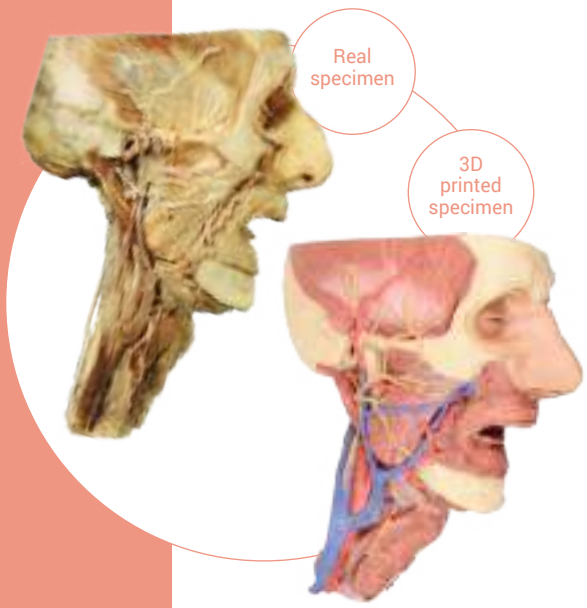
ERLER ZIMMER

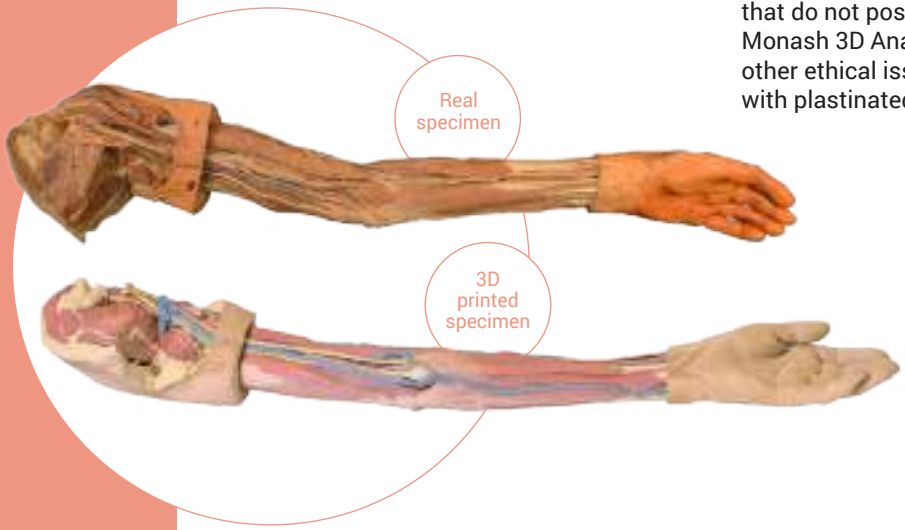
3D Printed Anatomy

Detailed article information at: **www.erler-zimmer.de**

THE GROUND-BREAKING

Monash Anatomy Series represents an unique and unrivalled collection of colour-augmented human anatomy body replicas designed specifically for enhanced teaching and learning. This premium collection of highly accurate normal human anatomy has been generated directly from either radiographic data or actual cadaveric specimens using advanced imaging techniques. The Monash 3D Human Anatomy Series provides a cost effective means to meet your specific educational and demonstration needs in a range of curricula from medicine, allied health sciences and biological sciences. A detailed description of the anatomy displayed in each 3Dprinted body replica is provided.





What advantages does The Monash 3D Anatomy Series offer over either plastic models or plastinated human specimens?

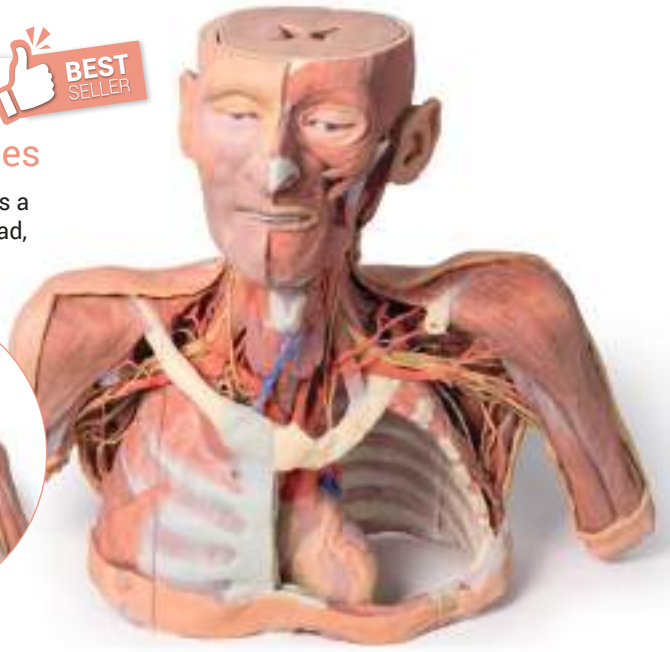
- ✓ Each body replica has been carefully created from selected radiographic patient data or high quality real human prosected cadaver specimens selected by a highly qualified team of anatomists at the Centre for Human Anatomy Education; Monash University to illustrate a range of clinically important areas of anatomy with a quality and fidelity that is not possible in conventional models – this is real anatomy and not stylised.
- ✓ Each body replica has been rigorously checked by a team of highly qualified anatomists at The Centre for Human Anatomy Education, Monash University, to ensure the anatomical accuracy of the final product.
- ✓ The body replicas are not real human tissue and therefore not subject to any barriers of transportation, importation or use in educational facilities that do not possess an anatomy license. The Monash 3D Anatomy Series avoids these and other ethical issues that are raised when dealing with plastinated human remains.

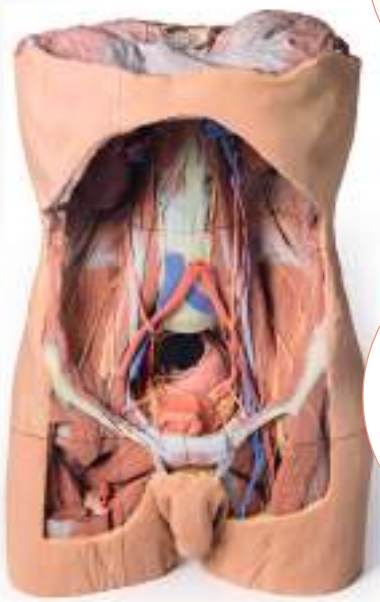
Head, Neck and Shoulder with angiosomes

BEST SELLER

This large 3D printed specimen displays a great deal of anatomy spanning the head, neck, thorax, axillae and upper limbs.

