

Table of Contents

GENERAL ANATOMY

Topographic Landmarks			
Terms of Position and Movement	2	Skeletal System	26
Subdivision and Boundaries of Anatomical Regions	6	Joints	27
Thoracic and Abdominopelvic Cavities	7	Joint Biomechanics	28
Head and Neck Regions - Boundaries	8	Classification of the Joints	30
Regions of the Neck	10	Muscles	31
Triangles of the Neck	12	The Integument	
Boundaries of the Thorax	14	Skin - Pilosebaceous Unit	32
Thoracic Regions	15	Cutaneous Appendages - Nails	33
Boundaries of the Abdomen	16	Sweat Glands	34
Abdominal Regions	17	Circulatory System	
Abdominal Cavity	19	Arterial and Venous Organization	35
Boundaries of the Pelvis	20	Arterial Supply	36
Pelvis and Perineum Regions	21	Venous Return	38
Boundaries and Regions of Upper Limb	22	Lymphatic System	
Boundaries and Regions of Lower Limb	23	Structure	41
Musculoskeletal System		Organization	42
Classification of the Bones	24	Nervous System	
		Organization	44
		Structure	45

CRANIUM AND SPINE

Head		Ribs	80
Skeleton	48	Joints of the Thoracic Cage	81
Bones	53	Joints of the Thoracic Column	83
Orbital Cavity and Paranasal Sinuses Conformation	63	Abdomen	
Orbital Cavity and Maxillary Sinus - Viscerocranium	64	Bones	85
Viscerocranium - Facial Skeleton	65	Pelvis	
Conformation of the Palate - Paranasal Sinuses	66	Bones	88
Paranasal Sinuses	67	Joints	91
Temporomandibular Joint	68	Boundaries and Pelvimetry	96
Spine		Typologies	97
Skeleton	70	Trunk	
Neck		Muscles of the Anterior Wall	98
Cervical Column	72	Muscles of the Posterior Wall	102
Joints	74	Muscles - Lateral View	107
Thorax		Muscles of the Back and Shoulder	112
Thoracic Column	77	Suboccipital Muscles, Spinotransversales, and Transversospinales	115
Thoracic Cage Conformation	78	Muscles of the Posterior Wall	117
Sternum	79	Summary of the Muscles of the Posterior Wall	125
		Fasciae and Fascial Structures	127

HEAD AND NECK

Head

Superficial Muscles and Fasciae	136
Mimic Muscles	138
Deep Muscles	139
Muscles of the Oral Cavity	140
Muscles of the Floor of the Mouth	143
Facial Muscles	144
Masticatory Muscles	145
Extraocular Muscles	146
Auricular Muscles	147
Muscles of the Auditory Ossicles	148
Summary of the Mimic Muscles	149
Summary of the Extraocular Muscles	152
Summary of the Muscles of the Auditory Ossicles	153
Summary of the Masticatory Muscles	154
Summary of the Muscles of the Tongue and Soft Palate	155
Summary of the Muscles of the Floor of the Mouth and Pharynx	156

Neck

Muscles and Fasciae	157
Suprahyoid and Infrahyoid Muscles, and Cervical Fascia	159
Suprahyoid, Infrahyoid, Scalene and Prevertebral Muscles	160
Prevertebral and Scalene Muscles	161
Scalene and Infrahyoid Muscles	162
Muscles of Soft Palate and Fauces	163
Summary of the Muscles of the Neck	166
Subdivision of the Muscles Acting on the Head and Neck	168
Fasciae and Compartments of the Neck	171

Vessels

Superficial Blood Supply	172
Deep Blood Supply	173
Arterial Vascularization	174
Superficial and Deep Venous Drainage	176
Deep Veins	177
Venous Sinuses	178
Cerebral Veins	180

Lymphatic System

Lymphatic Ducts and Lymphatic Groups	181
Distribution of Lymphatic Vessels of the Head and Neck	184

Nerves

Cervical and Brachial Plexuses	185
Cervical Plexus	186
Autonomic Division	187
Cutaneous Nerves	189
Cranial Nerves	190
Peripheral Nervous System - Trigeminal Nerve	191
Peripheral Nervous System - Facial Nerve	192

