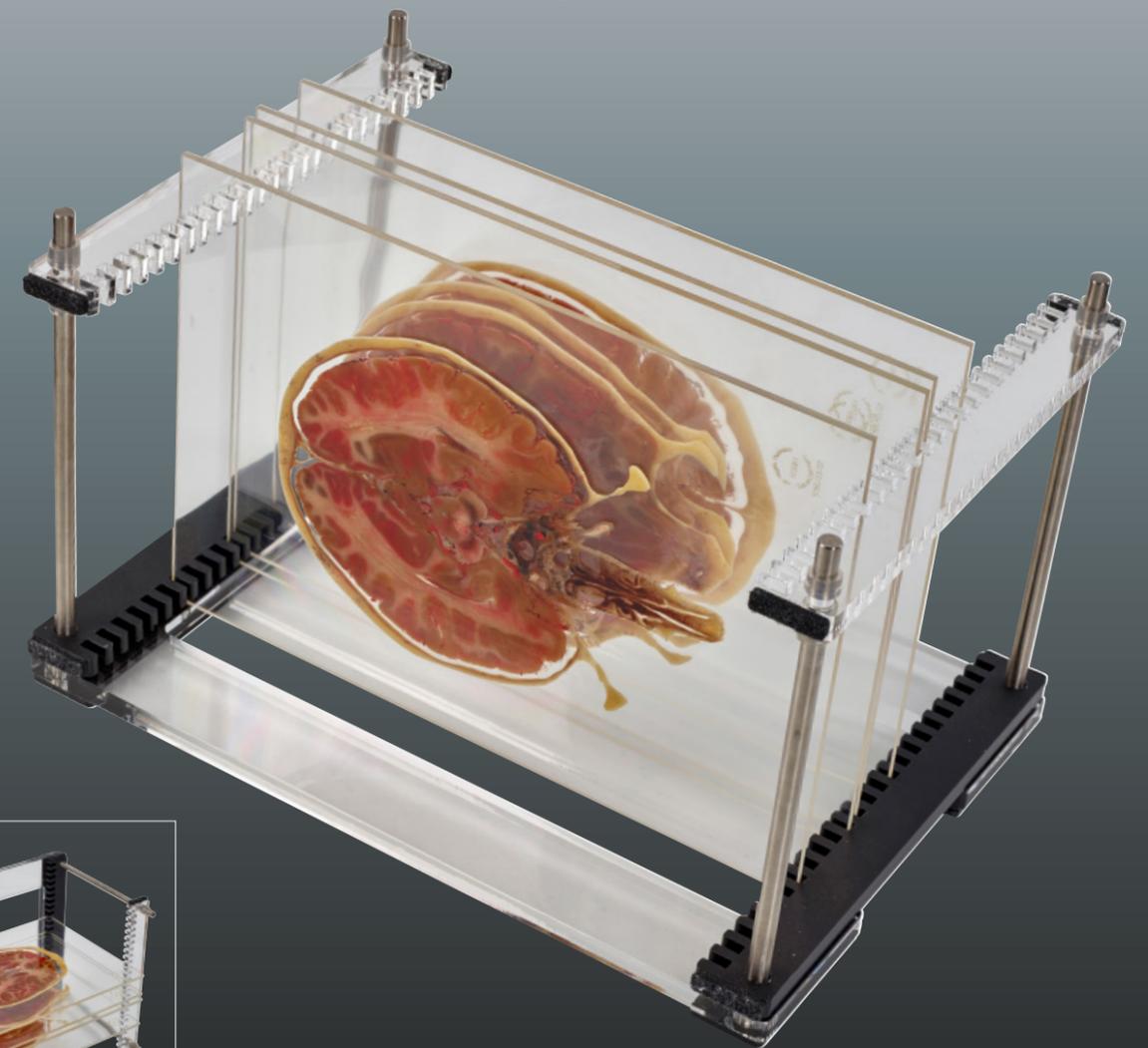
Transverse Plane

03.10.3

ART.-NO HS68H1 · HS68H2 · HS68H3

KEY FEATURES INCLUDE

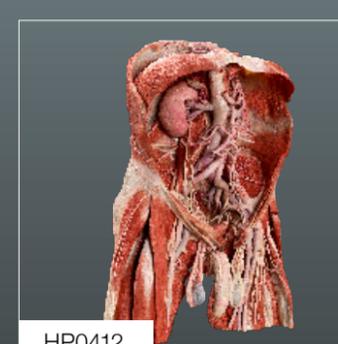
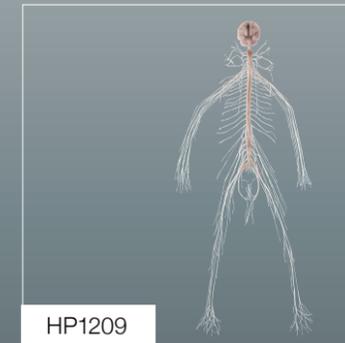
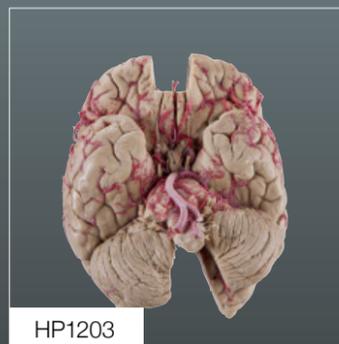
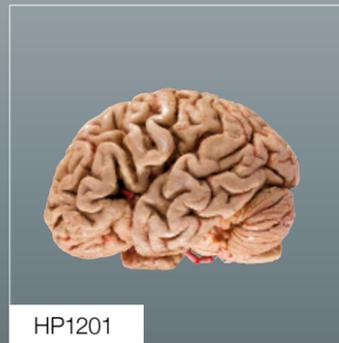
- Transverse slices of the central nervous system in the cranium—structures outside of the cranial cavity are removed.
- Grey and white matter structures of the brain, brainstem and cerebellum.
- Deep brain nuclei.
- Ventricles of the brain.
- Meninges, dural formations and dural venous sinuses.
- Regional vasculature and cranial nerves.



ADDITIONAL SILICONE PLASTINATES (HP)

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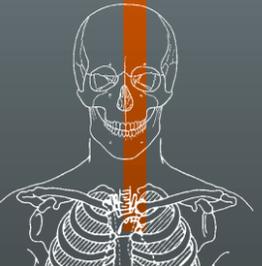
ADDITIONAL SILICONE PLASTINATES (HP)

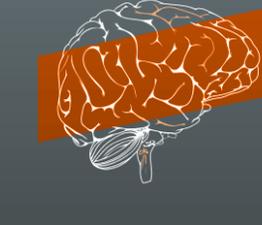
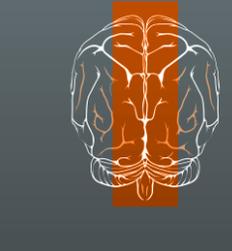
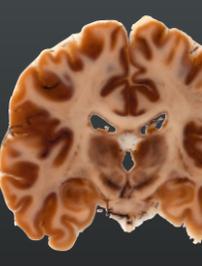
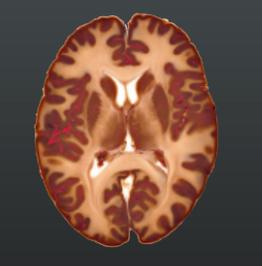
ADDITIONAL SHEET PLASTINATES (HS)

To further enhance your learning and teaching, you might also benefit from our additional range of Sheet Plastinates and Plastinated Brain Slices.

