

ANATOMY OF FACIAL MUSCLES

ANATOMY OF FACIAL MUSCLES IS A FUNDAMENTAL TOPIC IN UNDERSTANDING HUMAN EXPRESSION, COMMUNICATION, AND FUNCTION. THE FACIAL MUSCLES ARE A UNIQUE GROUP OF MUSCLES THAT ENABLE A WIDE RANGE OF MOVEMENTS NECESSARY FOR NONVERBAL COMMUNICATION, SUCH AS SMILING, FROWNING, AND OTHER EXPRESSIONS. UNLIKE MOST SKELETAL MUSCLES, MANY FACIAL MUSCLES INSERT INTO THE SKIN RATHER THAN BONE, ALLOWING FOR SUBTLE AND COMPLEX MOTIONS. THIS ARTICLE EXPLORES THE DETAILED ANATOMY OF FACIAL MUSCLES, INCLUDING THEIR CLASSIFICATION, FUNCTIONS, AND CLINICAL SIGNIFICANCE. ADDITIONALLY, IT DISCUSSES THE MAJOR MUSCLE GROUPS INVOLVED IN FACIAL EXPRESSIONS AND MASTICATION. UNDERSTANDING THE ANATOMY OF FACIAL MUSCLES IS ESSENTIAL FOR PROFESSIONALS IN MEDICINE, DENTISTRY, AND ALLIED HEALTH FIELDS. THE FOLLOWING SECTIONS PROVIDE A STRUCTURED OVERVIEW OF THIS INTRICATE MUSCULAR SYSTEM.

- OVERVIEW OF FACIAL MUSCLES
- MUSCLES OF FACIAL EXPRESSION
- MUSCLES OF MASTICATION
- INNERVATION AND BLOOD SUPPLY
- CLINICAL RELEVANCE OF FACIAL MUSCLES

OVERVIEW OF FACIAL MUSCLES

THE ANATOMY OF FACIAL MUSCLES COMPRISES A COMPLEX NETWORK OF MUSCLES PRIMARILY RESPONSIBLE FOR FACIAL EXPRESSIONS AND MOVEMENTS. THESE MUSCLES ARE PREDOMINANTLY SUPERFICIAL, LYING JUST BENEATH THE SKIN, AND ARE UNIQUE BECAUSE MANY ATTACH DIRECTLY TO THE DERMIS. THIS ATTACHMENT ENABLES THE SKIN TO MOVE, CREATING A VARIETY OF FACIAL EXPRESSIONS. FACIAL MUSCLES ARE TYPICALLY THIN AND FLAT, CONTRASTING WITH THE THICKER MUSCLES FOUND ELSEWHERE IN THE BODY.

THERE ARE APPROXIMATELY 20 MUSCLES INVOLVED IN FACIAL EXPRESSION, GROUPED BASED ON THEIR LOCATION AND FUNCTION. IN ADDITION TO EXPRESSION, SOME FACIAL MUSCLES CONTRIBUTE TO MASTICATION, SPEECH, AND SENSORY FUNCTIONS. THE MUSCLES ARE USUALLY CATEGORIZED INTO MUSCLES OF FACIAL EXPRESSION AND MUSCLES OF MASTICATION FOR CLARITY.

STRUCTURAL CHARACTERISTICS

FACIAL MUSCLES DIFFER FROM OTHER SKELETAL MUSCLES IN THEIR INSERTION POINTS AND FIBER ORIENTATION. MOST INSERT INTO THE SKIN RATHER THAN BONE, ALLOWING FOR FINE MOTOR CONTROL OF SKIN MOVEMENT. THEY ARE INNERVATED BY THE FACIAL NERVE (CRANIAL NERVE VII) AND PLAY A CRITICAL ROLE IN NONVERBAL COMMUNICATION.