Ref.no. MP1250
Details:





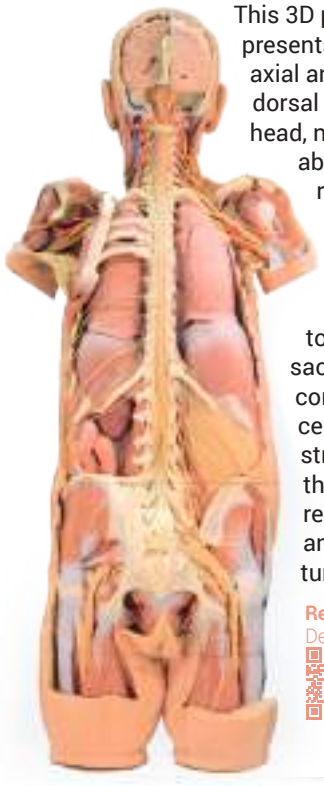
Posterior Abdominal wall

This large 3D-printed specimen displays the entire male posterior abdominal wall from the diaphragm to the pelvic brim, as well as pelvic anatomy and to the proximal thigh. This same individual specimen is also available as a pelvic and proximal thigh specimen (MP1770).

Ref.no. MP1300
Details:

Nervous System Dissection (posterior view)

BEST SELLER



This 3D printed specimen presents a unique view of axial anatomy, presenting a dorsal deep dissection of the head, neck, axillae, thorax, abdomen, and gluteal regions. The removal of the posterior portions of the cranium and laminectomy from the cervical region to the opening of the sacral canal affords a continuous view of the central nervous system structures and origin of the segmental nerves relative to other axillary and appendicular structures.

Ref.no. MP1400
Details:

Posterior Body Wall / Ventral Deep Dissection

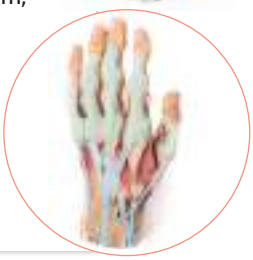
This 3D printed specimen complements our dorsal dissection specimen (MP1400) by presenting a ventral deep dissection of axial anatomy from the head, neck, axillae, thorax, and abdomen to the proximal portion of the thighs. The removal of the anterior portions of the cranium and vertebral bodies from the cervical region to the 5th lumbar provides a continuous view of the central nervous system structures and origin of the segmental nerves relative to other axillary and appendicular structures.

Ref.no. MP1410
Details:

Hand

BEST SELLER

This 3D printed specimen demonstrates a superficial dissection of a left hand and wrist. Anteriorly, the transverse carpal and palmar carpal ligaments have been removed to expose the tendons and nerves traversing the carpal tunnel and Canal of Guyon. The palmar aponeurosis has been removed to demonstrate the course of the tendons through the palm, the superficial muscles of the thenar and hypothenar eminences (abductors and flexors), and the lumbrical muscles arising from the flexor digitorum tendon.



Ref.no. MP1530
Details:

Upper Limb

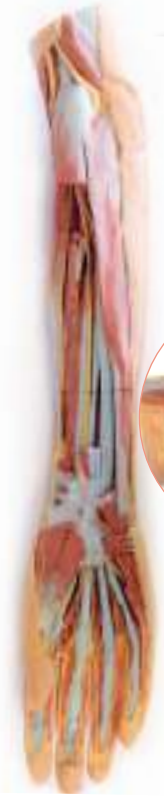
This 3D-printed specimen demonstrates the superficial anatomy of a left upper limb from the blade of the scapula to the hand. The skin and superficial and deep fascia has been removed from most of the limb except over the dorsum of the scapula, proximal arm, and over the hand. The superficial veins, including the median cubital vein, have been maintained; with the cephalic and basilica preserved from the wrist to the deltopectoral groove and termination in the brachial vein, respectively.

Ref.no. MP1500
Details:

Forearm and hand

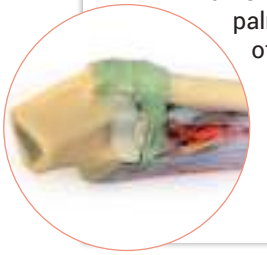
– superficial and deep dissection.
This 3D printed specimen preserves a mixed superficial and deep dissection of the anterior aspect of a right distal arm, forearm and hand.

Ref.no. MP1512
Details:



Forearm and hand

– deep dissection. This 3D printed specimen of a left upper limb preserves a deep dissection from the distal humerus to the palmar surface of hand.



Ref.no. MP1514
Details:

Upper limb and hand

– deep dissection. This 3D print of a superficially dissected right upper limb specimen displays a mixture of the vascular, nervous and muscular anatomy of the distal arm, forearm and hand.

Ref.no. MP1513
Details:

Upper Limb – elbow, forearm and hand

This 3D-printed specimen displays a great deal of upper limb anatomy. In the distal arm and elbow/cubital fossa region it shows the arrangement of the biceps tendon, brachial artery and median nerve arranged from lateral to medial. The bicipital aponeurosis has been divided to reveal the structures deep to it.

Ref.no. MP1510
Details:

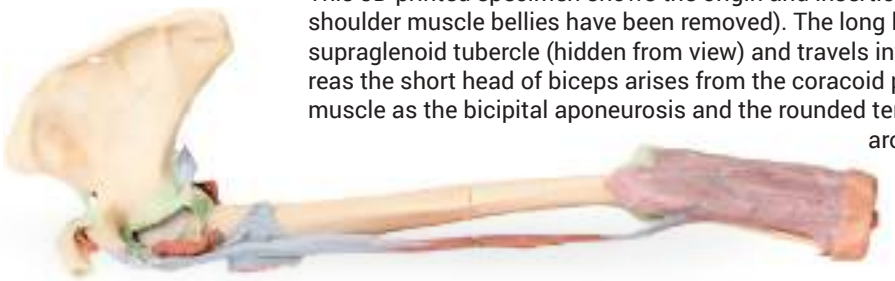
Upper Limb Ligaments

This 3D printed specimen presents the entire upper limb skeleton and ligaments from the pectoral girdle to the hand. Detailed anatomical description on request.

Ref.no. MP1520
Details:

Upper Limb – biceps, bones and ligaments

This 3D-printed specimen shows the origin and insertion of biceps (most other arm and shoulder muscle bellies have been removed). The long head of biceps arises from the supraglenoid tubercle (hidden from view) and travels inferiorly in the bicipital groove, whereas the short head of biceps arises from the coracoid process. The bifid insertion of the muscle as the bicipital aponeurosis and the rounded tendon which can be seen winding around the radius to insert into the radial tuberosity are clearly discernable.