Accessory Nerve - Distribution of the Nerves of the Head	193
Distribution of the Nerves of the Head	194
Distribution of the Nerves of the Head and the Neck	198
Distribution of the Nerves of the Neck	199

Contents of the Head and Neck

Frontal View	200
Neck - Frontal View	204
Lateral View	212
Posterior View	219

Mouth

Oral Cavity	223
Oral Cavity - Conformation and Structure	224
Tongue - Topographic Relations	226
Topographic Relations and Structure	227
Innervation	228
Teeth - Conformation and Structure	230
Conformation, Structure and Vascularization	231
Isthmus of Fauces	232
Parotid Space	233
Infratemporal Fossa	234

Nose

Conformation and Structure	237
Vascularization	238
Innervation	239
Lymphatic Drainage	240

Eye

Position and Structure - Muscles	241
Muscles	242
Vascularization and Innervation	243
Vascularization and Innervation - Oculomotor, Trochlear and Abducens Nerves	246
Innervation	247
Ciliary Ganglion	248
Lymphatic Drainage	249
Eyelid and Eyeball	250

Ear

Vascularization	251
Lymphatic Drainage	252
Innervation	253

Trachea and Larynx

Position and Structure	254
Muscles	255

Larynx

Muscles and Structures	256
Cartilages	263
Functional Aspects	265

Esophagus

Position	266
Structure	267

Neck

Topographic Relations	268
-----------------------------	-----

Vascularization	269	Posterior View	272
Lymph Nodes	270	Sections	274
Innervation	271		

THORAX

Muscles of the Thorax

Muscles of Anterior and Lateral Wall	276
Intercostal Muscles	277
Muscles of Rib Cage	278
Diaphragm	279
Summary of the Muscles	281

Topographic Anatomy

Thoracic Cavity	282
Mediastinum	283
Mediastinum and Pleural Compartments	284

Vessels

Arteries	285
Veins	287
Parietal Cava-Caval Anastomoses	288
Vertebral Venous Plexuses	289

Lymphatic System

Lymphatic Ducts and Lymphatic Groups	290
--	-----

Nerves

Brachial Plexus	292
Intercostal Nerves	294
Superficial (Cutaneous) Innervation	295
Sympathetic and Parasympathetic Nervous Systems	296
Distribution of the Nerves of the Thorax	297

Breast

Conformation and Structure	299
Vascularization	300
Lymph Nodes and Innervation	301

Contents of the Thorax

Frontal View	302
Right Lateral View	310
Left Lateral View	312

Esophagus

Topographic Relations	314
---------------------------------	-----

Trachea

Conformation	316
3D Reconstructions	317

Great Vessels of the Mediastinum

Topographic Relations	318
---------------------------------	-----

Heart

Topographic Relations	319
Pericardium	321
External Conformation	322
Internal Configuration	323
Fibrous Skeleton and Valves	328
Cardiac Vessels	329
Coronary Arteries	330
Cardiac Veins	332
Conduction System	333

Lymph Nodes

Mediastinal Lymph Nodes	334
-----------------------------------	-----

Nerves

Heart	337
Esophagus	339
Laryngeal and Phrenic Nerves	340

Lungs

Pleural Compartments - Conformation	341
Tracheobronchial Tree	342
Medial View	343
Intrapulmonary Bronchi	344
Pulmonary Segments	345

Pleurae

Topography	346
Cervical Pleura	348
3D Reconstructions	349

Thorax - Transverse Sections

Thoracic Cavity	350
---------------------------	-----

ABDOMEN

Muscles of the Abdomen

Anterolateral Muscles	352
Quadratus Lumborum	355
Muscles of the Abdominal Wall	356
Summary of the Muscles	360