CLASSIFICATION OF FACIAL MUSCLES

THE FACIAL MUSCLES CAN BE BROADLY CLASSIFIED INTO:

- MUSCLES OF FACIAL EXPRESSION
- MUSCLES OF MASTICATION
- OTHER MINOR MUSCLES INVOLVED IN FACIAL FUNCTIONS

MUSCLES OF FACIAL EXPRESSION

MUSCLES OF FACIAL EXPRESSION ARE RESPONSIBLE FOR THE DYNAMIC MOVEMENTS THAT CONVEY EMOTIONS AND FUNCTIONAL ACTIONS LIKE BLINKING AND SMILING. THESE MUSCLES SURROUND THE EYES, MOUTH, NOSE, AND FOREHEAD AND ARE INTRICATELY CONNECTED TO SKIN AND SOFT TISSUES.

ORBICULARIS OCULI

THE ORBICULARIS OCULI MUSCLE ENCIRCLES THE EYE AND CONTROLS EYELID CLOSURE. IT HAS THREE PARTS: THE ORBITAL, PALPEBRAL, AND LACRIMAL PORTIONS, EACH WITH SPECIFIC ROLES IN BLINKING, WINKING, AND TEAR DRAINAGE. THIS MUSCLE IS ESSENTIAL FOR PROTECTING THE EYE AND FACILITATING FACIAL EXPRESSION.

ORBICULARIS ORIS

THIS MUSCLE ENCIRCLES THE MOUTH AND CONTROLS MOVEMENTS SUCH AS PUCKERING THE LIPS, CLOSING THE MOUTH, AND ARTICULATION DURING SPEECH. THE ORBICULARIS ORIS IS CRITICAL FOR FUNCTIONS INCLUDING EATING, SPEAKING, AND EXPRESSING EMOTIONS.

ZYGOMATICUS MAJOR AND MINOR

THESE PAIRED MUSCLES ORIGINATE FROM THE CHEEKBONE AND INSERT INTO THE CORNERS OF THE MOUTH. THEY ELEVATE THE LIPS AND PULL THE MOUTH UPWARD AND Laterally, CREATING A SMILE. THE ZYGOMATICUS MUSCLES ARE KEY PLAYERS IN POSITIVE FACIAL EXPRESSIONS.

OTHER IMPORTANT MUSCLES OF EXPRESSION

- **FRONTALIS:** RAISES THE EYEBROWS AND WRINKLES THE FOREHEAD.
- **BUCCINATOR:** COMPRESSES THE CHEEK, AIDING IN CHEWING AND BLOWING.
- **LEVATOR LABII SUPERIORIS:** ELEVATES THE UPPER LIP.
- **DEPRESSOR ANGULI ORIS:** PULLS THE CORNERS OF THE MOUTH DOWNWARD.
- **PLATYSMA:** TENSES THE SKIN OF THE NECK AND LOWER FACE.

MUSCLES OF MASTICATION

THE MUSCLES OF MASTICATION PRIMARILY FACILITATE CHEWING AND JAW MOVEMENTS. UNLIKE THE MUSCLES OF FACIAL EXPRESSION, THESE MUSCLES INSERT ONTO BONE STRUCTURES AND ARE INNERVATED BY THE MANDIBULAR BRANCH OF THE TRIGEMINAL NERVE (CRANIAL NERVE V).

MASSETER

THE MASSETER IS A THICK, POWERFUL MUSCLE ON THE SIDE OF THE JAW THAT ELEVATES THE MANDIBLE, ENABLING THE CLOSING OF THE MOUTH. IT IS ONE OF THE STRONGEST MUSCLES INVOLVED IN MASTICATION.

TEMPORALIS

THE TEMPORALIS MUSCLE IS FAN-SHAPED AND LOCATED ON THE SIDE OF THE HEAD. IT ELEVATES AND RETRACTS THE MANDIBLE, PLAYING A CRUCIAL ROLE IN CHEWING.

MEDIAL AND LATERAL PTERYGIDS

THESE MUSCLES ARE LOCATED DEEPER WITHIN THE FACE. THE MEDIAL PTERYGID ASSISTS IN ELEVATING THE MANDIBLE, WHILE THE LATERAL PTERYGID FACILITATES JAW OPENING AND SIDE-TO-SIDE MOVEMENTS, ESSENTIAL FOR GRINDING FOOD.