Ref.no. MP1515
Details:

Cubital Fossa

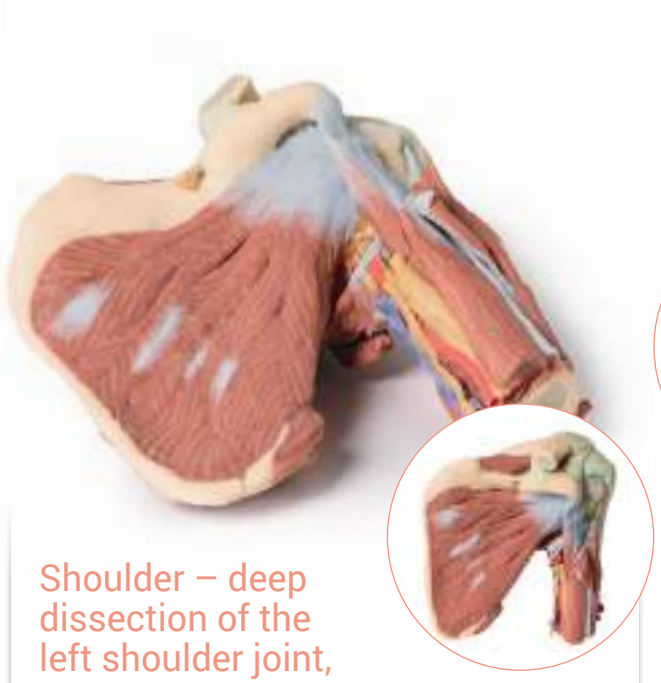
This 3D printed cubital fossa displays a superficial dissection of the right distal arm and proximal forearm. The skin and superficial fascia has been removed anteriorly, medially and laterally to expose the superficial veins (basilic, cephalic, and median cubital) and cutaneous (medial, lateral and posterior antebrachial) nerves.

Ref.no. MP1750
Details:

Cubital fossa – muscles, large nerves and the brachial artery

This 3D printed specimen presents a left distal arm and proximal forearm with all skin, subcutaneous fat and superficial cutaneous nerves and veins removed. The elbow region partially flexed to display the arrangement of muscles and neurovascular structures of the cubital fossa.

Ref.no. MP1755
Details:



Shoulder – deep dissection of the left shoulder joint,

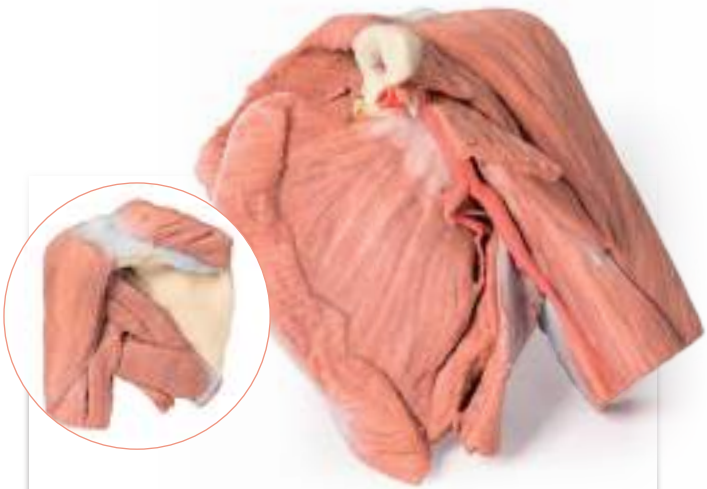
musculature, and associated nerves and vessels. This 3D printed specimen presents a deep dissection of the left shoulder joint, musculature, and associated nerves and vessels of the scapula and proximal humerus (to near midshaft). Anteriorly, the deltoid muscle has been detached from its origin to expose the underlying deeper structures of the shoulder joint and rotator cuff musculature.

Ref.no. MP1525
Details:

Shoulder – deep dissection of a right shoulder girdle,

preserving a complete scapula, lateral clavicle, and proximal humerus. This 3D printed specimen preserves a deep dissection of a right shoulder girdle, consisting of a complete scapula, lateral clavicle, and proximal humerus. In the anterior view, the subscapularis muscle is present but sectioned to highlight the cross-sectional thickness of the belly within the subscapular fossa.

Ref.no. MP1527
Details:



Shoulder left – Superficial muscles and axillary/brachial artery

This printed 3D left shoulder specimen consists of the scapula, humerus (sectioned near midshaft) and clavicle (sectioned at midshaft) with the superficial muscles around the shoulder joint, the rotator cuff muscles and the axillary artery as it progresses distally to become the brachial artery. The muscles attached to the clavicle have been preserved including the subclavius muscle attachment to the inferior border of the clavicle and the deltoid covering the lateral aspect of the proximal upper limb (overlying the origins of the long head of biceps brachii and the lateral head of triceps brachii).

Ref.no. MP1523
Details:

Right thoracic wall – axilla, and the root of the neck

This 3D printed specimen preserves a dissection of the right thoracic wall, axilla, and the root of the neck. Structures within the right chest wall are visible deep to the parietal pleura, including the ribs, muscles of the intercostal spaces and the origins of the neurovascular bundle in each intercostal space. The pectoralis major has been reflected medially towards the sectioned edge of the specimen to expose pectoralis minor which acts as a useful landmark as it divides the axillary artery into its three parts. The clavicle has had its middle 1/3 removed, but the subclavius muscle has been retained. The brachial plexus and many of its branches are seen almost in its entirety from the roots of C5-T1 to its termination.

Ref.no. MP1521
Details:

Foot – Plantar surface

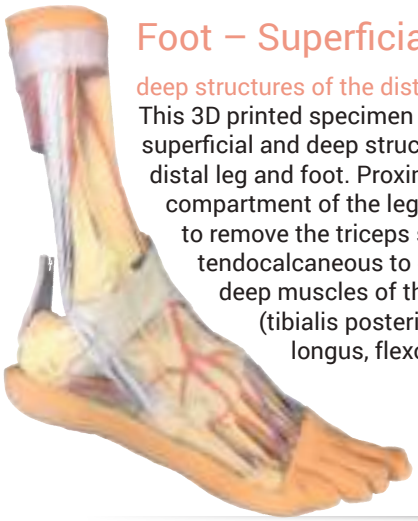
and superficial dissection on the dorsum.
This 3D printed specimen is a left foot with superficial structures exposed on the dorsum, and the superficial layer of muscles and nerves on the plantar surface. The anterior portion of the plantar aponeurosis has largely been removed to expose the first layer of muscles.

Ref.no. MP1910
Details:

Foot – Deep plantar structures

This 3D printed specimen provides a view of deep plantar structures of a right foot. Medially, the cut edge of the great saphenous vein is visible within the superficial fascia, just anterior to the cut edges of the medial and lateral plantar arteries and nerves overlying the insertion of the tibialis posterior muscle. The superficial fascias, the plantar aponeurosis, and superficial musculature have been removed to expose the deep (third layer) of musculature.

Ref.no. MP1940
Details:



Foot – Superficial and

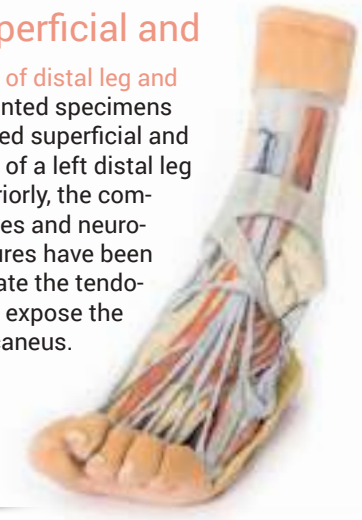
deep structures of the distal leg and foot.
This 3D printed specimen presents both superficial and deep structures of a right distal leg and foot. Proximally, the posterior compartment of the leg has been dissected to remove the triceps surae muscles and tendocalcaneous to demonstrate the deep muscles of the compartment (tibialis posterior, flexor digitorum longus, flexor hallucis longus).