More details can be found online or in our main catalogue.
www.vonHagens-Plastination.com/catalogue

ADDITIONAL SETS OF PLASTINATED BRAIN SLICES (HS)

<p>CORONAL</p> <p>SHEET PLASTINATE RANGE</p> <p>HS6201 – HS6210</p>	<p>TRANSVERSE</p> <p>SHEET PLASTINATE RANGE</p> <p>HS6220 – HS6237</p>	<p>SAGITTAL</p> <p>SHEET PLASTINATE RANGE</p> <p>HS6241 – HS6247</p>
 <p>HS62C1 · HS62C2 · HS62C3</p>	 <p>HS62H1 · HS62H2 · HS62H3</p>	 <p>HS62S1 · HS62S2 · HS62S3</p>
 <p>Example</p>	 <p>Example</p>	 <p>Example</p>

 <p>CORONAL</p>	 <p>TRANSVERSE</p>	 <p>SAGITTAL</p>
 <p>HS61C1 · HS61C2 · HS61C3</p>	 <p>HS61H1 · HS61H2 · HS61H3</p>	 <p>HS61S1 · HS61S2 · HS61S3</p>

CROSS SECTIONAL ANATOMY

This chapter shows how our semi-transparent cross-sectional slices (Sheet Plastinates) directly relate to the modern clinical imaging technique, ultrasound, and can be used to enhance teaching, learning and mastery in this discipline.

Sheet Plastinates show the cross-sectional anatomy of the head and neck in exceptional detail.

The slices, produced using real human tissue and a unique plastination process, represent the highest quality and durability available.

Anatomical structures including nerves, vessels and fascial layers and planes are clearly visible, and can be explored down to the microscopic level.



Exclusive Sets of Real Human Sheet Plastinates (HS)

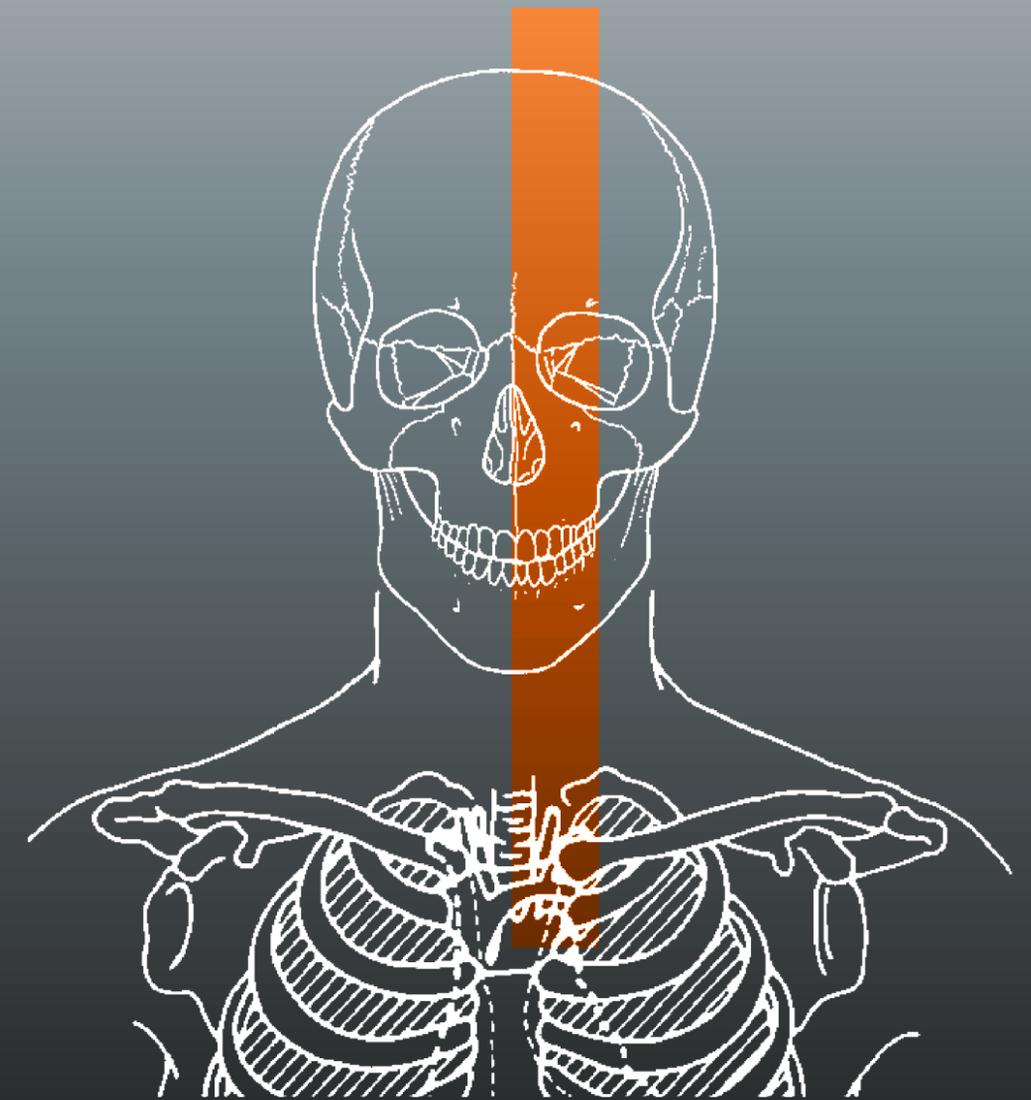
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Anatomical structures including nerves, vessels and fascial layers and planes are clearly visible, and can be explored down to the microscopic level.

ART.-NO.

HS62S1	SET OF 3 HEAD SLICES
HS62S2	SET OF 7 HEAD SLICES
HS62S3	SET OF 14 HEAD SLICES



* Slices will originate from within the shaded region.

04.1.2

Coronal Plane

ART.-NO.

HS62C1	SET OF 10 HEAD SLICES
HS62C2	SET OF 14 HEAD SLICES
HS62C3	SET OF 28 HEAD SLICES



* Slices will originate from within the shaded region.

Transverse Plane

04.1.3

ART.-NO.

HS62H1	SET OF 7 HEAD SLICES
HS62H2	SET OF 17 HEAD SLICES
HS62H3	SET OF 28 HEAD SLICES



* Slices will originate from within the shaded region.

04.2

Cross-Sectional Anatomy for Ultrasound

The increasing use of ultrasound examination throughout clinical practice for diagnostics and interventional procedures requires an enhanced knowledge of cross-sectional anatomy, both positional and morphological.

This chapter will demonstrate how commonly viewed ultrasound images of the head and neck can be correlated with Sheet Plastinates (semitransparent slices) to enhance the visualization and learning of ultrasound anatomy.*

Sheet Plastinates are obtained from a range of donors and are therefore likely to demonstrate a range of morphological variances, body masses (BMI) and pathologies (e.g., atherosclerosis, enlarged thyroid gland and lymphadenopathy).

The Sheet Plastinates shown are exemplary and may differ to the delivered product.

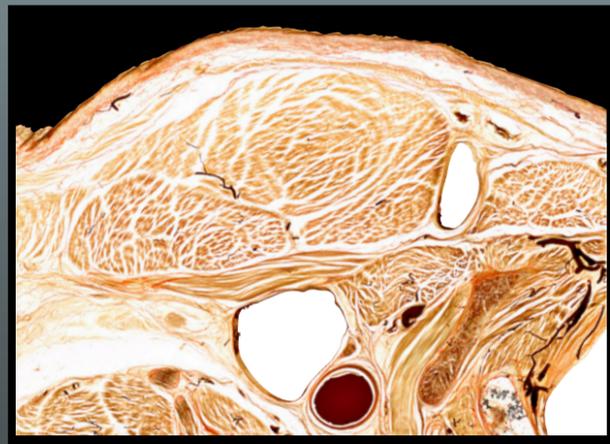
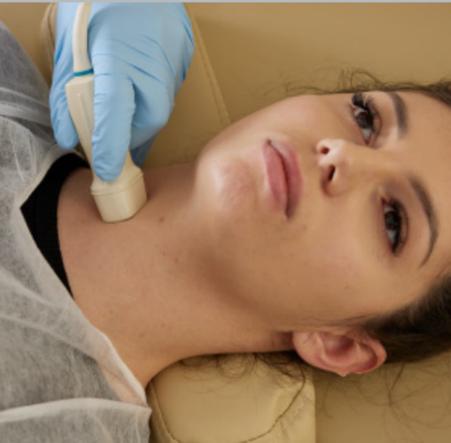
* Sheet Plastinates (HS) are not provided with matching ultrasound images. However, it is possible to match your choice of ultrasound image to a Sheet Plastinate. This service is available upon request and is subject to a 20% surcharge. Longer lead-times may apply.