FUNCTIONS OF MASTICATION MUSCLES

- ELEVATION AND DEPRESSION OF THE MANDIBLE
- PROTRUSION AND RETRACTION OF THE JAW
- LATERAL MOVEMENTS FOR GRINDING

INNERVATION AND BLOOD SUPPLY

THE ANATOMY OF FACIAL MUSCLES INCLUDES A DETAILED NEUROVASCULAR NETWORK THAT SUPPORTS MUSCLE FUNCTION AND HEALTH. THE FACIAL NERVE (CRANIAL NERVE VII) IS THE PRIMARY MOTOR NERVE FOR MUSCLES OF FACIAL EXPRESSION, WHILE THE TRIGEMINAL NERVE (CRANIAL NERVE V) INNERVATES THE MUSCLES OF MASTICATION.

FACIAL NERVE (CRANIAL NERVE VII)

THIS NERVE EMERGES FROM THE BRAINSTEM AND BRANCHES EXTENSIVELY TO INNERVATE MUSCLES OF FACIAL EXPRESSION. DAMAGE TO THIS NERVE CAN RESULT IN PARALYSIS OR WEAKNESS, AFFECTING FACIAL SYMMETRY AND EXPRESSION.

TRIGEMINAL NERVE (CRANIAL NERVE V)

THE MANDIBULAR BRANCH OF THE TRIGEMINAL NERVE CONTROLS THE MUSCLES OF MASTICATION. IT PROVIDES MOTOR INNERVATION CRITICAL FOR JAW MOVEMENTS.

BLOOD SUPPLY

FACIAL MUSCLES RECEIVE BLOOD PRIMARILY FROM BRANCHES OF THE EXTERNAL CAROTID ARTERY. THE FACIAL ARTERY AND SUPERFICIAL TEMPORAL ARTERY ARE MAJOR CONTRIBUTORS, ENSURING ADEQUATE OXYGENATION AND NUTRIENT DELIVERY TO SUPPORT MUSCLE ACTIVITY.

CLINICAL RELEVANCE OF FACIAL MUSCLES

AN UNDERSTANDING OF THE ANATOMY OF FACIAL MUSCLES IS VITAL IN CLINICAL PRACTICE, PARTICULARLY IN SURGERY, NEUROLOGY, AND REHABILITATION. FACIAL MUSCLE DISORDERS CAN SIGNIFICANTLY IMPACT QUALITY OF LIFE THROUGH IMPAIRED EXPRESSION, SPEECH, AND EATING.

BELL'S PALSY

BELL'S PALSY IS A COMMON CONDITION INVOLVING TEMPORARY PARALYSIS OF THE FACIAL MUSCLES DUE TO INFLAMMATION OR DAMAGE TO THE FACIAL NERVE. IT RESULTS IN ASYMMETRY OF FACIAL EXPRESSION AND DIFFICULTY WITH EYE CLOSURE AND MOUTH MOVEMENTS.

FACIAL TRAUMA AND SURGERY

INJURIES TO THE FACE CAN DAMAGE MUSCLES OR THEIR INNERVATION, REQUIRING PRECISE ANATOMICAL KNOWLEDGE FOR RECONSTRUCTION. COSMETIC AND RECONSTRUCTIVE SURGERIES RELY ON DETAILED UNDERSTANDING TO RESTORE FUNCTION AND APPEARANCE.

BOTULINUM TOXIN APPLICATIONS

BOTULINUM TOXIN INJECTIONS TARGET SPECIFIC FACIAL MUSCLES TO REDUCE WRINKLES OR TREAT MUSCLE SPASMS. ACCURATE IDENTIFICATION OF MUSCLE ANATOMY ENSURES EFFECTIVE AND SAFE TREATMENT.