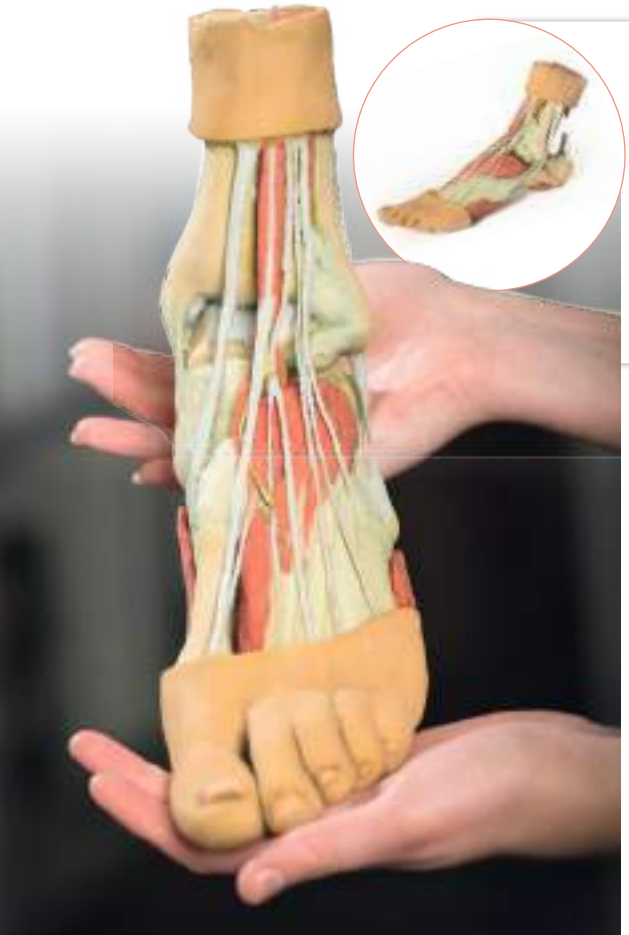
Ref.no. MP1930
Details:

Foot – Superficial and

deep dissection of distal leg and foot. This 3D printed specimens preserves a mixed superficial and deep dissection of a left distal leg and foot. Posteriorly, the compartment muscles and neurovascular structures have been removed to isolate the tendocalcaneous and expose the body of the calcaneus.

Ref.no. MP1920
Details:





Foot – Structures of the plantar surface

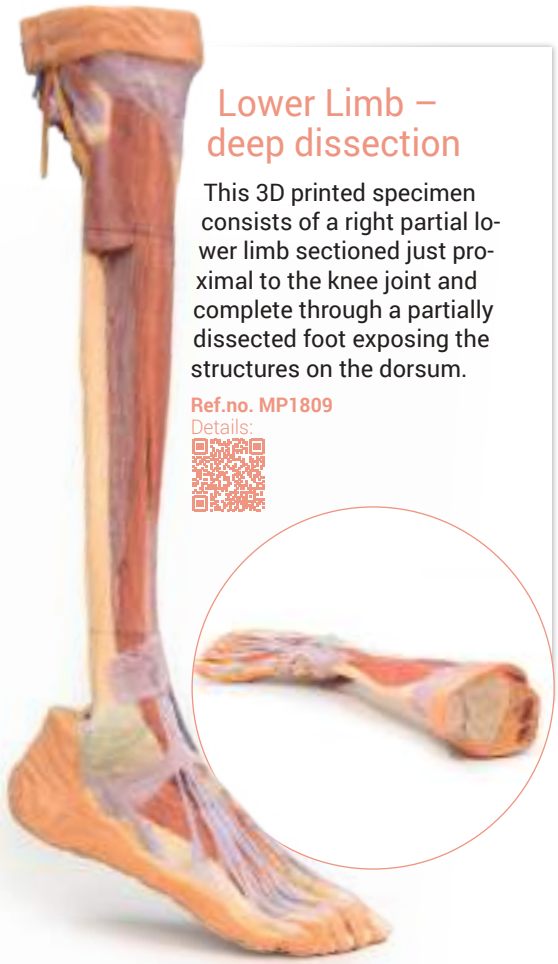
This 3D print records the anatomy of a right distal leg and the deep structures of the plantar surface of the foot. Proximally, the tibia, fibula, interosseous membrane, and leg muscles are discernable in cross-section. Medially, at the level of the ankle joint, the long tendons of the dorsi- and plantar-flexors are visible superficial to the capsular and extra capsular ligaments.

Ref.no. MP1900
Details:

Foot – Parasagittal cross-section

This 3D printed specimen provides a parasagittal cross-section through the medial aspect of the right distal tibia and foot, displaying the skeletal structures of the medial longitudinal arch of the foot and surrounding soft-tissue structures.

Ref.no. MP1850
Details:



Lower Limb – deep dissection

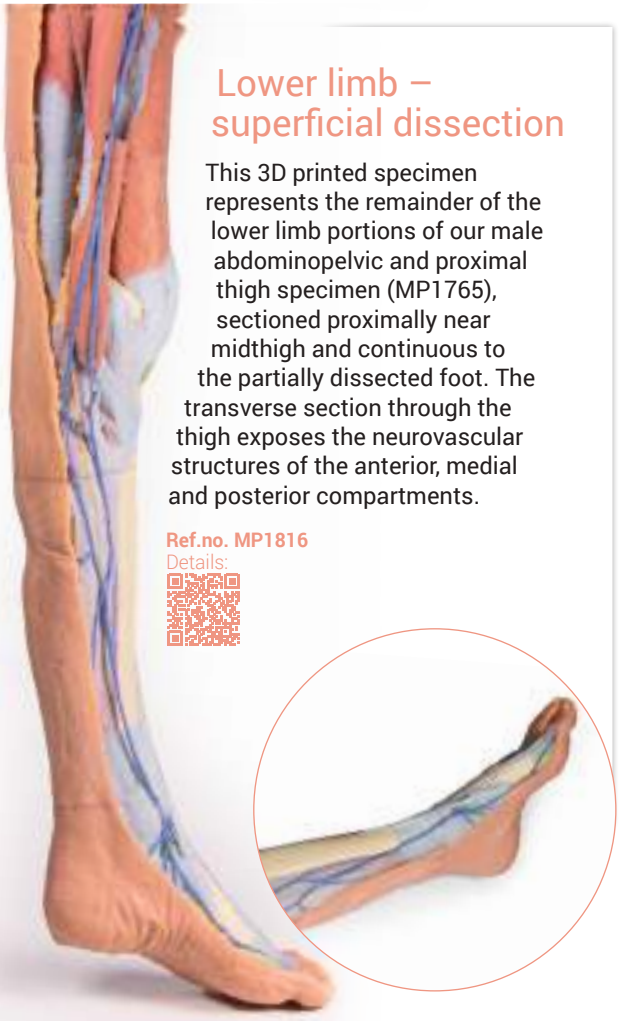
This 3D printed specimen consists of a right partial lower limb sectioned just proximal to the knee joint and complete through a partially dissected foot exposing the structures on the dorsum.