Topographic Anatomy

Abdominal Cavity	361
----------------------------	-----

Abdominal Wall

Posterior Wall	362
Anterolateral Wall	363

Inguinal Canal	365	Structure - Topographic Relations	413
Abdominal Cavity		Position and Vascularization	414
Peritoneum	368	Lymphatic Vessels and Vascular Sheaths	415
Topographic Subdivision	370	Innervation - Sagittal Sections	416
Vessels		Kidney	
Arteries	371	Conformation - Vascularization	417
Celiac Trunk	372	Topographic Relations - Structure	418
Mesenteric Arteries	374	Renal Pelvis and Ureters	
Veins	376	Urinary Tract	419
Parietal Venous Drainage	377	Structure	420
Portal Venous System	378	Duodenum	
Porto-caval Anastomoses	379	Topographic Relations	421
Lymphatic System		Internal Conformation	424
Lymphatic Ducts and Lymphatic Groups	380	Pancreas	
Lymph Nodes of the Colon	382	Topographic Relations	425
Ileocolic and Juxtaintestinal Nodes	383	Topographic Relations - Vascularization	427
Iliac, Inguinal and Aortic Lymph Nodes	384	Stomach	
Gastric, Hepatic, Pancreaticoduodenal and Splenic Lymph Nodes	385	Topographic Relations	428
Nerves		Internal Conformation	429
Lumbar and Sacral Plexuses	386	Supramesocolic Space	
Lumbar, Sacral and Coccygeal Plexuses	387	Omental Bursa and Stomach	430
Sacral and Coccygeal Plexuses	388	Innervation	431
Iliohypogastric and Ilioinguinal Nerves	389	Liver and Bile Ducts	
Sympathetic and Parasympathetic Systems	390	Conformation	432
Vagus Nerve	391	Topographic Relations	434
Distribution of the Abdominal Nerves	392	Ligaments and Attachment	435
Contents of the Abdomen		Vascularization	436
Frontal View	395	Lymph Nodes and Innervation	437
View from the Sagittal Plane		Extrahepatic Bile Ducts and Common Bile Duct	438
in the Male	408	Spleen	
View from the Sagittal Plane		Position and Relations	439
in the Female	410	Topographic Relations and Structure	441
Retroperitoneal Space		Submesocolic Space	
Renal Space	411	Small Intestine	442
3D Reconstructions	412	Abdominal Plexuses	443
Suprarenal Gland		Celiac Plexus	444
		Large Intestine	445

PELVIS AND PERINEUM

Muscles of Pelvis and Perineum		Constrictor Muscles	463
Muscles of the Pelvis	450	Summary of the Muscles of the Pelvis	464
Muscles of the Perineum	453	Summary of the Muscles of the Perineum	466
Male Perineum and Pelvic Diaphragm	454	Summary of the Muscles of the Perineum - Fasciae and Ligaments of the Perineum	467
Female Perineum and Pelvic Diaphragm	455	Topographic Anatomy	
Muscles of the Perineum	456	Pelvic Cavity	468
Muscles of the Pelvis and Perineum - Medial View	457	Pelvic Floor	
Muscles of the Pelvis and Perineum - Lateral View	459	Lateral Wall	470
Muscles of the Pelvis and Perineum - Posterior View	460	Vessels	
Ligaments and Foramina of the Pelvis	461	Arteries	472
Sphincter Muscles	462	Veins	473
		Lymphatic System	
		Lymphatic Ducts and Lymphatic Groups	474

Nerves			
Innervation of the Male and Female Pelvis	475		
Distribution of the Nerves of the Pelvis	476		
Distribution of the Nerves of the Pelvis and the Perineum	477		
Principal Systems Contained in the Pelvic Space	478		
Contents of the Pelvis and Perineum			
Male Frontal View	479		
Female Frontal View	482		
Male Pelvis			
Conformation and Relations	484		
Urinary Bladder	485		
Urethra and Prostate	486		
Prostate	487		
Ductus Deferentes	488		
		Male Perineum	
		Penis	489
		Testis	491
		Development of the External Genitalia	492
		Frontal View	493
		Female Pelvis	
		Conformation and Relations	495
		Urinary Bladder and Urethra	496
		Uterus and Appendages	497
		Female Perineum	
		External Genitalia	501
		Frontal View	502
		Rectum	
		Conformation	504
		Conformation - Innervation	505
		Vascularization	506