MUSCLE DISORDERS

- **MYOPATHIES:** DISEASES AFFECTING MUSCLE TISSUE CAN INVOLVE FACIAL MUSCLES, LEADING TO WEAKNESS OR ATROPHY.
- **NEUROMUSCULAR DISORDERS:** CONDITIONS LIKE MYASTHENIA GRAVIS AFFECT THE COMMUNICATION BETWEEN NERVES AND MUSCLES, IMPACTING FACIAL MOVEMENTS.

FREQUENTLY ASKED QUESTIONS

WHAT ARE THE MAIN GROUPS OF FACIAL MUSCLES?

THE MAIN GROUPS OF FACIAL MUSCLES INCLUDE THE MUSCLES OF FACIAL EXPRESSION, MUSCLES OF MASTICATION, AND MUSCLES INVOLVED IN THE MOVEMENTS OF THE SCALP AND NECK.

WHICH MUSCLE IS PRIMARILY RESPONSIBLE FOR SMILING?

THE ZYGOMATICUS MAJOR MUSCLE IS PRIMARILY RESPONSIBLE FOR ELEVATING THE CORNERS OF THE MOUTH TO PRODUCE A SMILE.

HOW DO FACIAL MUSCLES DIFFER FROM OTHER SKELETAL MUSCLES?

FACIAL MUSCLES ARE UNIQUE BECAUSE THEY INSERT INTO THE SKIN RATHER THAN BONE, ALLOWING FOR A WIDE RANGE OF FACIAL EXPRESSIONS.

WHAT IS THE ROLE OF THE ORBICULARIS OCULI MUSCLE?

THE ORBICULARIS OCULI MUSCLE ENCIRCLES THE EYE AND IS RESPONSIBLE FOR CLOSING THE EYELIDS, ENABLING BLINKING AND SQUINTING.

WHICH NERVE INNERVATES THE FACIAL MUSCLES?

THE FACIAL NERVE (CRANIAL NERVE VII) INNERVATES THE MUSCLES OF FACIAL EXPRESSION.

HOW DO THE BUCCINATOR MUSCLES CONTRIBUTE TO FACIAL FUNCTION?

THE BUCCINATOR MUSCLES COMPRESS THE CHEEKS AGAINST THE TEETH, AIDING IN CHEWING AND PREVENTING FOOD FROM ACCUMULATING IN THE ORAL VESTIBULE.

WHAT IS THE SIGNIFICANCE OF THE FRONTALIS MUSCLE IN FACIAL ANATOMY?

THE FRONTALIS MUSCLE RAISES THE EYEBROWS AND WRINKLES THE FOREHEAD, PLAYING A KEY ROLE IN EXPRESSING SURPRISE OR CURIOSITY.

CAN DAMAGE TO FACIAL MUSCLES AFFECT FACIAL EXPRESSIONS?

YES, DAMAGE TO FACIAL MUSCLES OR THEIR INNERVATING NERVE CAN RESULT IN PARALYSIS OR WEAKNESS, LEADING TO IMPAIRED FACIAL EXPRESSIONS AND ASYMMETRY.

ADDITIONAL RESOURCES

1. *FACIAL MUSCLE ANATOMY: A COMPREHENSIVE GUIDE*

THIS BOOK PROVIDES AN IN-DEPTH EXPLORATION OF THE STRUCTURE AND FUNCTION OF FACIAL MUSCLES. IT COVERS THE ORIGINS, INSERTIONS, AND ACTIONS OF EACH MUSCLE WITH DETAILED ILLUSTRATIONS. IDEAL FOR STUDENTS AND PROFESSIONALS IN MEDICINE AND ART, IT BRIDGES THE GAP BETWEEN ANATOMICAL SCIENCE AND PRACTICAL APPLICATION.

2. *THE MUSCULATURE OF THE FACE: AN ANATOMICAL ATLAS*

FEATURING HIGH-QUALITY IMAGES AND DIAGRAMS, THIS ATLAS SERVES AS A VISUAL REFERENCE FOR UNDERSTANDING FACIAL MUSCLE ANATOMY. IT INCLUDES CLINICAL CORRELATIONS AND EMPHASIZES THE RELEVANCE OF MUSCLE FUNCTION IN FACIAL EXPRESSION AND SURGERY. THE BOOK IS A VALUABLE TOOL FOR ANATOMISTS, SURGEONS, AND ARTISTS ALIKE.