Ref.no. MP1809
Details:

Lower Limb superficial veins

This 3D printed specimen presents a superficial dissection of a left lower limb, from just proximal to the knee joint to a complete foot. The skin and superficial fascia have been removed to display the superficial venous structures of the leg including the dorsal venous plexus, great saphenous vein (including numerous tributaries), and the small saphenous vein (including numerous tributaries) on the crural fascia.

Ref.no. MP1815
Details:



Lower limb – superficial dissection

This 3D printed specimen represents the remainder of the lower limb portions of our male abdominopelvic and proximal thigh specimen (MP1765), sectioned proximally near midthigh and continuous to the partially dissected foot. The transverse section through the thigh exposes the neurovascular structures of the anterior, medial and posterior compartments.

Ref.no. MP1816
Details:

Lower Limb Musculature

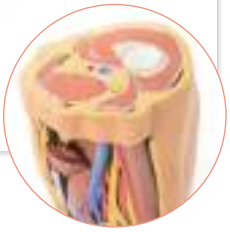
This 3D printed specimen preserves a superficial dissection of the lower limb musculature from the mid-thigh to mid-leg, as well as nerves and vessels of the popliteal fossa. The insertions of the muscles of the anterior, middle and posterior compartments of the thigh are visible, including the pes anserinus medially and the iliotibial tract laterally. The capsule of the knee joint has been opened anteriorly to demonstrate the menisci and the tibial and fibular collateral ligaments. Detailed anatomical description on request.

Ref.no. MP1810
Details:

Popliteal Fossa distal thigh and

proximal leg. This 3D printed specimen preserves the distal thigh and proximal leg, dissected posteriorly to demonstrate the contents of the popliteal fossa and surrounding region.

Ref.no. MP1820
Details:



Popliteal Fossa

This 3D printed specimen preserves the distal thigh and proximal leg, dissected posteriorly to demonstrate the contents of the popliteal fossa and surrounding region. The proximal cross-section demonstrates the anterior, posterior and medial compartment muscles, with the femoral artery and vein visible within the adductor canal. The sciatic nerve and great saphenous vein are also visible.

Ref.no. MP1830
Details:

BEST SELLER

Flexed knee joint deep dissection

This 3D printed specimen displays a deep dissection of a left knee joint with the internal joint capsule structures relative to superficial tissues in a flexed position.

Ref.no. MP1807
Details:

Knee Joint, flexed

This 3D printed specimen demonstrates the ligaments of the knee joint with the leg in flexion. In the anterior view, with the patella and part of the patellar ligament removed, the medial and lateral menisci and anterior and posterior cruciate ligaments are visible.

Ref.no. MP1800
Details:

Knee Joint, extended

This 3D printed specimen demonstrates the ligaments of the knee joint with the leg in extension; it represents the same specimen as MP1800 knee joint printed in a flexed position. Both tibial and fibular collateral ligaments are intact.

Ref.no. MP1805
Details:

Lower limb – superficial dissection with male left pelvis

This 3D printed specimen combines the Lower limb – superficial dissection (Ref. no. MP1816) with the male left pelvis (Ref.no. MP1765).

Ref.no. MP1818
Details:

BEST SELLER

Lower Limb – deep dissection of a left pelvis and thigh

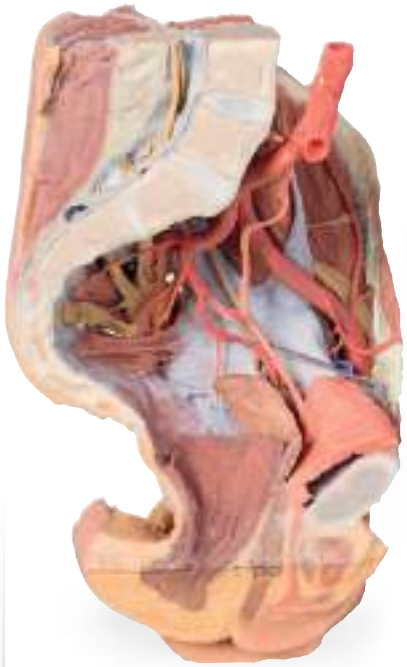
This 3D printed specimen presents a deep dissection of a left pelvis and thigh to show the course of the femoral artery and sciatic nerve from their proximal origins to the midshaft of the femur. Proximally, the pelvis has been sectioned along the mid-sagittal plane and the pelvic viscera are removed. In the pelvis the coccygeus muscle spans between the sacrum and iliac spine and the obturator artery and nerve entering the obturator canal superior to the obturator membrane.

Ref.no. MP1813
Details:

Male left pelvis and proximal thigh

This 3D printed male left pelvis and proximal thigh (sectioned through the midsagittal plane in the midline and transversely through the L3/4 intervertebral disc) shows superficial and deep structures of the true and false pelves, inguinal and femoral region. In the transverse section, the epaxial musculature, abdominal wall musculature (rectus abdominis, external and internal abdominal obliques, transversus abdominis), psoas major and quadratus lumborum are visible and separated from each other and the superficial fat by fascial layers such as the rectus sheath and the thoracolumbar fascia. The psoas major muscle lies lateral to the external iliac artery, with the left testicular artery and vein lying on its superficial surface. More laterally (and moving inferiorly), the ilioinguinal nerve, the lateral cutaneous nerve of the thigh and the femoral nerve are positioned over the superficial surface of the iliacus muscle.

Ref.no. MP1765
Details:



Female left pelvis and proximal thigh

This 3D printed female left pelvis and proximal thigh preserves both superficial and deep structures of the true and false pelves, inguinal region, femoral triangle, and gluteal region. The specimen has been sectioned transversely through the fourth lumbar vertebra, displaying the cross-section of the musculature (epaxial musculature, psoas and quadratus lumborum muscles) and cauda equina within the vertebral canal. The ventral and dorsal roots of the cauda equina are also visible exiting the intervertebral and sacral foramina in the sagittal section.

Ref.no. MP1780
Details:

Female right pelvis superficial and deep structures

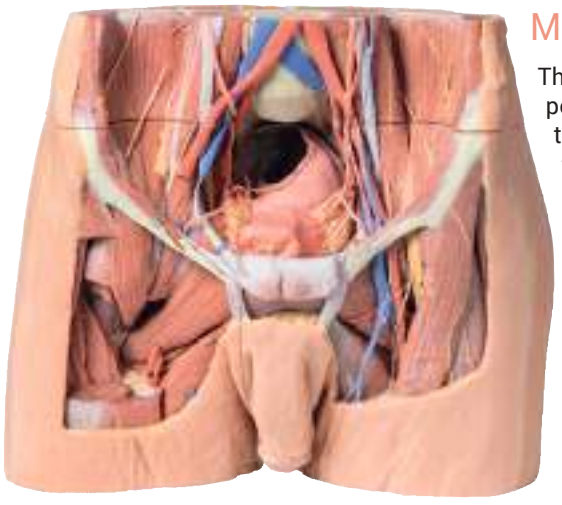
This 3D printed female right pelvis preserves both superficial and deep structures of the true and false pelves, as well as the inguinal ligament, the obturator membrane and canal, and both the greater and lesser sciatic foramina. Somewhat unique is the removal of portions of the peritoneum (a grayish colour) to create 'windows' displaying extraperitoneal structures.