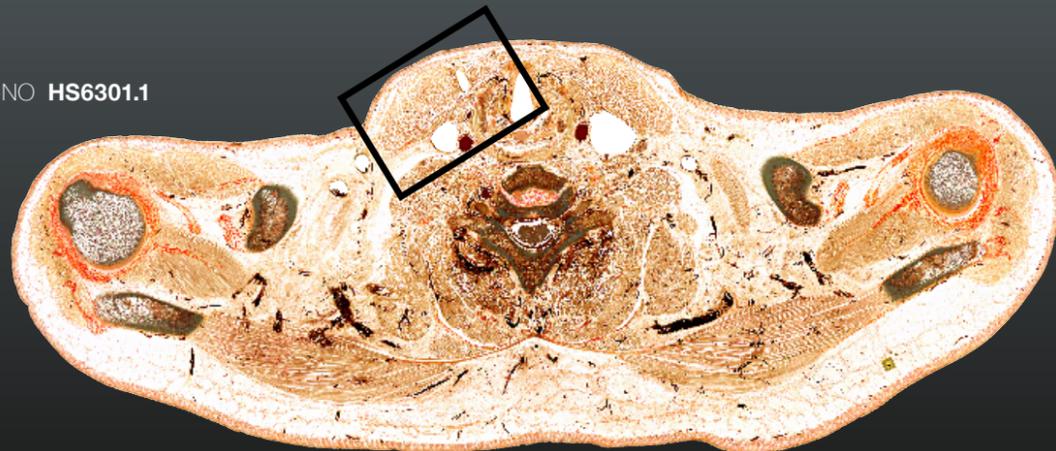
04.2.1.1

Carotid Sheath

Transverse ultrasound of the carotid sheath showing the common carotid artery, internal jugular vein, sternocleidomastoid muscle, platysma and fasciae of the neck.

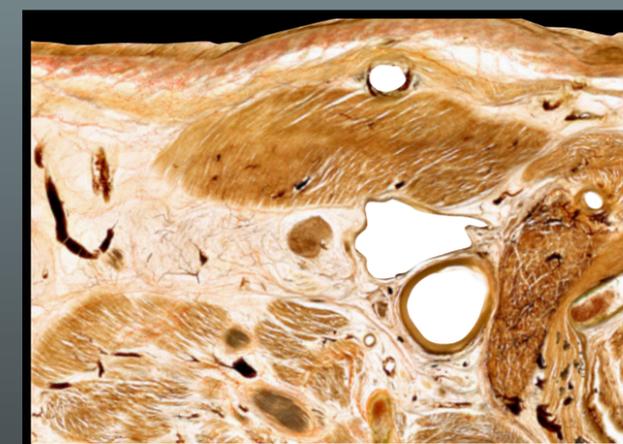


ART.-NO HS6301.1

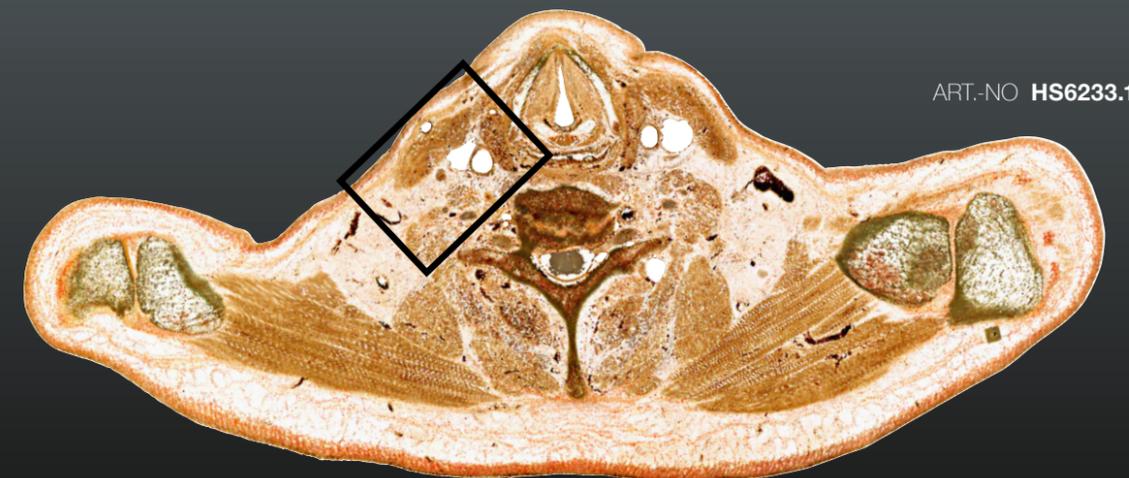


Carotid Sheath

Transverse ultrasound of the carotid sheath showing the common carotid artery, internal jugular vein, thyroid gland, sternocleidomastoid muscle, platysma and fasciae of the neck.



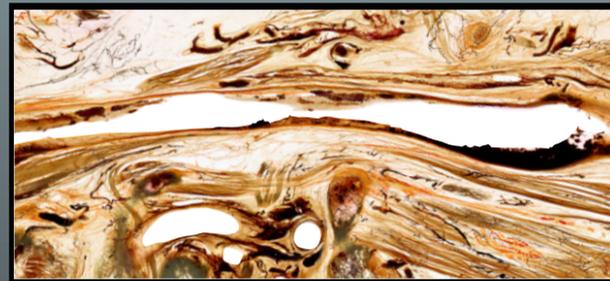
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04.2.2.1

Carotid Sheath

Longitudinal ultrasound of the carotid sheath showing the common carotid artery, the carotid sinus at the carotid bifurcation and the internal carotid artery.

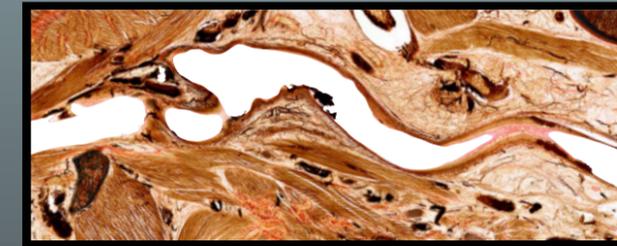
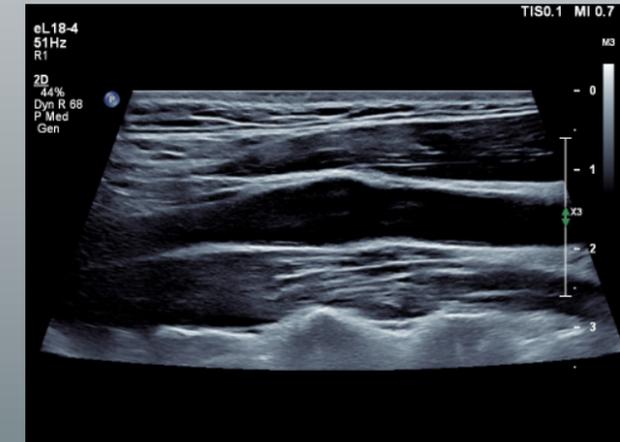