UPPER LIMB

Osteoarticular System			
Skeleton	508		
Bones of the Pectoral Girdle	509		
Bone of the Arm	510		
Bones of the Forearm	511		
Bones of the Hand	512		
Joints of the Pectoral Girdle	516		
Glenohumeral Joint	518		
Elbow Joint	521		
Joints of the Forearm	524		
Joints of the Hand	525		
Muscles and Fasciae			
Anterior Muscles	533		
Posterior Muscles	534		
Lateral View	535		
Muscles of the Shoulder and the Arm	536		
Anterior Muscles of the Arm	537		
Posterior Muscles of the Arm	540		
Anterior and Lateral Muscles of the Forearm	543		
Anterior and Posterior Muscles of the Forearm	545		
Anterior Muscles of the Forearm	546		
Lateral and Posterior Muscles of the Forearm	547		
Muscles of the Forearm - Transverse Section	550		
Fasciae of the Hand - Palmar View	551		
Muscles of the Hand - Palmar View	552		
Fasciae of the Hand - Dorsal View	556		
Muscles of the Hand - Dorsal View	557		
		Lateral Muscles of the Hand - Radial View	560
		Hand - Transverse Section	561
		Summary of the Muscles	563
		Fasciae and Fascial Structures	569
		Vessels	
		Arteries	572
		Arteries of the Shoulder	573
		Acromial Anastomosis	574
		Arteries of the Arm and Cubital Anastomosis	575
		Arteries of the Forearm and Palmar Arteries	576
		Arteries of the Hand and Wrist	578
		Veins	579
		Superficial Veins	580
		Lymphatic System	
		Lymphatic Ducts and Lymphatic Groups	581
		Nerves	
		Spinal Nerves	582
		Superficial (Cutaneous) Innervation	585
		Distribution of the Nerves of the Upper Limb	586
		Contents of the Upper Limb	
		Anterior Superficial View	588
		Posterior Superficial View	589
		Axillary Arteries and Veins	590
		Vessels and Nerves of the Arm	591
		Vessels and Nerves of the Forearm	594
		Vessels and Nerves of the Hand	597

LOWER LIMB

Osteoarticular System			
Skeleton	602		
		Thigh Bones	603
		Bones of the Leg	604

Bones of the Foot	605	Anastomotic Circle of the Hip	672
Hip Joint	616	Femoral Artery	673
Knee Joint	618	Genicular Anastomosis	674
Joints of the Foot	623	Arteries of the Leg and Foot.	675
Muscles and Fasciae		Arteries of the Foot	676
Muscles - Anterior and Posterior Views.	629	Veins.	677
Muscles - Lateral and Medial Views.	630	Lymphatic System	
Internal Muscles of the Hip and Anterior Muscles of the Thigh.	631	Lymphatic Ducts and Lymphatic Groups	679
Muscles of the Hip and Thigh - Anterior View.	633	Nerves	
External Muscles of the Hip and Posterior Muscles of the Thigh.	634	Spinal Nerves	681
External Muscles of the Hip and Medial Muscles of the Thigh.	635	Nerves of the Thigh and Leg	682
Muscles of the Hip and Thigh - Posterior View	636	Nerves of the Leg and Foot	683
Muscles of the Hip and Thigh - Lateral View	637	Superficial (Cutaneous) Innervation.	684
Muscles of the Hip and Thigh - Medial View	638	Distribution of the Nerves of the Lower Limb	685
Anterior and Lateral Muscles of the Leg	639	Contents of the Lower Limb	
Posterior Muscles of the Leg	642	Anterior and Posterior Superficial Views	688
Lateral Muscles of the Leg	647	Medial Superficial View	689
Dorsum of the Foot: Tendinous Sheaths and Fasciae	649	Anterior Deep View of the Thigh	690
Muscles of the Dorsum of the Foot.	650	Vascular Space and Saphenous Opening	692
Tendons of the Muscles of the Leg	652	Anterior Deep View of the Thigh	693
Aponeuroses and Muscles of the Sole of the Foot	655	Medial Deep View of the Thigh.	694
Muscles of the Sole of the Foot	656	Posterior Deep View of the Thigh.	695
Summary of the Muscles	661	Anterior Deep View of the Leg	696
Fasciae and Fascial Structures	667	Posterior Region of the Leg: Superficial and Deep Views	697
Vessels		Posterior Tibial and Fibular Arteries.	698
Arteries	671	Dorsum of the Foot: Superficial and Deep Views	699
		Superficial and Deep Plantar Views	700
		Deep Plantar View	701