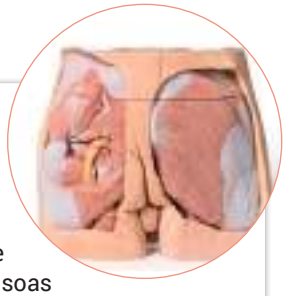
Ref.no. MP1783
Details:

Female right pelvis

This 3D printed specimen represents a female right pelvis, sectioned along the midsagittal plane and transversely across the level of the L4 vertebrae and the proximal thigh. The specimen has been dissected to demonstrate the deep structures of the true and false pelves, the inferior anterior abdominal wall and inguinal region, femoral triangle and gluteal region.

Ref.no. MP1785
Details:

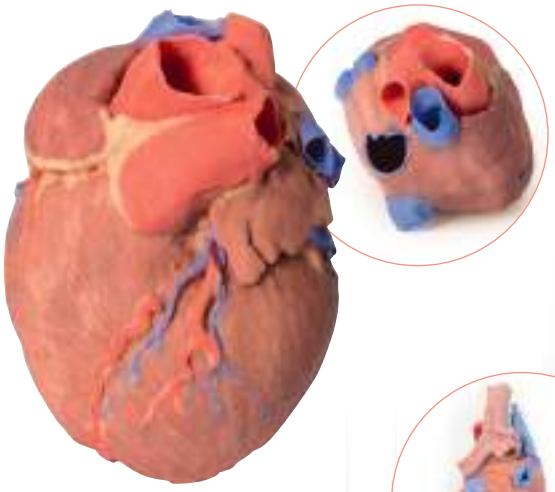




Male Pelvis

This 3D printed specimen represents the inferior posterior abdominal wall, the pelvic cavity and the proximal thigh. The common iliac veins unite to form the inferior vena cava. The iliacus and psoas muscles are easy to identify, the latter has a prominent psoas minor tendon. The nerves of the iliac fossa and their course is clearly visible, as is the genitofemoral nerves on the surface of psoas muscle. The ureters also descend on the superficial surface of the psoas and cross from its lateral to its medial border. They enter the pelvis at the bifurcation of the common iliac arteries into external and internal arteries. The external iliac arteries and veins running along the pelvic brim are clearly visible, as is the vas deferens crossing the brim from the deep inguinal ring to enter the pelvis.

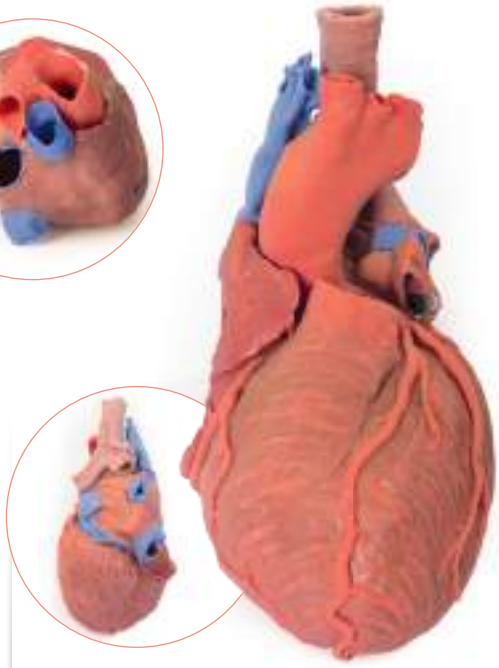
Ref.no. MP1770
Details:



Heart

This 3D printed heart specimen preserves superficial cardiac anatomy and the bases of the great vessels. All four chambers (atria and ventricles) are preserved, with the pericardial reflections on the left atrium demarcating the position of the transverse and oblique pericardial sinuses. On the posterior aspect, the coronary sinus receives all the cardiac veins (great, middle, small) and a prominent posterior vein of the left ventricle. The aortic and pulmonary semilunar valves are visible at the bases of the ascending aorta and pulmonary trunk, respectively.

Ref.no. MP1700
Details:



Heart and the distal trachea, carina and primary bronchi

This 3D printed specimen preserves the external anatomy of the heart and the distal trachea, carina, and primary bronchi in the posterior mediastinum relative to the great vessels and left atrium The left auricle has been sectioned to demonstrate the course of the circumflex artery in the coronary groove. The pulmonary trunk has been removed to expose the (open) pulmonary semilunar valves, while the arch of the aorta is intact to display the origins of the brachiocephalic trunk, left common carotid, and left subclavian.

Ref.no. MP1710
Details:

Heart internal structures

This 3D printed heart has been dissected to display the internal structures of the chambers. At the base of the heart the termination of the superior vena cava is preserved entering the right atrium. Part of the inferior vena cava is also preserved on the inferior aspect of the right atrium; however, most of the vessel lumen and much of the anterior wall has been removed to expose the pectinate muscles of the right auricle and the fossa ovalis. The anterior wall of the right ventricle has also been removed.

Ref.no. MP1715
Details:

BEST SELLER

Bronchial Tree

This 3D printed specimen presents the conducting pathways of the respiratory system from the trachea, carina, and complete right and left bronchial trees to the level of the tertiary lobar bronchi. Each set of lobar bronchi have been colour-coded to demonstrate the bronchopulmonary segments of the right and left lobes.

Ref.no. MP1690
Details:

Bowel – Portion of Ileum

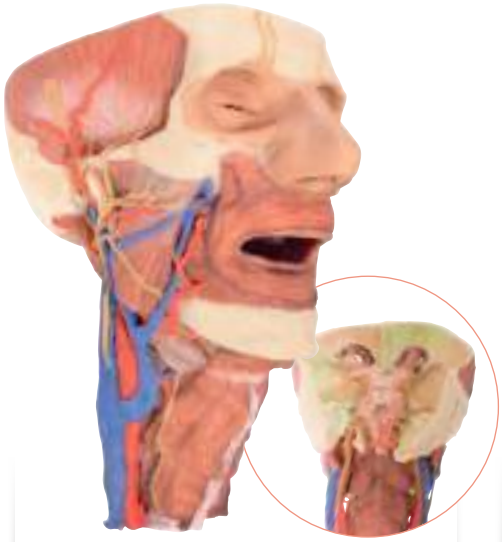
This 3D printed specimen demonstrates a small loop of ileum and mesentery. A window into the mesentery has been dissected (removing fat and visceral peritoneum) to show arterial arcades in the mesentery.