3. *FUNCTIONAL ANATOMY OF THE FACIAL MUSCLES*

FOCUSED ON THE BIOMECHANICS AND PHYSIOLOGY OF FACIAL MUSCLES, THIS BOOK EXPLAINS HOW THESE MUSCLES CONTRIBUTE TO EXPRESSION, SPEECH, AND MASTICATION. IT INTEGRATES ANATOMICAL DETAILS WITH FUNCTIONAL INSIGHTS, MAKING IT USEFUL FOR CLINICIANS AND THERAPISTS WORKING WITH FACIAL DISORDERS.

4. *FACIAL MUSCLES IN HEALTH AND DISEASE*

THIS TEXT EXPLORES BOTH NORMAL ANATOMY AND PATHOLOGICAL CONDITIONS AFFECTING THE FACIAL MUSCLES. IT DISCUSSES DISORDERS SUCH AS BELL'S Palsy, MUSCULAR DYSTROPHIES, AND TRAUMA-RELATED INJURIES. THE BOOK IS DESIGNED FOR HEALTHCARE PROFESSIONALS INTERESTED IN DIAGNOSIS AND TREATMENT OF FACIAL MUSCLE DYSFUNCTION.

5. *ATLAS OF FACIAL MUSCLE ANATOMY FOR ARTISTS*

TAILORED TO ARTISTS, THIS ATLAS EMPHASIZES THE FORM AND MOVEMENT OF FACIAL MUSCLES TO ENHANCE REALISTIC PORTRAITURE AND CHARACTER DESIGN. IT COMBINES ANATOMICAL ACCURACY WITH PRACTICAL DRAWING TIPS, HELPING ARTISTS VISUALIZE MUSCLE STRUCTURE BENEATH THE SKIN.

6. *CLINICAL ANATOMY OF THE FACIAL MUSCLES*

THIS CLINICAL MANUAL HIGHLIGHTS THE IMPORTANCE OF FACIAL MUSCLE ANATOMY IN SURGICAL PROCEDURES AND DIAGNOSTIC PRACTICES. IT COVERS NERVE SUPPLY, MUSCLE LAYERING, AND SURGICAL LANDMARKS WITH DETAILED DESCRIPTIONS. THE BOOK IS A PRACTICAL GUIDE FOR SURGEONS, DENTISTS, AND CLINICIANS.

7. *EMBRYOLOGY AND DEVELOPMENT OF THE FACIAL MUSCLES*

EXAMINING THE ORIGIN AND GROWTH OF FACIAL MUSCLES FROM THE EMBRYONIC STAGE, THIS BOOK PROVIDES INSIGHTS INTO DEVELOPMENTAL ANATOMY. IT DISCUSSES HOW GENETIC AND ENVIRONMENTAL FACTORS INFLUENCE MUSCLE FORMATION, USEFUL FOR RESEARCHERS AND MEDICAL STUDENTS FOCUSED ON DEVELOPMENTAL BIOLOGY.

8. *FACIAL EXPRESSION AND MUSCLE ANATOMY*

THIS INTERDISCIPLINARY BOOK LINKS FACIAL MUSCLE ANATOMY WITH THE PSYCHOLOGY OF FACIAL EXPRESSIONS. IT EXPLORES HOW MUSCLE MOVEMENTS CONVEY EMOTIONS AND SOCIAL SIGNALS, SUPPORTED BY ANATOMICAL ILLUSTRATIONS AND BEHAVIORAL STUDIES. SUITABLE FOR PSYCHOLOGISTS, ANATOMISTS, AND COMMUNICATION SPECIALISTS.