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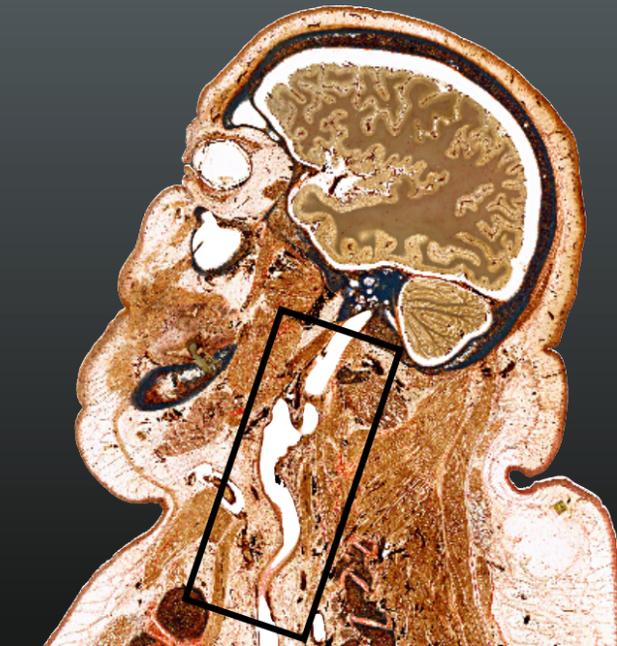


04.2.2.2

Longitudinal ultrasound of the common carotid artery carotid sinus at the carotid bifurcation and internal carotid artery. Note, atherosclerosis and deformation of the common carotid artery are visible.



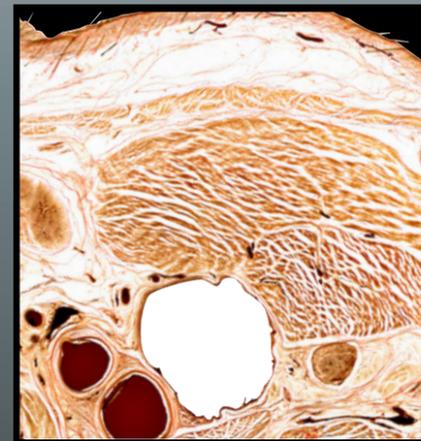
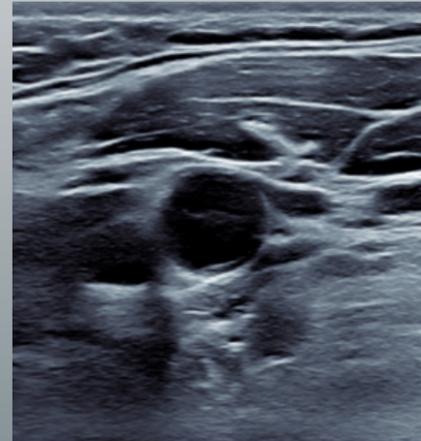
ART.-NO HS6243.1



04.2.3.1

Carotid Sheath

Transverse ultrasounds of the carotid sheath at and above the carotid sinus, showing the sternocleidomastoid and platysma muscles, internal jugular vein, carotid sinus on one side and the internal and external carotid arteries on the other side.

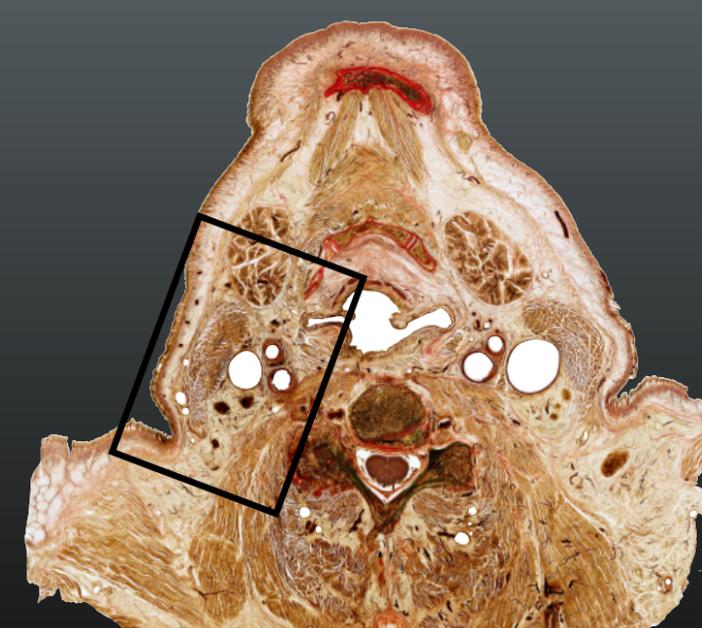
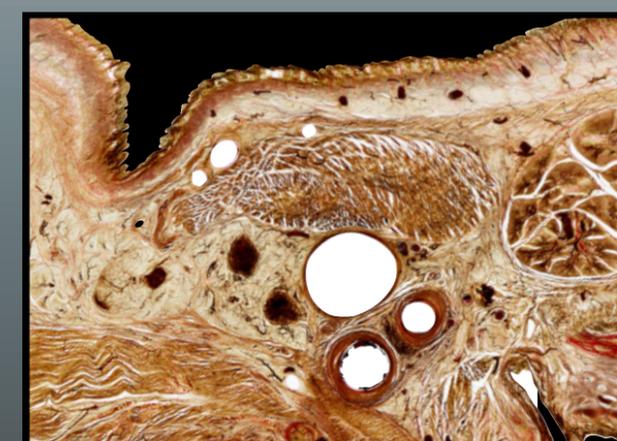


ART.-NO HS6237.1

Carotid Artery

04.2.3.2

Transverse ultrasound of the carotid sheath (cranial to the carotid bifurcation and sinus) showing the sternocleidomastoid muscle, the internal and external carotid arteries. Note: atherosclerosis of the internal and external carotid arteries is visible in the real slice.

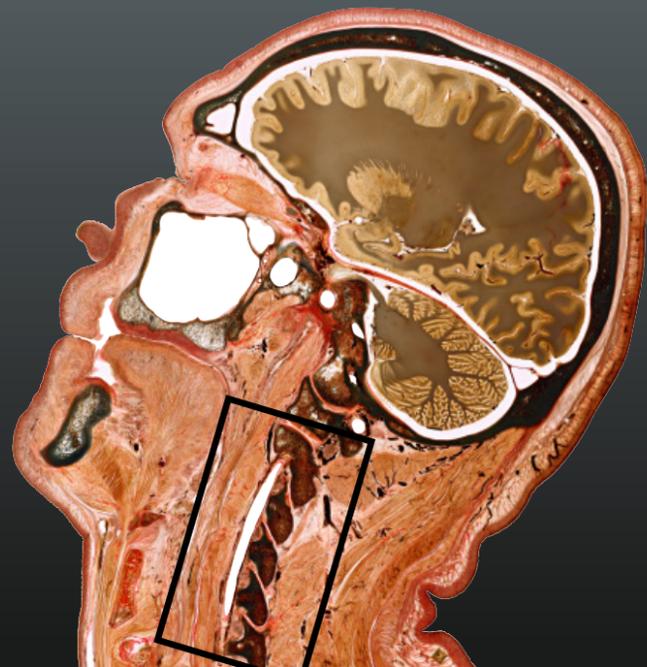
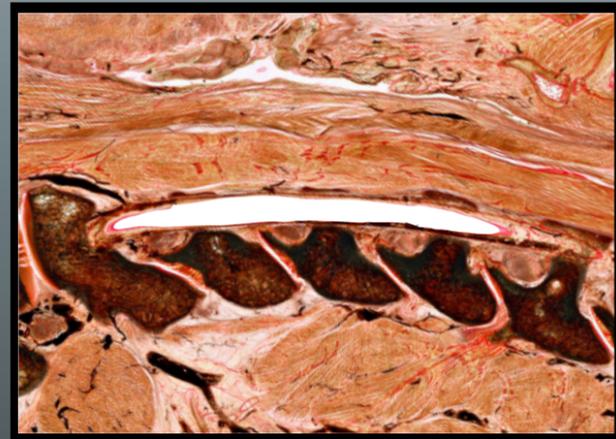