NERVOUS SYSTEM AND SENSE ORGANS

Organogenesis		Ventral Spinothalamic and Spinotectal Tracts (ALS)	725
Neural Tube.	704	Dorsal Column - Medial Lemniscal Pathway (DC-ML)	726
Organization of the Nervous System		Dorsal Spinocerebellar Tract.	727
Neuraxis and Spinal Nerves.	705	Ventral Spinocerebellar Tract	728
Cranial Nerves	706	Pyramidal System - Direct and Crossed Pyramidal Tracts	729
Brain	709	Brainstem	
General and Special Senses	710	Conformation	730
Receptors	711	Fourth Ventricle	731
Sensory Pathways	712	Anterior Brainstem	732
Motor Pathways.	713	Cerebellum and Lateral Brainstem	733
Spinal Cord		Nuclei of the Cranial Nerves	734
Organization.	714	Corticonuclear Tract.	735
External Conformation	716	Solitariothalamic Tract - Gustatory Lemniscus.	736
Vascularization	717	Trigemino cerebellar Tract	737
Spinal Cord and Spinal Nerves	718	Ventral Secondary Trigeminal Tract (VSTT) - Trigeminal Lemniscus	738
Dermatomes	719	Nuclei of the Brainstem.	740
Internal Conformation.	720	Reticular Formation and Ascending Fascicles.	741
Laminae, Motor Columns and Projection Tracts.	721	Pontoreticulospinal Tract	742
Anterolateral System (ALS) - Lateral Compartment	722		
Mechanisms of Pain Control	723		
Anterolateral System (ALS) - Medial Compartment	724		

Lateral Bulboreticulospinal Tract	743	Hippocampus - Conformation	782
Rubrospinal Tract	744	Hippocampus - Pathways	783
Tectospinal Tract	745	Hippocampus - Structure	784
Cerebellum		Amygdaloid Body - Circuits	785
Conformation	746	Limbic system	
Structure	748	Papez Circuit	786
Functional Regions	750	Vascularization	
Olive	751	Cerebral Hemispheres	787
Neocerebellum	752	Olfactory System	
Cerebellar Cortex	753	Conformation	788
Circuits	754	Olfactory Pathways	789
Diencephalon		Ear	
Relationships	755	Conformation	790
Thalamus - Conformation	756	Bone Conformation	791
Thalamus - Relationships	757	Bony Labyrinth	794
Nuclei of the Thalamus and Metathalamus	758	Vestibular System	
Hypothalamus - Conformation	761	Structural Organization	795
Hypothalamus - Connections	762	Semicircular Canals	796
Pituitary Gland	763	Vestibulo-ocular Reflex	797
Subthalamus, Epithalamus and Epithalamic Circuits	765	Lateral Vestibulospinal Tract	798
Circuits	765	Medial Vestibulospinal Tract	799
Telencephalon		Auditory System	
Conformation	766	Internal Ear	800
Cerebral Cortex	768	Spiral Organ	801
Brodmann Areas	770	Central Auditory Pathways	802
Ventricular Cavities	773	Visual System	
Basal Nuclei - Positions and Relations	774	Eyeball	803
Basal Nuclei - Circuits	775	Retina	807
Insula	776	Retinal Cells	808
Clastrum	777	Transduction and Transmission of the Visual Signal	809
White Matter, Association Bundles and Capsule System	778	Visual Pathways	810
Corpus Callosum - Conformation	779	Miosis and Mydriasis	811
Corpus Callosum - Circuits	780	INDEX	813
Fornix	781		