9. *REHABILITATION OF FACIAL MUSCLES: ANATOMICAL AND THERAPEUTIC PERSPECTIVES*

A RESOURCE DEDICATED TO THE REHABILITATION OF PATIENTS WITH FACIAL MUSCLE IMPAIRMENTS, THIS BOOK COMBINES ANATOMICAL KNOWLEDGE WITH THERAPEUTIC TECHNIQUES. IT REVIEWS EXERCISES, NEUROMUSCULAR STIMULATION, AND SURGICAL INTERVENTIONS TO RESTORE FUNCTION AND AESTHETICS. PERFECT FOR PHYSICAL THERAPISTS, SPEECH THERAPISTS, AND CLINICIANS.

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anatomy of facial muscles: *Surgical Anatomy of the Face* Wayne F. Larrabee, Kathleen H. Makielski, Jenifer L. Henderson, 2004 Thoroughly updated to reflect the latest refinements in operative technique, this full-color atlas provides a surgeon's-eye view of the anatomic structures and relationships encountered during all facial surgical procedures. It features more than 100 drawings by Dr. Makielski, a head and neck surgeon, and more than 100 photographs. This Second Edition's brand-new chapter on embryology emphasizes congenital anomalies such as clefts and dermoid cysts. New illustrations show the surgical anatomy of endoscopic approaches and recently developed procedures, including the SOOF lift. This edition also includes more detail on the osteocutaneous and retaining ligaments and the supporting ligaments and tendons of the orbit.

anatomy of facial muscles: *Animal Anatomy for Artists* Eliot Goldfinger, 2004-11-15 From the author of the classic *Human Anatomy for Artists* comes this user-friendly reference guide featuring over five hundred original drawings and over seventy photographs. Designed for painters, sculptors, and illustrators who use animal imagery in their work, *Animal Anatomy for Artists* offers thorough, in-depth information about the most commonly depicted animals, presented in a logical and easily understood format for artists--whether beginner or accomplished professional. The book focuses on the forms created by muscles and bones, giving artists a crucial three-dimensional understanding of the final, complex outer surface of the animal. Goldfinger not only covers the anatomy of the more common animals, such as the horse, dog, cat, cow, pig, squirrel, and rabbit, but also the anatomy of numerous wild species, including the lion, giraffe, deer, hippopotamus, rhinoceros, elephant, gorilla, sea lion, and bear. Included are drawings of skeletons and how they move at the joints, individual muscles showing their attachments on the skeleton, muscles of the entire animal, cross sections, photographs of live animals, and silhouettes of related animals comparing their shapes and proportions. He offers a new and innovative section on the basic body plan of four-legged animals, giving the reader a crucial conceptual understanding of overall animal structure to which the details of individual animals can then be applied. The chapter on birds covers the skeleton, muscles and feather patterns. The appendix presents photographs of skulls with magnificent horns and antlers and a section on major surface veins. Incredibly thorough, packed with essential information, *Animal Anatomy for Artists* is a definitive reference work, an essential book for everyone who depicts animals in their art.

anatomy of facial muscles: *Cosmetic and Clinical Applications of Botox and Dermal Fillers*

William J. Lipham, 2008 This text is for anyone interested in the use of Botox and dermal filler agents for a wide variety of functional and minimally invasive facial rejuvenation procedures. The storage, reconstitution, and mechanism of action of botulinum toxin or Botox are all thoroughly explained. A thorough analysis is provided detailing the underlying facial muscle anatomy that is required and how physicians can integrate this procedure into their current practice. An additional section is also included detailing injectable filler agents, a more effective form of treatment for lines that are present at rest. As the demand for less invasive facial rejuvenation products and treatments continue to increase, Botox injections are emerging as the popular choice. While the initial public reaction was guarded, the procedure is now common, as millions of individuals around the world are pursuing the cosmetic application of Botox for wrinkle reduction. The text utilizes a how to approach in teaching the ways Botox can remedy many functional disorders and conditions.

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Guillaume-Benjamin Duchenne, 1990-07-27 In *Mécanisme de la physionomie humaine*, the great nineteenth-century French neurologist Duchenne de Boulogne combined his intimate knowledge of facial anatomy with his skill in photography to produce a fascinating interpretation of the ways in which the human face portrays emotions. Here, Andrew Cuthbertson provides an English translation complete with a reproduction of the marvellous Album of photographs.

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anatomy of facial muscles: Imaging Anatomy: Head and Neck - E-BOOK Surjith Vattoth, 2024-04-08 This richly illustrated and superbly organized text/atlas is an excellent point-of-care resource for practitioners at all levels of experience and training. Written by global leaders in the field, *Imaging Anatomy: Head and Neck*, second edition, provides a thorough understanding of the detailed normal anatomy that underlies contemporary imaging. This must-have reference employs a templated, highly formatted design; concise, bulleted text; and state-of-the-art images throughout that identify the clinical entities in each anatomic area, offering a unique opportunity to master the fundamentals of normal anatomy and accurately and efficiently recognize pathologic conditions. - Features hundreds of detailed, full-color illustrations and more than 900 high-resolution, cross-sectional radiologic images that together illustrate the fine points of imaging anatomy for new and experienced head and neck imaging specialists - Contains new chapters on external nose anatomy, the facial nerve in temporal bone, minor fissures and sutures around the temporal bone, and temporal bone anatomy on photon-counting detector (PCD) CT - Provides updated, enlarged images and captions in areas such as facial muscles and the superficial musculoaponeurotic system, and frontal recess and related air cells - Includes extensive new content on PCD CT; new details on relatively unknown anatomical foramina, such as the vomerovaginal canal and canaliculus innominatus; new content based on the International Frontal Sinus Anatomy Classification; and minute details on the course of nerves in the head and neck - Includes a series of successive imaging

slices in each standard plane of imaging (coronal, sagittal, and axial) to provide multiple views that further support learning - Depicts common anatomic variants and covers the common pathological processes that manifest with alterations of normal anatomic landmarks - Reflects new understandings of anatomy due to ongoing anatomic research as well as new, advanced imaging techniques - Presents essential text in an easy-to-digest, bulleted format, enabling imaging specialists to find quick answers to anatomy questions encountered in daily practice - Any additional digital ancillary content may publish up to 6 weeks following the publication date

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anatomy of facial muscles: *Classic Human Anatomy in Motion* Valerie L. Winslow, 2015-08-04 This essential companion book to the bestselling *Classic Human Anatomy* provides artists and art students with a deeper understanding of human anatomy and different types of motion, inspiring more realistic and energetic figurative art. Fine-art instruction books do not usually focus on anatomy as it relates to movement, despite its great artistic significance. Written by a long-time expert on drawing and painting human anatomy, *Classic Human Anatomy in Motion* offers artists everything they need to realistically draw the human figure as it is affected by movement. Written in a friendly style, the book is illustrated with hundreds of life drawing studies (both quick poses and long studies), along with charts and diagrams showing the various anatomical and structural components. This comprehensive manual features 5 distinct sections, each focusing on a different aspect of the human figure: bones and joint movement, muscle groups, surface form and soft tissue characteristics, structure, and movement. Each chapter builds an artistic understanding of how motion transforms the human figure and can create a sense of expressive vibrancy in one's art.

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anatomy of facial muscles: The Artist's Complete Guide to Facial Expression Gary Faigin, 2012-07-10 Artists love this book, the definitive guide to capturing facial expressions. In a carefully organized, easy-to-use format, author Gary Faigin shows readers the expressions created by individual facial muscles, then draws them together in a section devoted to the six basic human emotions: sadness, anger, joy, fear, disgust, and surprise. Each emotion is shown in steadily increasing intensity, and Faigin's detailed renderings are supplemented by clear explanatory text, additional sketches, and finished work. An appendix includes yawning, wincing, and other physical reactions. Want to create portraits that capture the real person? Want to draw convincing illustrations? Want to show the range of human emotion in your artwork? Get The Artist's Complete Guide to Facial Expression!

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advanced medical students and professionals.

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