ART.-NO HS6232.1

04.2.4.1

Vertebral Arteries

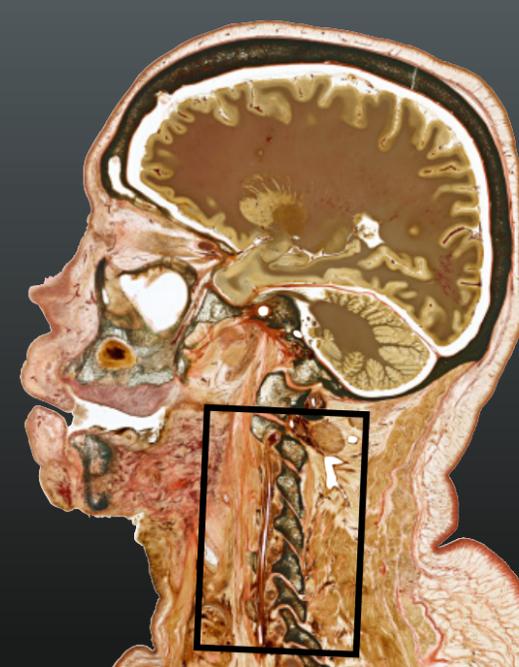
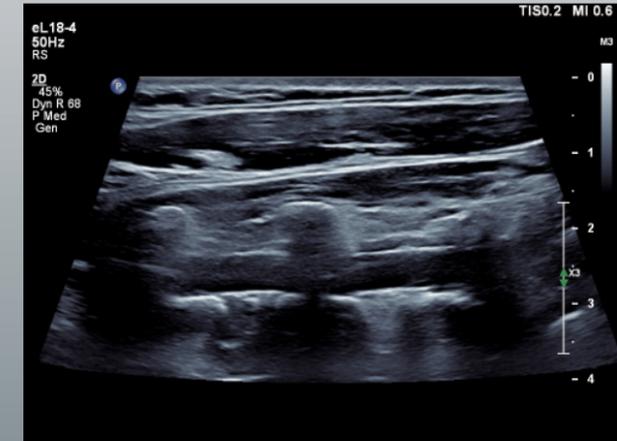
Longitudinal ultrasound of the vertebral arteries passing through the foramen transversarium.



ART.-NO HS6242.1

Vertebral Arteries

Longitudinal ultrasound of the vertebral arteries passing through the foramen transversarium, and the cervical ganglia.



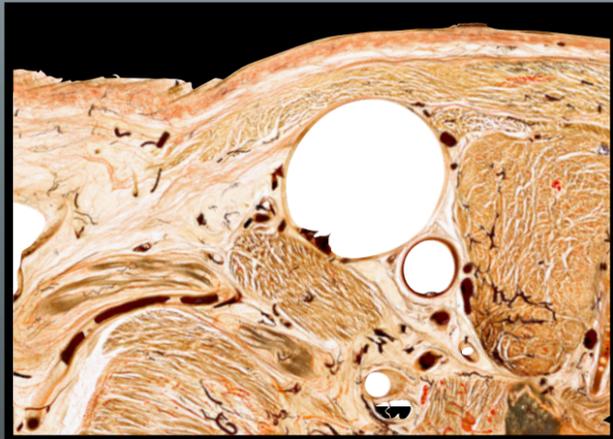
ART.-NO HS6242.2

Anterior Neck

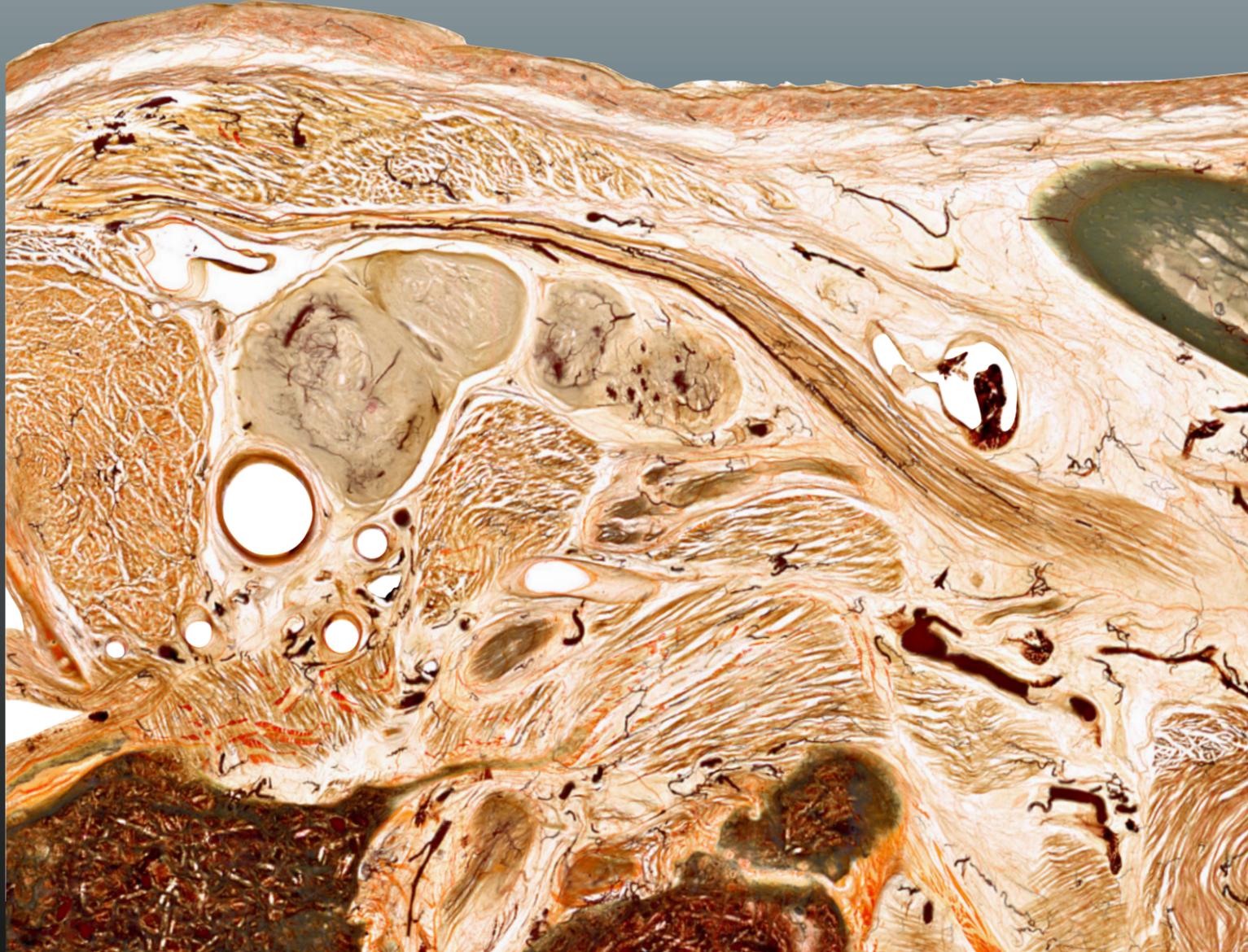
Transverse ultrasound of the anterior neck showing the sternocleidomastoid and scalene muscles, lobe of the thyroid gland, common carotid artery, internal jugular vein, trunks of the brachial plexus.

SPECIAL NOTE

The deep cervical lymph nodes are enlarged on the left side of the real human Sheet Plastinate shown below.



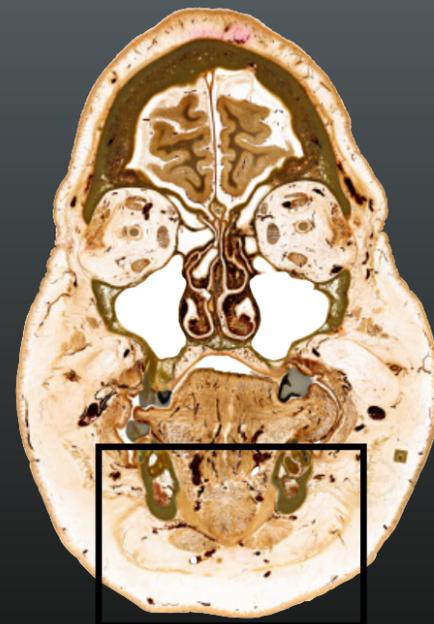
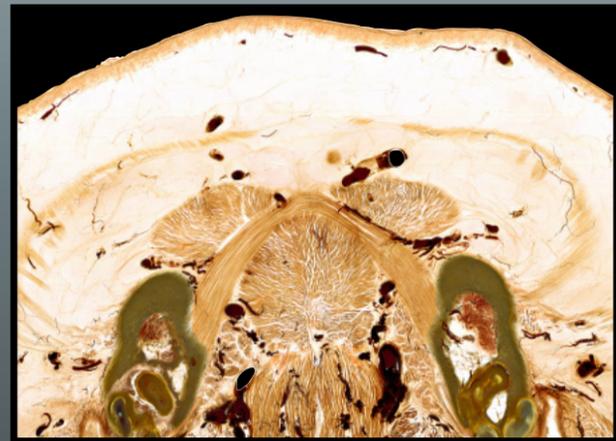
ART.-NO HS6303.1



04.2.6.1

Floor of the Mouth

Transverse ultrasound of floor of the mouth showing the sublingual salivary glands, anterior bellies of digastric, mylohyoid, geniohyoid and genioglossus muscles.



ART.-NO HS6202.1

Floor of the Mouth

04.2.6.2

Transverse ultrasound of floor of the mouth showing the sublingual salivary glands, anterior bellies of digastric, mylohyoid, geniohyoid and genioglossus muscles.

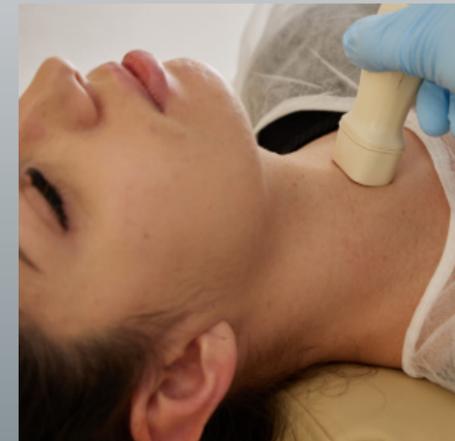


ART.-NO HS6202.2

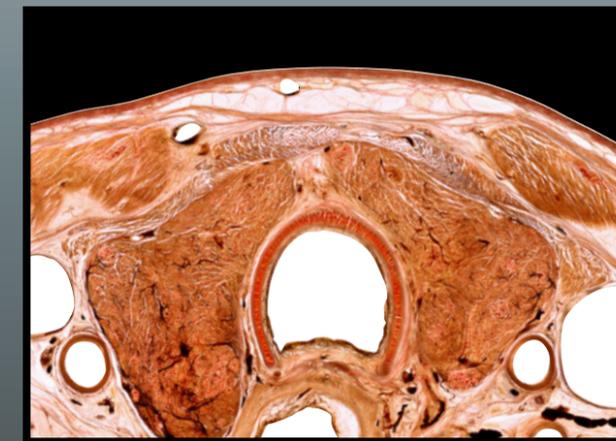
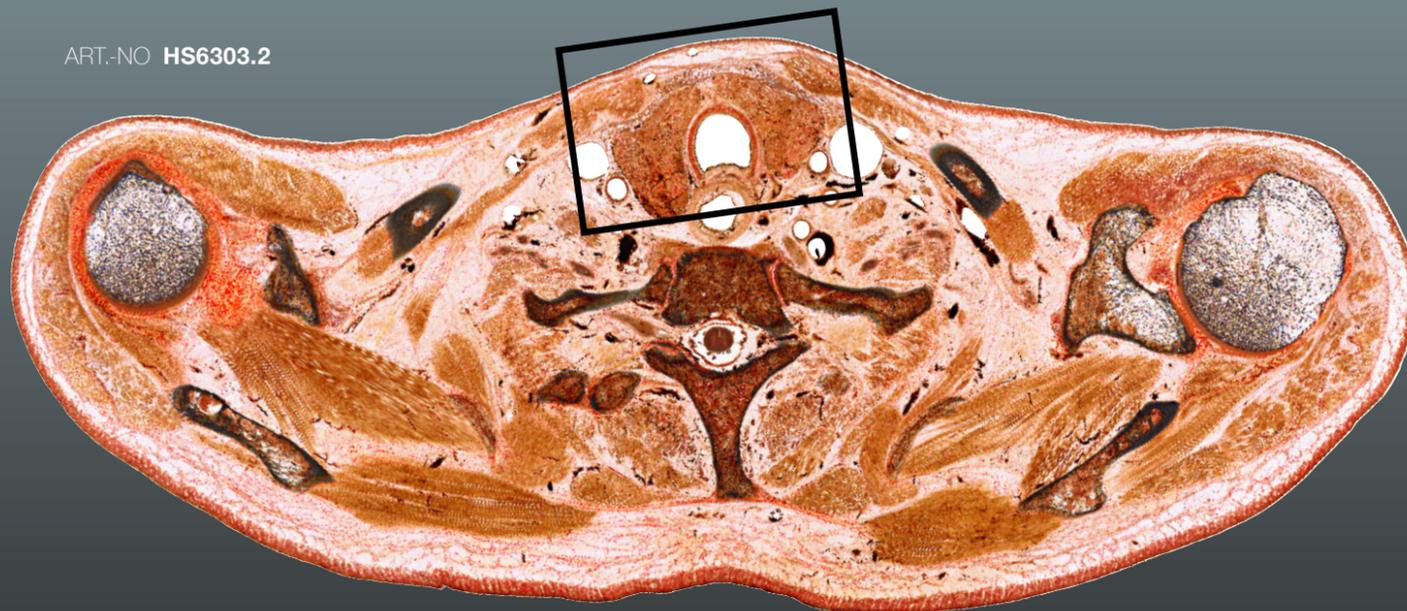
04.2.7

Thyroid Gland

Transverse ultrasound of the thyroid gland showing its left and right lobes and isthmus, the infrahyoid muscles, trachea, tracheal cartilage, oesophagus and common carotid arteries.



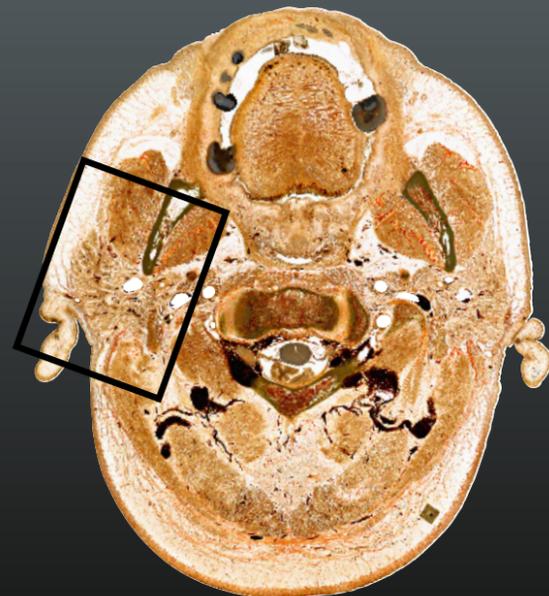
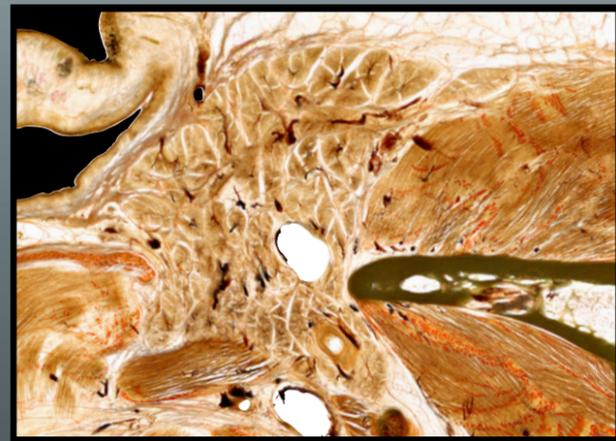
ART.-NO HS6303.2



04.2.8.1

Lateral Face

Transverse ultrasound of the lateral face showing the parotid gland, masseter, ramus of the mandible, retromandibular vein and external carotid artery.

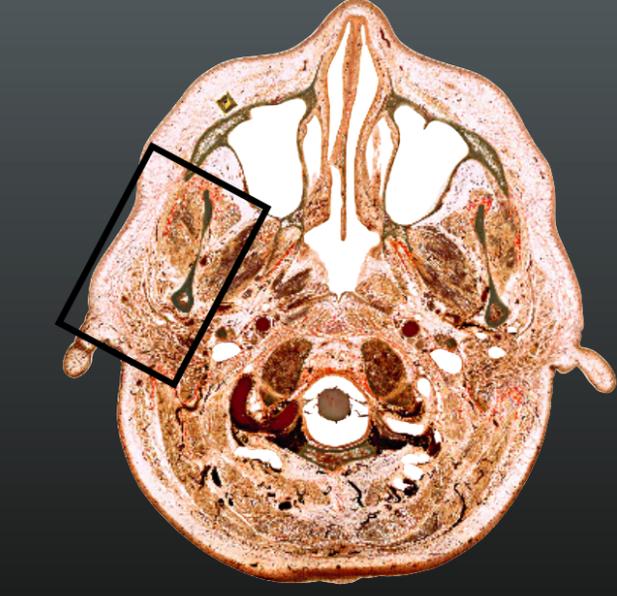
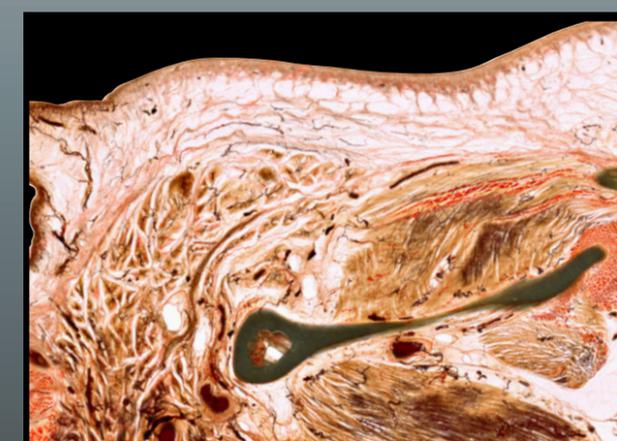
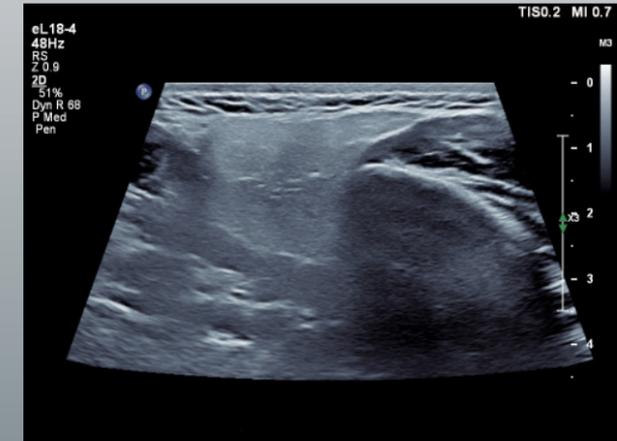


ART.-NO HS6236.1

Lateral Face

04.2.8.2

Transverse ultrasound of the lateral face showing the parotid gland, masseter, ramus of the mandible, retromandibular vein and external carotid artery.

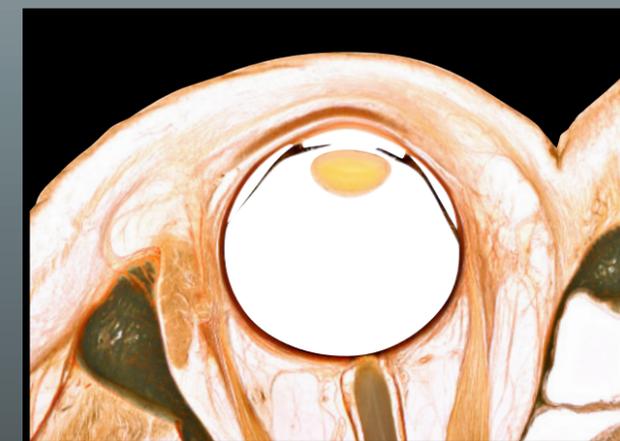


ART.-NO HS6229.1

04.2.9

Eyeball in the Orbital Cavity

Transverse ultrasound of the eyeball in the orbital cavity, showing the eyelid, anterior chamber, lens, iris, retina, vitreous body and optic nerve.



ART.-NO HS6225.1

Exclusive Series of Real Human Sheet Plastinates (HS)

as a Whole Head with Different Spacing, in all 3 Planes

Sheet Plastinate slices provide highly detailed views of cross sectional anatomy that can be explored down to the microscopic level.

The slices are 2–3 mm thin, creating a 3D effect that aids visualisation and learning. Each unique series of slices demonstrate inter-individual variances and may show common pathologies such as atherosclerosis, tumors and signs of neurodegenerative disease.

All series of Sheet Plastinates originate from a single body donor making their viewing comparable to that of the MRI or CT data from a single patient. Indeed, Sheet Plastinates can enhance the learning and mastery of CT, MRI and ultrasound image interpretation, and they serve as an ideal supplement to published learning resources (e.g., atlases). Computer-based 3D reconstruction of Sheet Plastinate images is also possible.¹

¹ Sora, M.C., Latorre, R., Baptista, C. and López-Albors, O. (2019) Plastination—A scientific method for teaching and research. *Anatomia, Histologia, Embryologia*, 48(6):526–531

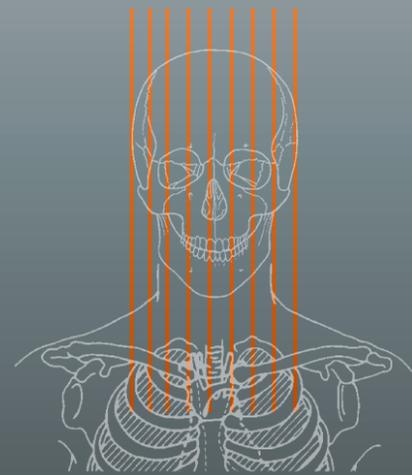


04.3.1

Sagittal Plane

All series of Sheet Plastinates originate from a single body donor making their viewing comparable to that of the MRI or CT data from a single patient.

The size of a series ranges from a whole head to one fifth (20%) of a head. This enables you to perfectly match your unique requirements and budget. Smaller series (from one half to one fifth of a head) consist of a series of slices taken at regular intervals, as shown in the table below.



ART.-NO.	SERIES	INTERVAL (MM)	≈ NO. OF SLICES
HS62S8	WHOLE HEAD	0.95*	30-40
HS62S7	1/2 HEAD	3.20	15-20
HS62S6	1/3 HEAD	5.45	10-13
HS62S5	1/4 HEAD	7.70	7-10
HS62S4	1/5 HEAD	9.95	6-8

* 0.95 mm interval represents the thickness of the saw blade.



04.3.2

Coronal Plane

All series of Sheet Plastinates originate from a single body donor making their viewing comparable to that of the MRI or CT data from a single patient.

The size of a series ranges from a whole head to one fifth (20%) of a head. This enables you to perfectly match your unique requirements and budget. Smaller series (from one half to one fifth of a head) consist of a series of slices taken at regular intervals, as shown in the table below.



ART.-NO.	SERIES	INTERVAL (MM)	≈ NO. OF SLICES
HS62C8	WHOLE HEAD	0.95*	40–50
HS62C7	1/2 HEAD	3.20	20–25
HS62C6	1/3 HEAD	5.45	13–21
HS62C5	1/4 HEAD	7.70	10–12
HS62C4	1/5 HEAD	9.95	8–10

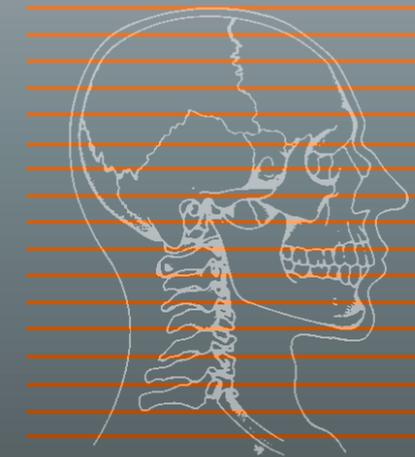
* 0.95 mm interval represents the thickness of the saw blade.

Transverse Plane

04.3.3

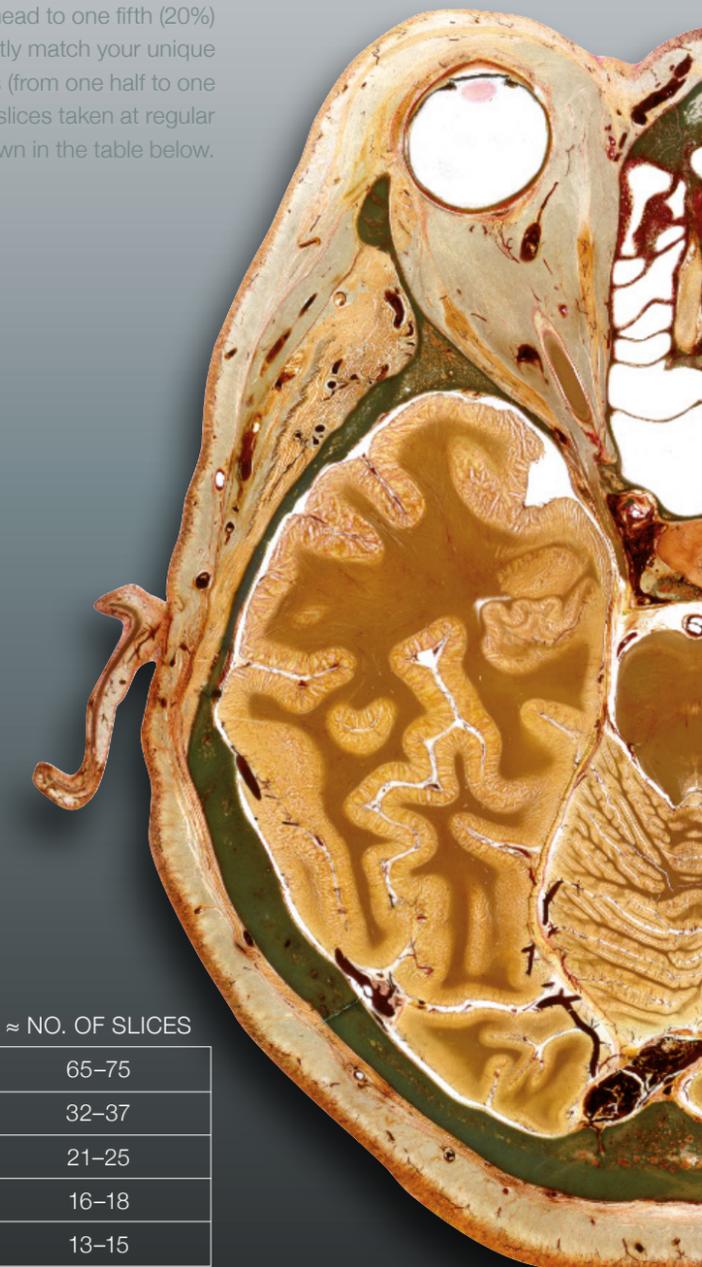
All series of Sheet Plastinates originate from a single body donor making their viewing comparable to that of the MRI or CT data from a single patient.

The size of a series ranges from a whole head to one fifth (20%) of a head. This enables you to perfectly match your unique requirements and budget. Smaller series (from one half to one fifth of a head) consist of a series of slices taken at regular intervals, as shown in the table below.



ART.-NO.	SERIES	INTERVAL (MM)	≈ NO. OF SLICES
HS62H8	WHOLE HEAD	0.95*	65–75
HS62H7	1/2 HEAD	3.20	32–37
HS62H6	1/3 HEAD	5.45	21–25
HS62H5	1/4 HEAD	7.70	16–18
HS62H4	1/5 HEAD	9.95	13–15

* 0.95 mm interval represents the thickness of the saw blade.



ADDITIONAL SHEET PLASTINATES (HS)

To further enhance your learning and teaching, you might also benefit from our additional range of Sheet Plastinates and Plastinated Brain Slices.

More details can be found online or in our main catalogue.
www.vonHagens-Plastination.com/catalogue

ADDITIONAL SETS OF PLASTINATED BRAIN SLICES (HS)

CORONAL

SHEET PLASTINATE RANGE

HS6201 – HS6210

TRANSVERSE

SHEET PLASTINATE RANGE

HS6220 – HS6237

SAGITTAL

SHEET PLASTINATE RANGE

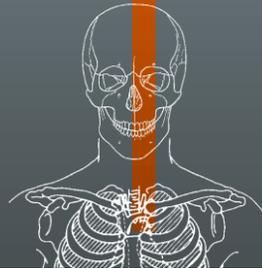
HS6241 – HS6247



HS62C1 · HS62C2 · HS62C3



HS62H1 · HS62H2 · HS62H3



HS62S1 · HS62S2 · HS62S3



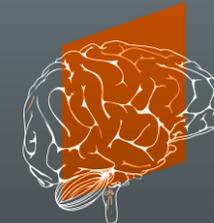
Example



Example



Example



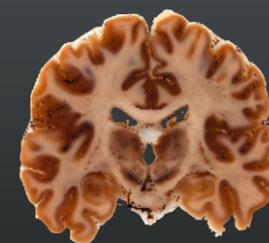
CORONAL



TRANSVERSE



SAGITTAL



HS61C1 · HS61C2 · HS61C3



HS61H1 · HS61H2 · HS61H3



HS61S1 · HS61S2 · HS61S3

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Think before you print.