Ref.no. MP1725
Details:

Bowel – Portion of Jejenum

This 3D printed specimen presents a small loop of jejenum and mesentery. A window into the mesentery, fat and visceral peritoneum has been removed to illustrate the arterial arcades in the mesentery.

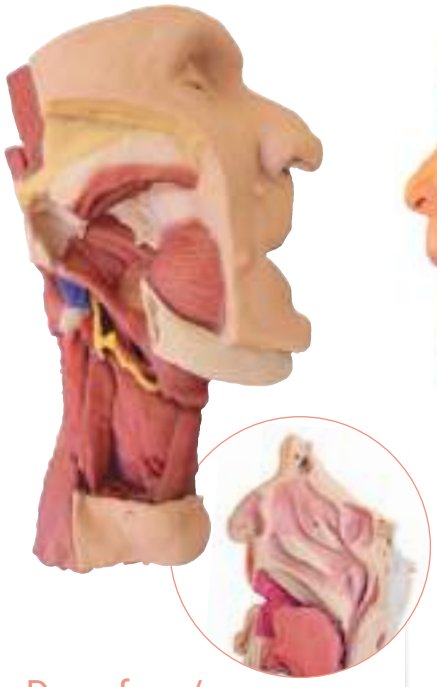
Ref.no. MP1730
Details:



Head and visceral column of the neck

This 3D print specimen preserves a series of features of the head and visceral column of the neck: The face: On the right side of the head the parotid gland has been removed to reveal the facial nerve and all its branches (temporal, zygomatic, buccal, marginal mandibular and cervical) and demonstrate the spatial relations of structures embedded in the gland from superficial to deep (facial nerve, retromandibular vein, external carotid artery). In the surrounding region the temporalis, masseter and posterior belly of digastric are exposed, as are and the facial artery, transverse facial artery and superficial temporal artery. The facial vein and transverse facial vein are clearly visible uniting to form the common facial vein which is joined by the retromandibular vein to form the external jugular vein.

Ref.no. MP1670
Details:



Deep face/ Infratemporal fossa

In this 3D printed specimen of a midsagittally-sectioned right face and neck, the ramus, coronoid process and head of the mandible have been removed to expose the deep part of the infratemporal fossa. The pterygoid muscles have also been removed to expose the lateral pteygoid plate and posterior surface of the maxilla. The buccinator has been retianed and can be seen originating from the external aspect of the maxilla, the pterygomandibular raphe and the external aspect of the (edentulous) mandible.

Ref.no. MP1665
Details:

Head and Neck

This 3D printed specimen of a parasagittally sectioned head and neck demonstrates a range of anatomical features: Lateral aspect of the face: A window has been created to expose the parotid region. The pinna of the ear has been left intact, however the mastoid process has been exposed by reflection of the sternocleidomastoid (SCM) muscle. The parotid gland has been carefully removed to display structures which are normally embedded or hidden by the gland. The attachment of the posterior belly of digastric arising from the digastric groove medial to the mastoid process can be clearly seen.

Ref.no. MP1660
Details:

Superior Orbit

This 3D printed model captures a dissection in which the calvaria and cerebrum have been removed to expose the floors of the anterior and middle cranial fossae. The midbrain has been sectioned at the level of the tentorium cerebelli and on the cross sectional surface one can identify the superior colliculi, cerebral peduncles and the substantia nigra. Anterior to the mid-brain the vertebral artery can be clearly identified rising from the posterior cranial fossa and dividing into the posterior cerebral arteries.

Ref.no. MP1675
Details:

Medial Orbit

This 3D print displays the orbital contents and its close relations as viewed from the medial perspective when the majority of the lateral wall of the nasal cavity and the intervening ethmoidal sinuses have been removed. The posterior ethmoidal nerve (PEN) (a branch of the nasociliary nerve, CN V1) can be seen passing between the medial rectus (MR) inferiorly and the superior oblique muscle superiorly. Detailed anatomical description on request.

Ref.no. MP1685
Details:

Lateral Orbit

This 3D printed specimen shows the orbit from the lateral perspective when the bony lateral wall and part of the calvaria of the skull have been removed. The frontal and temporal lobes of the brain are exposed. In the orbit the lateral rectus (LR) has been divided to demonstrate the intraconal space. The muscle near its insertion has been reflected anteriorly to reveal the insertion of inferior oblique muscle (IO). The portion near its origin from the annulus is reflected to reveal the abducens nerve (VI Nv) entering the bulbar aspect of the muscle belly.

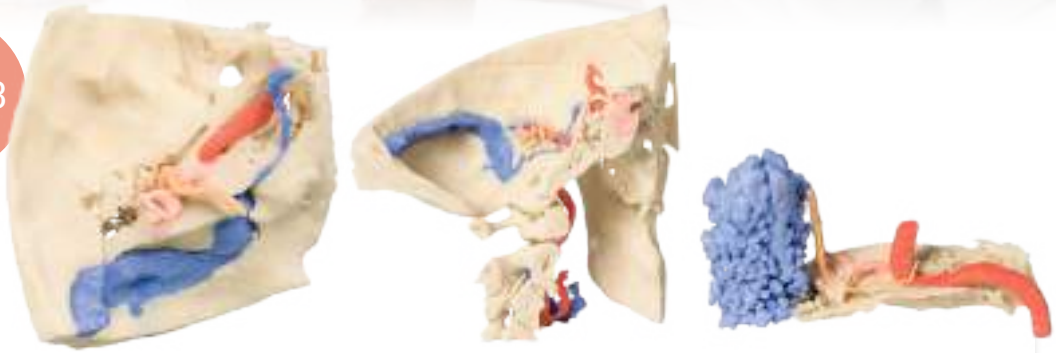
Ref.no. MP1680
Details:

Paranasal Sinus model

This unique model has been created from CT imaging and segmentation of the internal spaces of the viscerocranium. Parts of the skull have been retained but sections or windows have been removed to expose the paranasal sinuses. The paired frontal sinuses, with the right being partially subdivided, are coloured blue.

Ref.no. MP1630
Details:

Set of 3



Temporal Bone Model

This 3 part 3D printed model derived from CT data highlights the complex anatomy of the temporal bone including bone ossicles, canals, chambers, foramina and air spaces. In addition, the spatial relations between temporal bone and other structures of otological importance, i.e. carotid artery, dural venous sinuses, related nerves and the dura mater are indicated. Internal casts (endocasts) of the bony chambers and canals have been created to aid visualisation of the internal anatomy of the temporal bone. The model set consists of three parts: Part 1 Skull Preparation. Part 2 The Petrous Part Of The Temporal Bone. Part 3 The Auditory And Vestibular Apparatus.

Ref.no. MP1620
Details:

Circle of Willis

This 3D printed specimen demonstrates the intracranial arteries that supply the brain relative to the inferior portions of the viscero- and neurocranium. This print was created by careful segmentation of angiographic data. The model shows the paired vertebral arteries entering the cranial cavity through the foramen magnum and uniting to form the basilar artery. The basilar can be seen dividing into their terminal posterior cerebral arteries. The superior cerebellar arteries arise just proximal to this termination.

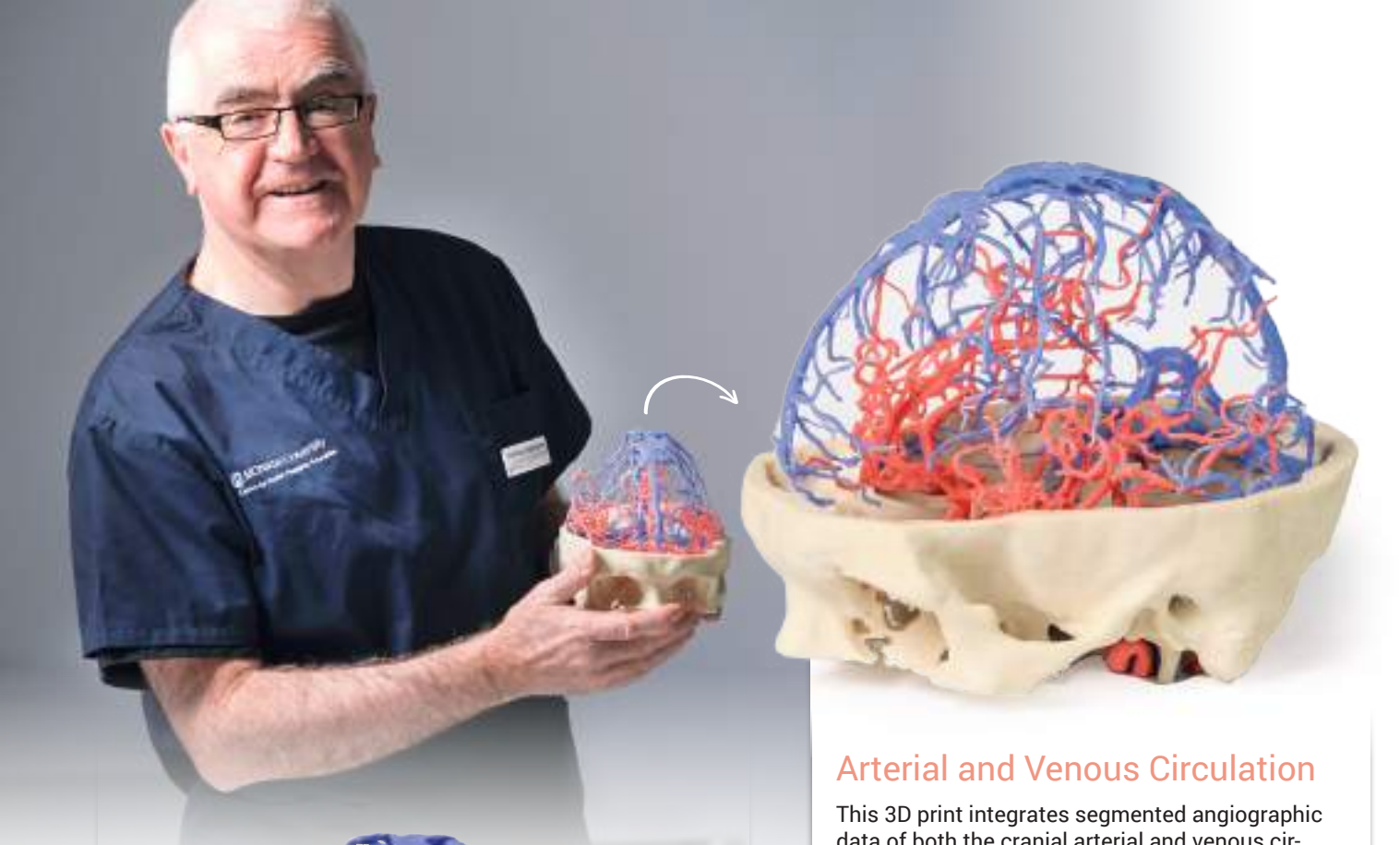
Ref.no. MP1600
Details:

Dural Skull

BEST SELLER

This 3D print of a dissected and opened cranial cavity displays the dural folds and dural venous sinuses, including the falx cerebri (preserved by a retained midsagittal portion of the calvaria. The intact tentorium cerebelli demonstrates the tentorial notch which normally houses the midbrain.

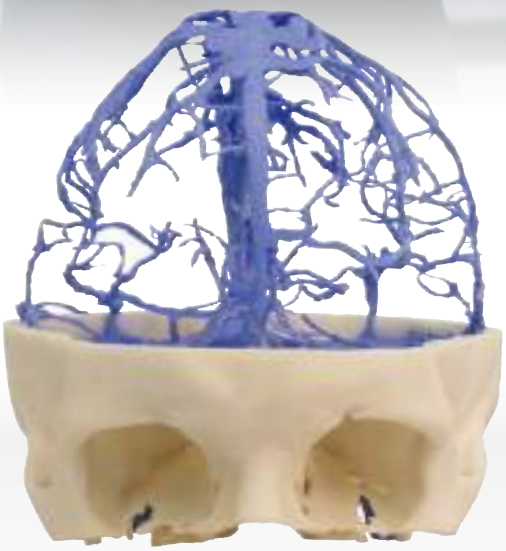
Ref.no. MP1610
Details:



Arterial and Venous Circulation

This 3D print integrates segmented angiographic data of both the cranial arterial and venous circulation into a single model. This model is a combination of 'Circle of Willis' MP1600, 'Cranial Arterial Circulation' MP1650 and 'Cranial Venous Circulation' MP1645 prints.

Ref.no. MP1640
Details:



Venous Circulation

Based on the same dataset as MP1600 and MP1650, in this 3D print the dural venous sinus network has been segmented based on structures visible from the circulation of contrast medium. As a result, while most of the sinuses are present, the lack of contrast in the anterior portions of the venous system means that some structures (cavernous sinus, petrosal sinuses) are not included in the model. The extensive network of dural veins and venous lacunae are visible, joined in the midline to the superior sagittal sinus. Deep to this network of sinus veins are the great cerebral vein, the inferior sagittal sinus and the straight sinus to its convergence with the superior sagittal at the confluence of sinuses. Several dural veins drain into the left and right transverse sinuses as they pass anterior towards the petrous portion of the temporal bone. The sigmoid sinuses can be seen in the posterior cranial fossa prior to exiting the skull at the jugular foramen and forming the internal jugular vein (visible on the inferior surface of the skull).

Ref.no. MP1645
Details:

Arterial Circulation

Like our circle of Willis print, this model demonstrates the internal carotid and vertebral arteries entering the skull, branching into the intracranial arteries that supply the brain. This more expanded 3D print of the internal carotid and vertebral artery anastomoses and branches, inclusive of the circle of Willis, displays the full branching pattern of the cerebral and cerebellar arteries.

Ref.no. MP1650
Details: